

# Road Safety Action Plan

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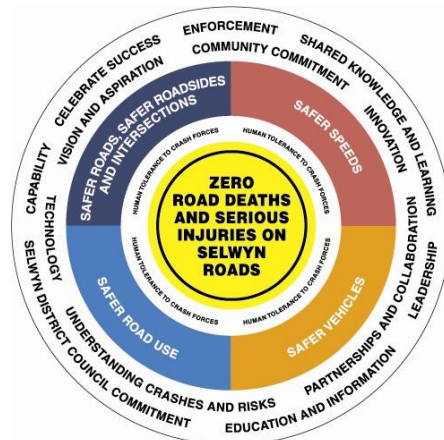
for

## Selwyn District Council

July 2015 – June 2016

**Vision: Zero deaths and injuries on Selwyn roads**

**Goal: To progressively reduce the number and severity of road crashes in the Selwyn District**



## Safer Journeys 2010 – 2020 National Road Safety Strategy

Safer Journeys is New Zealand's Road Safety Strategy 2010–2020. The strategy has a vision:

**"A safe road system increasingly free of death and serious injury"**

### A Safe System Approach

The vision is a safe road system increasingly free of death and serious injury, which challenges us to see road deaths and serious injuries as preventable.

The Safe System differs from traditional approaches to road safety. Rather than always blaming the road user for causing a crash, it acknowledges that even responsible people sometimes make mistakes in their use of the roads.

Given that mistakes are inevitable, the Safe System has objectives to:

- make the road transport system more accommodating of human error
- manage the forces that injure people in a crash to a level the human body can tolerate without serious injury
- minimise the level of unsafe and risky road user behaviour

The Safe System focuses on creating safe roads, safe speeds, safe vehicles and safe road use.

- **Safe roads and roadsides** – that are predictable and forgiving of mistakes. They are self-explaining in that their design encourages safe travel speeds.
- **Safe speeds** – travel speeds suit the function and level of safety of the road. People understand and comply with the speed limits and drive to the conditions.
- **Safe vehicles** – that prevent crashes and protect road users, including pedestrians and cyclists, in the event of a crash.
- **Safe road use** – road users that are skilled and competent, alert and unimpaired. They comply with road rules, take steps to improve safety, and demand and expect safety improvements.

## Selwyn District Crash Statistics 2010 – 2014 All crashes – Overview

- ❁ 1,237 crashes (508 injury, 729 non-injury) resulting in 37 deaths and 178 users seriously injured
- ❁ 92% of all crashes happened in rural areas, 82% of fatal and serious occurred in rural areas and 40% were at intersections
- ❁ 49% were lost control/head on type crashes (25% on bends and 24% on straight roads)
- ❁ The three most common crash factors were poor handling (34%), poor observation (31%), and failed to give way/stop (25%)
- ❁ Speed (12%) and alcohol (13%) were also common factors involved in crashes in the Selwyn District
- ❁ 28% of the at fault or part fault drivers in injury crashes were under 25 years old and 18% were over 60 years old
- ❁ ACC: Canterbury Motor Vehicle claims (2010-2014) 16,421 with a 5 year average of 3,264 showing a 2% upward trend since 2010
- ❁ ACC: Canterbury Motorcycle claims (2010-2014) 2,641 with a 5 year average of 528 showing a 7% downward trend since 2010

## Selwyn District Road Safety Strategy 2020

### Road Safety – A long term plan for Selwyn District – Vision: “Zero road deaths and serious injuries on Selwyn roads”

The aspiration of “Vision Zero” road deaths and serious injuries applies a long term, ultimate level of aspiration for the implementation of the Safe System in Selwyn. It takes into consideration our unique roading network that consists of 2,400 kilometres of mainly long, flat straight roads with over 1,000 intersections.

The district will continue to experience a sustained level of high growth that is continually increasing the number of vehicles on our roads ranging from those originating from our expanding townships close to Christchurch, and heavy trucks, dairy tankers and agricultural machinery on our rural network.

It is recognised that it is probably not possible to prevent all crashes. However, by taking a total view of the combined factors involved in road safety, “Vision Zero” aims to implement an improved road transport system that, in the longer term, will protect road users and prevent crashes that result in death and serious injury. The aspirational “Vision Zero” is underpinned by the overall goal to:

**“Progressively reduce the number and severity of road crashes in Selwyn District”**

## Police enforcement - the “Fatal Five”

Canterbury: 80% of all tickets will be issued for the “fatal five” offences as shown below. There is an expectation that 50% of all speed tickets will be for speeds between 1-15kph in excess of limit. The introduction of the lowered tolerance around schools and during holiday periods has widened the target.

**Speed    Drink/drug driving    Restraints    Dangerous/Careless driving    High Risk drivers**



Alcohol
<b>Selwyn Statistics 2010 - 2014 (Local Roads and State Highways)</b>
Between 2010 and 2014, there were 142(12% of all crashes) crashes that involved alcohol, 72 injury 70 non injury. These crashes resulted in 11 deaths and 35 people being seriously injured.
<b>Target groups</b>
All road users
<b>Reason for Action</b>
Alcohol crashes have been identified as a high risk area in the Safer Journeys Strategy 2020. It is also included as a priority action in the Selwyn Road Safety Strategy to 2020.
<b>Measures</b>
A reduction in recorded crashes over a five year period using crash comparisons with similar TA"s. (Group D) Police enforcement data and Crash Analysis System data.

## Alcohol / Drug Impaired Driving

[illegible]

## Alcohol / Drug Impaired Driving

[illegible]



## Intersections

### Selwyn Statistics 2010 - 2014 (Local Roads and State Highways)

There were 490 intersection crashes, which is 40% of all crashes in the Selwyn District. There were 209 injury and 281 non injury. The injury crashes resulted in 7 deaths, 73 seriously injured, Failure to give way/stop and poor observation were the most common crash factors.

### Target groups

All road users




### Reason for Action

Rural intersections have been identified as a high risk area in the "Communities at risk" register for Selwyn, it is also given a high rating in the Safer Journeys 2020. Addressing Intersection crashes is a key action in the Selwyn Road Safety Strategy to 2020. In Selwyn District there are many long straight roads, with a high percentage of rural road intersections located in 100kph speed limit areas.



### Measures

A reduction in recorded crashes over a five year period using crash comparisons with similar TA's. (Group D)  
Police enforcement data and Crash Analysis System data.

## Intersections



Activities	Actions and Outcomes	Target and Measures	Dates	Responsibility
<b>Safe Road Use</b> Intersection safety education and awareness programmes. 	<p>Deliver a co-ordinated education and awareness campaign aimed at improving road user behaviour at intersections.</p> <p>Road Users will be encouraged to adopt appropriate and safe driving practices at intersections.</p>	<p>Target is to deliver one campaign using a combination of media and resources to deliver key messages</p> <p>Measured by the community feedback and media pick up of the campaign.</p>	February 2015 - March 2016	Road Safety Coordinator
<b>Safe Roads/ Roadsides</b> Regular control of vegetation and maintenance of signs and road markings at intersections 	<p>Road maintenance contracts have regular inspections and work carried out to control vegetation and retain visibility of road markings.</p> <p>Clear sight distances and road markings clearly visible to road users</p>	<p>Inspections and trimming of vegetation completed as programmed. Road marking maintained to the level of retro reflectivity in the specification.</p> <p>Inspections and trimming recorded. Test results for road marking submitted and non-compliant road marking repainted.</p>	On-going	Assets roading staff, maintenance contractors
<b>Safe Roads/ Roadsides</b> Intersection layout, control and design 	<p>Have an on-going programme to upgrade intersections with arterial and collector roads that have the appropriate control, and layout.</p> <p>Have intersections that are clearly visible to drivers and provide clear guidance for drivers.</p>	<p>Have a proportion of the minor improvements budget used to upgrade intersections on arterial and collector routes each year (minimum of two intersections per year).</p>	On-going	Assets roading staff

## Intersections


Activities	Actions and Outcomes	Target and Measures	Dates	Responsibility
<b>Safe Roads/ Roadsides</b> Intersection layout, control and design 	<p>Ensure targeted information is shared with regional partners as part of working with them to identify and develop action plans to implement effective safe system treatments for identified risks, such as roundabouts and eliminating uncontrolled right hand turns.</p>	<p>Work with RCA's to prioritise interventions to address the highest risk intersections in each region based on the top 100 riskiest intersections which will be identified by NZTA.</p>	On-going	NZTA, ACC and Councils
<b>Safe Roads/ Roadsides</b> Intersection layout, control and design 	<p>Complete sign and road marking audit at SDC intersections to ensure they have appropriate warning signs and meet best practice for safety outcomes.</p> <p>Intersections will have correct signage appropriate to meet the needs for increased driver safety and compliance.</p>	<p>The changes recommended from the recent audit will/are being implemented. Auditing will be ongoing throughout financial year.</p> <p>Intersections are clearly visible and provide clear guidance for road users.</p>	On-going	Selwyn District Council, roading staff and contractors
<b>Enforcement</b>	Complete intersection enforcement as part of local Road Safety campaign.	Number of infringement notices issued. Reduction in serious crashes occurring at intersections.	July 2014 - June 2015	New Zealand Police
<b>NZTA</b> <b>The High Risk Intersection Guide</b>  <b>100 High Risk intersections</b>	<p>The guide has been released and is available to Safe System practitioners.</p> <p>The 100 High Risk Intersection list to be released regularly.</p>	<p>Guide and report is readily available and are being used by Safe System practitioners</p> <p>Safer High Risk Intersections</p>	July 2014 - June 2015	NZTA  NZTA, National Road Safety Committee, Councils

Motorcycles
<b>Selwyn Statistics 2010 - 2014 (Local Roads and Highways)</b>
There were 58 injury motorcycle crashes in Selwyn District resulting in 4 fatalities, 34 serious injuries. There were also 9 non injury crashes. These crashes are 5% of all crashes in the Selwyn District.
<b>Target groups</b>
All motorcycle riders, new and return riders, both male and female
<b>Reason for Action</b>
<p>Safer Journeys and the NZTA Strategic fit shows motorcycles as a high priority. The Communities at Risk Register shows that Selwyn is at medium risk.</p> <p>Selwyn District is a popular destination for riders wanting to do day trips out of Christchurch, most weekends see large numbers of motorcyclists travelling through the District, either alone or in large groups. The roads of choice for motorcyclists seem to be either hilly or winding roads like those in our district travelling towards Akaroa, the Rakaia Gorge and the West Coast.</p>
<b>Measures</b>
A reduction in recorded crashes over a five year period using crash comparisons with similar TA"s. (Group D) data

## Motorcycles

Activities	Actions and Outcomes	Target and Measures	Dates	Responsibility
<b>Safe Road use</b> Motorbike awareness education campaigns 	<p>Deliver an awareness campaign for both riders and motorists.</p> <p>Promote subsidised training to motorcyclists to upskill, particularly target new and return riders.</p>	<p>Develop and deliver a 6 week safety campaign with resources for both rider and drivers using a range of media.</p> <p>This will be measured by feedback from participants completing training and the wider community.</p> <p>Actively support and assist with the organisation of the annual motorcycle event with Christchurch City Council, "Responsible riders are survivors"</p>	<p>September – October 2015</p> <p>October 2015</p>	<p>Road Safety Coordinator</p> <p>Road Safety Co-ordinator, Christchurch City Council, ACC, Police, motorcycle trainers</p>
<b>Safe Road use</b> Motorcycles 	<p>Contracted subsidised riding training for beginner, intermediate, return riders and urban commuters.</p> <p>Results from rider risk assessments on key routes for motorbikes in Canterbury - SH 75 and SH73.</p>	<p>On-going subsidised training to be offered across New Zealand to all licenced riders in line with the new Competency Based Training and Assessment guidelines. Specific training sessions can be requested for more isolated districts to ensure reach.</p> <p>ACC and Selwyn District Council will jointly promote the Ride Forever training offer to motorcyclists. It is anticipated that there will be an increase in uptake of the training. It is now being offered as bronze, silver, gold and urban training.</p> <p>Measure: take up of training in these areas.</p>	<p>2014 – 2015 Financial year</p>	<p>NZTA/ACC and Motorcycle Safety Advisory Council (MSAC)</p>

## Motorcycles

Activities	Actions and Outcomes	Target and Measures	Dates	Responsibility
<b>Safe Roads/Roadsides</b> Engineering activities that improve the safety of our roads and roadsides 	Consider the effect on motorcyclists in roading designs.	The design of roading layouts and traffic facilities are considered as part of every project.	On-going	Selwyn District Council, Roading Team, NZTA State Highway consultants and contractors.
<b>Enforcement</b>	Concentration on motorcyclist offences throughout the Selwyn District.	The number of infringement notices issued to motorcyclists. Support and refer riders to motorcycle training.	July 2015 - June 2016	New Zealand Police
<b>NZTA High risk motorcycling guide</b>  <b>Motorcycle Licence changes</b>  <b>High Risk Canterbury Motorcycle Routes</b>	Released and available on the NZTA Website.  Changes have been made to strengthen theory, basic handling skills and restricted tests. Encourage uptake of Competency Based Training Assessment programme.  Rider based assessments have been completed and findings to be released (3 Canterbury High Risk Routes on SH).	Support the use of the motorcycling guide to Safe System practitioners and policy makers.  Measurement; A reduction in motorcycle crashes and motorcycle riders taking responsibility for their own safety.	July 2015 - June 2016	NZTA  NZTA  NZTA, Motorcycle Safety Advisory Council (MSAC) and local Councils

## Driver Distraction/Fatigue

### Selwyn Statistics 2009 - 2013 (Local Roads and Highways)

There were 190 injury crashes with distraction/fatigue recorded as a contributing factor. These crashes contributed to 5 fatalities, 43 people receiving serious injuries. This makes up 15% of all crashes in the Selwyn District.

### Target groups

All drivers and their passengers.

### Reason for Action

Driver Distraction and Fatigue has been identified as a Medium Risk area for the Selwyn out of the Communities at Risk Register and also given as a medium concern in the Safer Journeys.

There is growing concern that many crashes have distraction as a contributing cause. Cell phone use, eating, passengers, altering vehicle controls while driving are some of the commonly known types of distraction.


It is felt fatigue in drivers is not easy to detect and may be under reported and not openly admitted after a crash.

Note: Distraction and Fatigue have been combined into one activity to encourage a continued focus and local injury prevention strategies and awareness campaigns to be delivered to our residents and visitors throughout the year.

### Measures


A reduction in recorded crashes over a five year period using crash comparisons with similar TA"s. (Group D) Crash Analysis System data

## Distraction

Activities	Actions and Outcomes	Target and Measures	Dates	Responsibility
<b>Safe Road Use</b> Community awareness 	<p>Deliver a campaign to increase community awareness about risk and consequences of distractions.</p> <p>It has come to our attention that cell phone use is believed to be a common concern and many residents are keen to see this change.</p> <p>Arrange billboard rotation.</p>	<p>The amount of community response and engagement to the campaign.</p> <p>There will be an increased awareness of distraction while driving, particularly cell phone use, Drivers and passengers will be encouraged to make efforts to reduce the impact of cell phone use whilst driving.</p> <p>Billboards are installed for a period of six weeks on local roads.</p>	October – Mid November 2015	Road Safety Coordinator
<b>Enforcement</b>	<p>Concentration on cell phone offences as there has been a steady increase in infringements since hand held phones were banned in 2009.</p> <p>Support the Selwyn District Distraction campaign.</p>	<p>The number of enforcement notices issued through the year and during the period of the campaign.</p>	On-going	New Zealand Police
<b>NZTA National Advertising</b>  <b>High Risk Rural Road Guide</b>	<p>Continue to promote distraction messages on the NZTA website.</p> <p>Incorporate distraction considerations when developing infrastructure.</p>	<p>Increased awareness of the consequences of being distracted while driving and a reduction in crashes where distraction is a factor.</p> <p>The website is viewed by the wider NZ community.</p>	July 2015 – June 2016	NZTA



## Fatigue

Activities	Actions and Outcomes	Target and Measures	Dates	Responsibility
<b>Safe Road Use</b> Fatigue 	<p>Deliver campaigns with messages to raise awareness of fatigue related crashes and general strategies to cope with driver fatigue.</p> <p>Use advertising and resources to attract attention from the community.</p> <p>The outcome will be to increase awareness and ideally reduce the number of crashes with fatigue as a factor.</p>	<p>Deliver awareness campaigns prior to Summer holiday period and each long weekend during the year.</p> <p>Increased awareness of fatigue by drivers and their passengers.</p> <p>We gain regular editorial opportunities from local newspapers.</p> <p>Measured by pick up of media interest and community feedback.</p>	October, November and December 2015, February and Easter Weekend 2016.	Road Safety Co-ordinator
<b>Enforcement</b>	<p>Fatigue is included in high risk drivers in the fatal five. Increased awareness of fatigue in drivers by Police staff.</p>	<p>Number of crashes where fatigue is recorded as a crash factor reflects actual numbers. Driver education opportunities at point of contact.</p>	July 2015 – June 2016	New Zealand Police
<b>NZTA</b> <b>National Advertising</b>	<p>Information about Fatigue on NZTA website</p> <p>National advertising campaign/billboards using Drive fresh campaign</p>	<p>Increased awareness of driver fatigue and a reduction in crashes where fatigue is a factor.</p>	July 2015 – June 2016	NZTA

## Safe Speeds – Loss of Control

### Selwyn Statistics 2009 - 2013 (Local Roads and Highways)

There were 164 injury crashes where speed too fast for the conditions and loss of control was a factor. These crashes resulted in 9 fatalities, 40 people receiving serious injuries. There were 82 injury and 82 non injury crashes. These made up 13% of all crashes in the Selwyn District. Loss of control on bends featured highly with 25%, with 24% straight road loss of control.

NZ Police: An expectation that 50% of all speed tickets issued will be issued for speeds 1-15kph in excess of the limit. Focusing on these “low end” speed offences is considered to be key in reducing the overall speed distribution and consequent road trauma. The introduction of lowered tolerances around schools and holiday periods has widened the target.

### Target Groups

All drivers

### Reason for Action

Selwyn District can experience severe weather and road conditions during the Winter months. To increase driver awareness to make appropriate changes to their driving behaviour during Winter conditions. Crashes where loss of control was a factor were not necessarily drivers exceeding the limit, and were also attributed to not adjusting speed to suit the conditions.

There are two parts to this project, one targeted at Winter driving conditions and other for speed/ loss of control on rural roads.



### Measures

There will be a reduction in the number of crashes where drivers drive too fast for conditions and lose control.



Speed monitoring sites. Installation of speed safety cameras at various locations. The measure is that excess speed will reduce at controlled sites

Police enforcement data, the number of speed infringement notices recorded.

<p><b>Safe Speeds – Loss of Control</b></p>
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Activities	Actions and Outcomes	Target and Measures	Dates	Responsibility
<b>Safe Speeds</b> 	<p>Winter Driving Use all types of media to increase awareness of Winter driving conditions. Motorists are given relevant warning messages to encourage understanding of various driving conditions, how ice and snow, rain or sun strike might affect driving.</p> <p>Co-ordinate a Speed, Loss of control on rural roads campaign with other Canterbury Road Safety Coordinators.</p>	<p>Measured by community feedback and engagement of both campaigns.</p> <p>Increased public awareness of driving at an appropriate speed for the conditions and encouraging adoption of safe driving practices.</p> <p>A reduction in crashes where too fast for conditions are a contributing factor in crashes.</p>		<p>Road Safety Coordinator</p> <p>Canterbury Road Safety Coordinators Speed group</p>
<b>Safe Road Use</b> <b>Young Drivers</b> 	<p>Educate young drivers how to drive on different road surfaces i.e. snow and ice as part of the Leading Learners course, as an injury/crash prevention session.</p> <p>Organise Teen Coach sessions for parents and young driver as they gain their Learners Licence.</p>	<p>Utilise Leading Learner courses and Teen Coach to encourage safe driving practices and awareness of surroundings and potential distractions when driving.</p> <p>Measured by feedback from Learners, parents and the instructor.</p> <p>Reduction in young driver loss of control crashes in Selwyn District.</p>	<p>October 2015 and January, April 2016</p>	<p>Road Safety Coordinator</p> <p>Local police and NZTA qualified instructors</p>

## Safe Speeds – Loss of Control


Activities	Actions and Outcomes	Target and Measures	Dates	Responsibility
<b>Safe Speeds</b> 	<p>In Canterbury - In collaboration with road controlling authority and road safety partners identify roads that require speed management and support the development and implementation of action plans to manage speeds in a way that supports a Safe Systems approach.</p>	<p>Support roading authorities to prioritise speed management into regional road safety action plans, with a view to increasing public engagement around improved speed management.</p> <p>Nationally - Partner and co-invest in the development of a new approach to public engagement and education on speeds.</p>	July 2015 – June 2016	ACC
<b>Safe Roads and Roadsides</b> Engineering to improve the safety of our roads and roadsides 	<p>Consider the effect of loss of control in engineering design to have roadsides clear of hazards where vehicles may travel e.g. on the outside of bends.</p> <p>A proposed district wide safety audit of including but not limited to signage, road markings to improve safety on local roads.</p>	<p>The roadsides are designed as part of any project with loss of control a factor in the design.</p> <p>To improve road and roadside safety aids for drivers in Selwyn District.</p>	On-going	Selwyn District Council Roding Team, NZTA State Highway consultants and contractors.
<b>Police enforcement</b>	<p>Speed enforcement is listed in the fatal five offences. Police will concentrate on regular and on-going enforcement and speed infringements. Access to State Highway Patrol for Speed enforcement operations (eg. Ski fields)</p>	<p>Targeted enforcement around school areas and over long weekends.</p> <p>The measure will be the number of enforcement notices issued and a reduction in speed related crashes.</p>	On-going	New Zealand Police

## Safe Speeds – Loss of Control

Activities	Actions and Outcomes	Target and Measures	Dates	Responsibility
<p><b>NZTA</b></p> <p><b>National Advertising and promotion</b></p> <p><b>Speed management Plan</b></p> <p><b>Safety/speed cameras</b></p>	<p>National Television advertising. Reach NZ Wide</p> <p>Continue to work towards a Speed Management Plan for Government. Gain feedback and community from the wider NZ Community. Agree positions on appropriate speed given to use, function, risks and level of safety provided by the road.</p> <p>Following consultation, more locations and increased use for safety/speed cameras. Camera Installation sites and new technology is targeted at areas of risk.</p>	<p>Increased public acceptance of safe speeds and awareness of consequences of driving at high speeds.</p> <p>Measure – If people agree, it will affect driver behaviour and support travel at safer speeds. Evident interest and support for the 3 year campaign from communities nationwide.</p> <p>Attendance and input at the Safer Speed workshops throughout NZ.</p> <p>Number of safety camera installations completed and resulting infringements issued.</p>	<p>July 2015 – June 2016</p>	<p>NZTA</p> <p>NZTA, New Zealand Police, Communities</p> <p>NZTA, Ministry of Transport, New Zealand Police, Communities</p>

Mature Road Users	
<b>Selwyn Statistics 2009 - 2013 (Local Roads and Highways)</b>	
There were 121 injury crashes in Selwyn District involved older drivers, which relates to 24% of all injury crashes.. These crashes resulted in 16 fatalities and 47 people receiving serious injuries.	
<b>Target groups</b>	
All mature drivers, with a particular focus on those aged 60+	
<b>Background</b>	
In Selwyn District there is a need for mature drivers to continue driving for longer to enable them to access services, shops and health requirements. Mature drivers are a high concern for Selwyn in the Communities at Risk Register. It is a key action in the Selwyn District Road Safety Strategy. Older drivers feature as an emerging trend both locally and nationally.	
<b>Measures</b>	
The number and severity of crashes where the mature driver is either at fault or part fault is reduced. A reduction in recorded crashes over a five year period using crash comparisons with similar TA"s. (Group D) Crash Analysis System data.	

## Mature Road Users

Activities	Actions and Outcomes	Target and Measures	Dates	Responsibility
<b>Safe Road Use</b> 	<p>Mature Driver Courses Contract Age Concern to facilitate the Confident Driving Courses in the Selwyn District.</p> <p>CarFit Events Co-ordinate Carfit events in the Selwyn District.</p> <p>Outcomes - Mature drivers will be more confident, safe and comfortable when driving their vehicle.</p>	<p>Each course is well attended and positive feedback received.</p> <p>Course and event participation and feedback from mature drivers.</p> <p>A reduction in the number and severity of crashes where mature drivers are involved.</p>	<p>September 2015 – April 2016</p>	<p>Road Safety Co-ordinator, Age Concern, Police</p> <p>Road Safety Co-ordinator, AA, CarFit Technicians, and Occupational Therapists</p>
<b>Enforcement</b>	Attend and support Confident Driving Courses and refer drivers where applicable.	Attendance when each course is held in the Selwyn District.	2015-2016 Financial year	New Zealand Police
<b>NZTA Staying Safe</b>	Resources are readily available for mature driver education and activities.	Resources will be utilised and mature drivers are given opportunities to attend courses and activities.	On-going	NZTA

## Young Drivers (16-24)

### Selwyn Statistics 2010 – 2014

Young drivers were involved in 170 crashes resulting in 12 fatalities, 51 people receiving serious injuries. These crashes make up 33% of all crashes in the Selwyn District. Young drivers were at fault in 34% of all crashes.

### Target groups

**Overall:** drivers aged between 16 and 24 years old, utilising young driver programmes, resources and engagement opportunities.

**Leading Learners:** drivers on a Learner licence who are a resident in Selwyn (aged 16-19).

**Teen Coach:** drivers and their parent/caregiver who are on or preparing for a Learner Licence (aged 16-19)

### Reason for Action



The reason for this action is to reduce the number of young people involved in crashes, driving offences and Graduated Driving Licence System breaches. Encourage participation in other driving programmes to increase experience and support 120 hours of supervised driving before applying for a Restricted Licence.

### Measures

There will be a reduction in young driver crash and enforcement statistics. A reduction in breaches of learner and restricted licence. Evaluation forms from Learners and parents, and feedback from instructors after attending courses and activities.



## Young Drivers

Activities	Actions and Outcomes	Target and Measures	Dates	Responsibility
<b>Safe Road Use</b> 	<p>Hold four Leading Learners courses this financial year. A practical programme that teaches driving on different road surfaces, braking and stopping distances, hazard awareness, low speed manoeuvres, peer pressure (in car), distraction, basic car maintenance.</p> <p>Hold at least two Teen Coach workshops per year, prior to Leading Learners course.</p> <p>Investigate further supportive opportunities for Restricted drivers in this age group.</p>	<p>Young driver 16-24 years The courses and activities are well attended by young drivers and parents attending a Selwyn secondary school or living in the District.</p> <p>Evaluation forms and feedback from instructors.</p> <p>A reduction in the crash statistics involving young drivers, particularly restricted drivers.</p> <p>A reduction in the number of young driver offences.</p>	2015 - 2016 financial year	Road Safety Coordinator and Driving Instructors New Zealand Police
<b>Safe Road Use</b> 	<p>Promote Practice, Safe Teen, SADD and Attitudes programmes to Young Drivers in the Selwyn District including, but not limited to high schools.</p> <p>Safe Teen Driver - <a href="http://www.safe.teen.govt.nz">www.safe.teen.govt.nz</a></p> <p>Practice - <a href="http://www.practice.govt.nz">www.practice.govt.nz</a></p> <p>Right Car - <a href="http://www.rightcar.govt.nz">www.rightcar.govt.nz</a></p>	<p>Practice has been re-pitched to a wider market to embrace those drivers who are older but have not progressed through the Graduated Driver Licence System.</p> <p>Measure: Registration of drivers on the Practice site. The increase use of computer based tools for Young drivers.</p> <p>Advertising and promotion is successful and programmes are utilised by young drivers and their parent/caregivers.</p>	2015 - 2016 financial year	Road Safety Coordinator ACC SADD NZTA

## Young Drivers

Activities	Actions and Outcomes	Target and Measures	Dates	Responsibility
<b>Safe Road Use</b>	Maintain relationship with SADD coordinator with the view to working jointly on road safety concerns for young drivers, including but now not restricted to alcohol impairment.	Young drivers, particularly those attending Secondary School  To achieve a reduction of young driver related offences/crashes in Selwyn district.	2015-2016 Financial year	Road Safety Coordinator and SADD Coordinator
<b>Enforcement</b>	Support Leading Learners courses and refer if applicable. Young Drivers are included in the fatal five offences in High Risk Drivers.	Police attendance at Leading Learners courses.  The measure will be the number of enforcement notices issued.	2015 - June Financial year	New Zealand Police

## Selwyn District Council Road Safety Projects

### Selwyn District Council Projects

- ✿ School community: Support schools with general road safety concerns, inclusive of speed, return to school, 20k passed school bus and school gate safety
- ✿ Community Road Safety Fund: Schools, organisations and residents have access to the fund which is available to support local road safety initiatives.
- ✿ Child restraint: Education and child restraint checking and clinics are available to Selwyn District residents.
- ✿ Vulnerable Road users: Road safety for young pedestrians and cyclists

### Target groups

Selwyn Young people aged 0-18 and their parents/caregivers.  
Early childhood education centres (ECEs) and schools.



### Reason for Action

Road safety for our Districts young people is included in the current Selwyn Road Safety Strategy and the Walking and Cycling Strategy (currently being updated)


### Measures

A reduction in speed around schools, an improvement in school gate safety and children's school travel (by way of engineering improvements and road safety education). Utilisation of safe routes to school, improvement of driver behaviour around schools, incorporation of NZTA school road safety education into the curriculum, increased road safety knowledge of children and their parents/caregivers, increased compliance of child restraint laws and recommendations.



## Selwyn District Council Road Safety Projects (0-18yrs)

Activities	Actions and Outcomes	Target and Measures	Dates	Responsibility
<b>Safe Road Use</b> 	<b>School Safety</b> <p>Road users slow down to 40km/h when travelling through rural school zones when children are present.</p>	<p>A reduction in vehicle speeds when children are present within school zones.</p>	<p>2015 – 2016 Financial year</p>	<p>Road Safety Coordinator</p>
<b>Safe Speeds</b> 	<p>Road users comply with the posted speed limit when driving past urban schools and drive 20km/h when passing a school bus that has stopped to let children on or off, in both directions.</p> <p>Rotate the Speed Calming Device around seven schools in Selwyn District.</p> <p>School visits and NZTA resources and a back to school awareness campaign</p> <p>Promote safe travel for children to/from schools, including all modes of transport, including walking, cycling, scooting, private car and bus transport.</p>	<p>The continued use of the 40km/h advisory speed rural school signs will show a reduction in vehicle speeds and an increase in awareness.</p> <p>A reduction in speed in the selected school communities.</p> <p>Distribute NZTA resources to schools at least once a year or as requested.</p> <p>Deliver back to school campaign in February to increase awareness of our young road users as they travel to/from school.</p>	<p>2015 -2016 Financial year</p> <p>February 2016</p>	<p>Selwyn District Council Roading Staff</p> <p>Road Safety Coordinator</p>




## Selwyn District Council Road Safety Projects (0-18yrs)

Activities	Actions and Outcomes	Target and Measures	Dates	Responsibility
<b>Enforcement</b>	Continue speed past schools enforcement campaigns.	<p>Target drivers who drive over the posted limited in school areas.</p> <p>The measure will be the number of infringement notices that are issued.</p> <p>And a reduction in the incidence of vehicles speeding past schools and stopped school buses.</p>	On-going	New Zealand Police
<b>Safe Roads/Roadsides</b> Engineering activities that improve the safety of our roads and roadsides 	Consider the layout of intersections and crossing points so they provide crossing facilities that are as safe as possible and easy to use by school children. Appropriate locations for kerb cut-downs are selected.	Minor improvements are made where possible after assessing school road safety concerns. Safer routes to/from school are identified and children are made aware of and use these routes.	On-going	Selwyn District Council Rooding Team, NZTA State Highway consultants and contractors, and School communities
<b>NZTA School Road Safety resources and promotions</b>	NZTA School Road Safety website <a href="http://www.education.nzta.govt.nz">www.education.nzta.govt.nz</a>	School resources are utilised by schools and competitions receive a high number of entries across NZ.	On-going	NZTA

## Selwyn District Council Road Safety Projects

Activities	Actions and Outcomes	Target and Measures	Dates	Responsibility
<b>Safe Road Use</b> 	<b>Community Road Safety Fund</b> Selwyn District schools, ECEs and the wider community are invited to apply for funding for road safety initiatives that will contribute to the goals of the Selwyn District Road Safety Strategy and Safer Journeys.  Community, School and Early Childhood Education road safety projects and initiatives are identified and delivered.	The fund is used appropriately according to the terms of reference to increase, assist or improve road safety for the Selwyn District.  Initiatives and projects are delivered and are successful in meeting the goals of the Community Road Safety Fund.	2015 – 2016 Financial year	Selwyn District Council Funding  Road Safety Coordinator
<b>Safe Road Use</b> 	<b>Child Restraints</b> Coordinate the training and support of Child Restraint Technicians across Selwyn District.  Organise and run at least two child restraint clinics per financial year, promoting car seat safety and offering opportunities to share information, identify and remedy child restraint issues	Educate Selwyn parents and caregivers on the correct use and installation of child restraints.  Check child restraints and remedy any incorrect installations at child restraint clinics. Parents / caregivers are more informed. Operate Child Restraint check points with RSC, Police and Plunket.	2015 -2016 Financial year	Selwyn District Council Funding  Road Safety Coordinator Police Plunket
<b>NZTA</b>  <b>Child Restraints</b>	Raise awareness on benefits of child restraint use over 5 years of age  Extend the criteria for mandatory use of child restraints for children over 7 years	Support with print resources, public education campaigns and improved data collection about restraint use.	On-going	NZTA, Councils, Plunket

## Safer Journeys - General

Activities	Actions and Outcomes	Targets and Measures	Dates	Responsibility
<b>Safe Road Use</b> <b>Heavy motor vehicles</b> 	<p>Workplace safety interventions – Fleet safety Programme and ACC Fleet Saver.</p> <p>Promote the Fleet Safety Programme resources to all fleet owners (includes light and heavy fleet owners) Assist fleet owners to enhance their health and safety practices.</p>	<p>Visit at least 10 transport companies in Canterbury.</p> <p>Provide resources to support these organisations when requested / required.</p>	<p>July 2015 – June 2016</p>	<p>ACC, NZTA, New Zealand Police, Ministry of Business Innovation and Employment</p>
<b>Safe Speeds</b> <b>Heavy motor vehicles</b> 	<p>Support the Fleet Health promotion with Police Rural PHO and fleet companies.</p> <p>Promote the Fleet safety programme and Fleet Saver as community opportunities arise.</p>	<p>Present to industry on these products</p>		
<b>Safer Vehicles</b> <b>Right Car Website</b> 	<p>Promotion of Right Car Website Increased awareness of website and other information available from NZTA</p> <p>Right Car website promoted as part of Leading Learners courses to educate parents/caregivers on safe first car options.</p> <p>Maintain Right Car Website <a href="http://www.rightcar.govt.nz">www.rightcar.govt.nz</a></p>	<p>Selwyn residents, particularly those intending to buy a motor vehicle for personal or business use.</p> <p>Improved safety of learner drivers by recommending parents/caregivers obtain a vehicle with a safety rating of 3 stars or more. Promote Rightcar and star ratings.</p> <p>Changed consumer behaviour when purchasing vehicles and the website is regularly visited by people across New Zealand.</p>	<p>On-going</p> <p>July 2015 – June 2016</p> <p>On-going</p>	<p>Road Safety Coordinator</p> <p>Road Safety Coordinator</p> <p>NZTA</p>

## DRAFT Road Safety Calendar 2014 – 2015

Month	Project/Activity	Brief Description	Seasonal Risk Factors	NZTA Advertising
<b>July</b>	Speed – Loss of Control Young Drivers	Winter Driving - Be prepared for all conditions Is 100K OK? Social media campaign Leading Learners	School holidays Pedestrians Icy Roads	Alcohol Fatigue
<b>August</b>	Distraction Young Drivers	Distraction - Drive phone free Teen Coach	Pedestrians Icy Roads Ski Season	Young Drivers Drugs
<b>September</b>	Motorcycles Mature Drivers	Safety Awareness Campaign and Ride Forever training promotion Confident Driving Course, CarFit training day (SDC)	Heavy Vehicles Weather	Speed Distractions
<b>October</b>	Mature Drivers Motorcycles Fatigue Young Drivers	CarFit Motorcycle Safety Awareness Campaign and Motorcycle Safety Event (with CCC) Labour Weekend Leading Learners	Holidays Drink Driving Weather	Alcohol Young Drivers
<b>November</b>	Mature Drivers Motorcycles Young Drivers	Confident Driving Course, CarFit Ride Forever training promotion Teen Coach	Fatigue Motorcycling Drink Driving Harvesting	Speed Fatigue
<b>December</b>	Fatigue Alcohol	Summer holiday driving  Christmas / New Year Drink/Drive Campaign, to involve local Licenced premises including hotels, taverns and sport clubs.	Fatigue, Tourists Motorcycling Drink Driving Harvesting	Alcohol Drug Driving



## DRAFT Road Safety Calendar 2014 – 2015

Month	Project/Activity	Brief Description	Seasonal Risk Factors	NZTA Advertising
<b>January</b>	Alcohol  Young Drivers	Christmas / New Year Drink/Drive Campaign, including Licenced premises including hotels, taverns and sport clubs.  Leading Learners	Tourists , Fatigue Harvesting Drink driving Motorcycling	Speed Fatigue
<b>February</b>	Intersections Mature Drivers Motorcycles School Road safety	Intersection campaign Confident Driving Course, CarFit Promotion for Ride Forever training School visits, Back to school campaign	Harvesting Roadworks Drink Driving Motorcycling	Drug Driving Young Drivers
<b>March</b>	Mature Drivers Intersections Motorcycles Fatigue	Confident Driving Course, Carfit Intersection Campaign Promotion of Ride Forever training Easter Weekend	Motorcyclists Drink Driving Tourists Easter	Young Driver Speed
<b>April</b>	Speed/Loss of Control	Rural Roads – Your speed affects others Vulnerable road users	Motorcycling	Alcohol Fatigue
<b>May</b>	Speed/Loss of Control	Rural Roads – Effect of speed/vulnerable road users Winter Driving – be prepared for all conditions	Pedestrians	Speed Distractions
<b>June</b>	Speed/Loss of Control	Winter Driving - Be prepared for all conditions	Pedestrians Winter/Darkness	Alcohol Drug driving

# **Safety Management System Actions**

Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Planning SMS 1.1
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Road Hierarchy</b>
<b>Description / Purpose:</b>	To assign functional categories to the road network to enable standards, guidelines and controls that are appropriate to road function to be applied in a consistent manner.
<b>Safety Issues:</b>	Use of roads that are inappropriate (eg through traffic using local access roads) Achieving higher safety standards (eg through better lighting, capacity, separation, delineation etc) on busier roads

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	Resource Management Act Local Government Act (Part XXI, 1974)
<b>Policies / Bylaws:</b>	
<b>Standards:</b>	District Plan (excludes physical standards) Asset Management Plan
<b>Guidelines:</b>	Rural Road Design: Guide to the Geometric Design of Rural Roads, Austroads, 1989 NZS 4404 : 2004 : Land Development and Subdivision Eng

#### SMS Procedures

	Urban	Rural
<b>Planning Procedures</b>	Road hierarchy currently based on traffic volume and purpose of road. Four categories. Hierarchy being reviewed as part of CRETS study and a significant change is expected. Will take importance from the regional strategy. Hierarchy to be defined in the District Plan. ( <i>Improvement Plan</i> )	
<b>Development Standards</b>	Selwyn has own standards which are generally taken from Austroads and NZS 4404 Standards documented in the District Plan.	
<b>Review, Monitor &amp; Evaluation Requirements</b>	Ongoing process of reviewing	

#### Organisation

<b>Primary Responsibility:</b>	Asset Manager Roading	<b>Controlling Documents:</b>	District Plan, Asset Management Plan, Engineering standards under development
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Planning SMS 1.2
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Land use planning and regulatory controls including district plan and bylaws</b>
<b>Description / Purpose:</b>	To establish controls on land use planning processes and changes so that impacts on traffic safety and efficiency can be minimised and / or balanced against the benefits of the change
<b>Safety Issues:</b>	<p>Adjacent land uses can affect road safety if they are not controlled to be sympathetic to the road network. There is a growing proliferation of access points (especially developers) and these can lead to safety conflicts because of narrow road reserves.</p> <p>In urban areas, on street manoeuvring and parking demand and associated site specific signage, including advertising signs can cause distraction.</p> <p>Requests for signs can be a safety issue.</p> <p>Café use of footpaths can lead to safety conflicts with pedestrians and mobility scooters.</p> <p>The level of regulatory enforcement can be an issue.</p>

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	Local Government Act (Part XXI, 1974 and 2002) Resource Management Act
<b>Policies / Bylaws:</b>	District Plan
<b>Standards:</b>	SDC District Plan NZS 4404 : 2004 : Land Development and Subdivision Eng
<b>Guidelines:</b>	<p>NZS 9201.25:2000: Model general bylaws – Traffic</p> <p>NZS 9201.8:1999: Model general bylaws – Control of Advertising Signage</p> <p>RTA Guide to Traffic Generating Developments</p> <p>Austroads Guide to Traffic Engineering Practice</p> <p>RTS 3 - Guidelines for Establishing Rural Selling Places, LTSA</p> <p>RTS 6 - Guidelines for Visibility at Driveways, LTSA</p> <p>RTS 7 – Advertising Signs and Road Safety: Design and Location Guidelines, LTSA</p> <p>RTS 13 - Guidelines for Service Stations, LTSA</p> <p>Manual of Traffic Signs and Markings (MOTSAM)</p> <p>NZS 4404 : 2004 : Land Development and Subdivision Eng</p>

#### SMS Procedures

	Urban	Rural
<b>Planning Approvals</b>	<p>All consent applications (subdivisions, land-use changes and access point consents) are to be reviewed for safety by Engineering staff prior to approval with comments and safety recommendations provided to planning staff. This will usually involve consideration and discussion of proposed designs with developers prior to consent being lodged.</p> <p>Conduct site visits where there are likely to be significant safety implications.</p> <p>Appropriately qualified and/or experienced personnel must sign-off on all designs. Sign off is in conjunction with other utility managers.</p> <p>Independent safety audits are to be required through the resource consent approval process and Producer Statements for large-scale subdivisions or developments. Refer to SMS 2.3 for requirements. <i>(Improvement plan action to implement)</i></p> <p>CRETS is expected to define the need for more access controls (eg Limited Access Road provisions) and planning hierarchy</p>	

	Urban	Rural
<b>Operational Procedures</b>	Respond to complaints & concerns – eg advertising signage. Inspection of subdivisions and monitoring of activities undertaken by Asset Team on a planned basis.	
<b>Review, Monitor &amp; Evaluation Requirements</b>	District Plan reviews require asset engineers input. Review provisions for access controls in District Plan. ( <i>Improvement plan action</i> )	

#### **Organisation**

<b>Primary Responsibility:</b>	District Planner / Asset Manager Roading	<b>Controlling Documents:</b>	District Plan
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Capital Works SMS 2.1
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Road Design and Geometrics</b>
<b>Description / Purpose:</b>	To provide design guidance for roading projects. To ensure consistency in construction standards for long term safety and cost effectiveness.
<b>Safety Issues:</b>	Providing "no surprises" for road users through consistent design standards. Potential for conflict between road users.

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	Resource Management Act Local Government Act (Part XXI, 1974 and 2002)
<b>Policies / Bylaws:</b>	Asset Management Plan
<b>Standards:</b>	District Plan NZS 4404:2004 : Land Development and Subdivision Engineering Austroads design standards.
<b>Guidelines:</b>	Guide to Geometric Design Rural Roads, NRBNZ, 1985. Austroads Guide to Traffic Engineering Practice Highway Surface Drainage – Design Guide for Highways with a Positive Collection System, National Roads Board. Pavement Rehabilitation Manual, National Roads Board. ARRB Sealed Roads Manual, Guidelines to Good Practice for the Construction, Maintenance and Rehabilitation of Pavements 1995. CCC Construction Standard Specifications (CSS) Pts 1, 6

#### SMS Procedures

	<b>Urban</b>	<b>Rural</b>
<b>Capital Works</b>	Predominantly in house professional services are used for design, supervision and contract management for physical works. Only a minor amount of external services are used. Geometric and other design standards are defined above. Refer also to the Guidelines, which may be used in preference to standards in particular design circumstances	
<b>Review, Monitor &amp; Evaluation Requirements</b>		

#### Organisation

<b>Primary Responsibility:</b>	Roading Engineer	<b>Controlling Documents:</b>	District Plan, NZS 4404, Engineering Standards
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Capital Works SMS 2.2
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Structures Design</b>
<b>Description / Purpose:</b>	To ensure structures are designed and constructed to provide safety for road users
<b>Safety Issues:</b>	Non observance of bridge weight and speed restrictions. Some bridge end structures represent a potential hazard. Narrow approaches with limited stopping sight distance. Single lane structures. Retaining structures.

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	Resource Management Act Local Government Act (Part XXI, 1974 and 2002)
<b>Policies / Bylaws:</b>	Asset Management Plan – Bridges, Culverts
<b>Standards:</b>	NZS Standards and Codes for loadings, design and materials. NZ Building Act (2004). TNZ Bridge Manual (2003) SP/M/022 TNZ M23 Specification for Design, Manufacture & Maintenance of Guardrails. NZS 4404:2004 : Land Development and Subdivision Engineering HIRDS2 (High Intensity Rainfall Design System version 2.0), National Institute of Water and Atmospheric Research (NIWA)
<b>Guidelines:</b>	AP-23/94: Waterways Design: A guide to the Hydraulic Design of Bridges, Culverts and Floodways: Austroads 1994 HIRDS <sup>2</sup> , NIWA

#### SMS Procedures

	Urban	Rural
<b>Capital Works</b>	All new structures require specific design and building and resource consent where applicable. In house professional services are used for design, supervision and contract management for physical works. External professional services may be used for specialised structures. Design standards are defined above. Deviations must be discussed with and approved by the Road Engineering.	
<b>Review, Monitor &amp; Evaluation Requirements</b>		

#### Organisation

<b>Primary Responsibility:</b>	Road Engineering	<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Capital Works SMS 2.3
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Project Safety Audits</b>
<b>Description / Purpose:</b>	To ensure safety audits are carried out as appropriate to the scale and safety risk of capital projects.
<b>Safety Issues:</b>	<p>Inappropriate standards applied to design</p> <p>Potentially unsafe designs that could be easily remedied prior to construction</p> <p>Nearby features that may affect safety (but are not within the design area).</p> <p>Design inconsistent with balance of road environment</p> <p>Hazards not identified as early as possible, where remedial action could be taken to reduce risk.</p> <p>Not all types of road users are considered.</p>

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	Transit NZ Act Local Government Act (Part XXI, 1974)
<b>Policies / Bylaws:</b>	
<b>Standards:</b>	Road Safety Audit Procedures for Projects Guideline, Transfund, Nov 2004 Transit NZ Manuals and Specifications
<b>Guidelines:</b>	Road Safety Audit, 1994, Austroads Austroads Guide to Traffic Engineering Practice, LTSA Traffic Notes and Information Sheets

#### SMS Procedures

	Urban	Rural
<b>Audit Procedures</b>	<p>No formal procedures at present. To be developed so included as part of design brief (<i>Improvement Plan action</i>)</p> <p>Note that Land Transport NZ policy requires all phases of financially assisted projects to be subject to safety audit unless the client project manager declares that a road safety audit is not required. (Note that the scale of the hazard is more important than the scale of the project in making this decision).</p> <p>Project Safety Audits are to be undertaken by specifically trained auditors.</p> <p>Subdivisions and developments are covered by this procedure – and safety audits are to be conducted by appropriately qualified personnel, with findings and responses reported to SDC Asset Manager Roading prior to project sign-off and acceptance. (<i>Improvement Plan action</i>)</p>	
<b>Review, Monitor &amp; Evaluation Requirements</b>		

#### Organisation

<b>Primary Responsibility:</b>	Asset Manager Roading	<b>Controlling Documents:</b>	Road Safety Audit Procedures for Projects Guideline, Transfund, Nov 2004
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Assets / Maintenance SMS 3.1
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Pedestrian Crossing Facilities</b>
<b>Description / Purpose:</b>	To provide safe and well maintained pedestrian crossing facilities where traffic flow is heavy and there is a pedestrian demand
<b>Safety Issues:</b>	<p>Sight distances and intervisibility between driver and pedestrian.</p> <p>Location of crossing.</p> <p>Availability of tactile indicators.</p> <p>Adequacy of signs and markings and lighting.</p> <p>Potential for conflict with cyclists.</p> <p>Overhanging vegetation.</p> <p>Material type.</p>

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	Local Government Act (Part XXI, 1974) Land Transport Rule: Traffic Control Devices 2004
<b>Policies / Bylaws:</b>	
<b>Standards:</b>	TR11 (MOT/LTSA specification) MOTSAM Parts I and II AS/NZS 1158: 1997 – Street Lighting
<b>Guidelines:</b>	<p>TRAFINZ Pedestrian Crossing Standards</p> <p>NZ Local Authority Traffic Institute: Pedestrian Crossings</p> <p>RTS 14: Guidelines for Facilities for blind and vision-impaired pedestrians.</p> <p>LTSA Guidelines for KEA crossings – Fact Sheet 26, 2003</p> <p>Austrroads Guide to Traffic Engineering Practice Part 13 – Pedestrians</p>

#### SMS Procedures

	Urban	Rural
<b>Operational Practices</b>	Aim is to provide a safe place to cross rather than a formal 'crossing' Apply LTSA Guidelines and Warrants, including lighting, for pedestrian crossing facilities. Have all types including Kea crossings.	
<b>Capital Works</b>	Other crossing points for pedestrians improved through use of kerb extensions and pedestrian refuges, where safety can be improved.	
<b>Review, Monitor &amp; Evaluation Requirements</b>	Maintain ongoing review of all existing pedestrian crossing facilities, and change to appropriate / alternative controls as defined by warrant considerations and public demands.	

#### Organisation

<b>Primary Responsibility:</b>	Asset Rooding Engineer / Rooding Engineer	<b>Controlling Documents:</b>	TR 11
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Assets / Maintenance SMS 3.2
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Cycle Facilities</b>
<b>Description / Purpose:</b>	Allow for a safe network of on and off-road facilities for cyclists so as to make cycling more attractive, enhance its convenience and improve safety
<b>Safety Issues:</b>	Poor crash record for cyclists Surface condition and debris Alignment Parking Cyclists using pedestrian facilities. Cyclists on arterial routes. Cycle facilities at intersections and crossing places.

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	Land Transport Rule: Traffic Control Devices 2004 Local Government Act (Part XXI, 1974)
<b>Policies / Bylaws:</b>	RLTS – Policy 2.2 and Appendix B – Cycling in Canterbury (Strategy for the development of a regional network of cycle routes)
<b>Standards:</b>	NZS 4404:2004 : Land Development and Subdivision Engineering
<b>Guidelines:</b>	Austroroads Guide to Traffic Engineering Part 14 – Bicycling

#### SMS Procedures

	Urban	Rural
<b>Inspection / Monitoring</b>		
<b>Emergency Maintenance</b>	Inspect and remove broken glass, loose sealing chip or sand, missing service access covers as per Maintenance contracts	
<b>Routine Maintenance</b>		
<b>Capital Works</b>	SDC has no cycle strategy – to be developed ( <i>Improvement Plan</i> ). Cater for cyclists as can when upgrading roads. Encourage cycle and pedestrian links between subdivisions. Provision of ChCh to Lincoln off road cycleway. Where practicable, cycleways are to be located off-road, using negotiation with land-owners as appropriate.	
<b>Review, Monitor &amp; Evaluation Requirements</b>		

#### Organisation

<b>Primary Responsibility:</b>	Asset Manager Roading	<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Assets / Maintenance SMS 3.3
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Footpaths</b>
<b>Description / Purpose:</b>	To provide safe and efficient pedestrian access
<b>Safety Issues:</b>	<p>Separation of pedestrian traffic from vehicular traffic. Need for an even footpath surface conflicts with the crossfall required for vehicle crossings Rough surface from poor trench restoration. Use by bicycles, push scooters and ride-on mobility scooter. Location/alignment at intersections Design and location of crossing points Cleanliness (lichen/moss, leaf drop) Crossfall at some wheelchair crossings excessive for wheelchairs / mobility scooters. Overhanging vegetation (regulatory control) Free standing signs (regulatory control)</p>

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	Local Government Act (Part XXI, 1974) Land Transport Rule: Traffic Control Devices 2004
<b>Policies / Bylaws:</b>	District Plan SDC Policy 411 Frontages at Schools
<b>Standards:</b>	<p>NZS 4404:2004 : Land Development and Subdivision Engineering AS/NZS 4586:1999 : Slip resistance classification of new pedestrian surface materials AS/NZS 4663:2002 : Slip resistance measurement of existing pedestrian surfaces NZS 4121:2001 : Design for Access and Mobility: Buildings and Associated Facilities</p>
<b>Guidelines:</b>	<p>RTS 14 Guideline for installing pedestrian facilities for people with visual impairment Austroads pedestrian standards</p>

#### SMS Procedures

	Urban	Rural
<b>Inspection / Monitoring</b>	Yearly inspection of surface and overhanging trees. Footpath data updated into RAMM.	Routine monitoring of rural metalled paths (small lengths only).
<b>Operational Practices</b>	Currently no provision for making improvements across school frontages – but SDC provides advice to schools in relation to the management of traffic at school frontages.	
<b>Emergency and Routine Maintenance</b>	Actions identified above are referred to Maintenance Contractor for response based on priority.	No paths in rural areas, some extra mowing to provide a clear walking space.
<b>Capital Works</b>	<p>New assets must comply with surfacing slip resistance standard. Cross fall and gradient standards are defined in NZS 4404 and NZS 4121. Crossing points for wheelchairs provided as required</p>	
<b>Review, Monitor &amp; Evaluation Requirements</b>		

**Organisation**

<b>Primary Responsibility:</b>	Asset Roothing Engineer / Roothing Engineer
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<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Assets / Maintenance SMS 3.4
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Pavement Surface Skid Resistance</b>
<b>Description / Purpose:</b>	To ensure that the carriageway surface is safe and has adequate skid resistance for road users during all weather conditions
<b>Safety Issues:</b>	Texture depth and skid resistance (Micro and Macro texture). Poor skid resistance can reduce tyre traction and contribute to loss of control crashes.

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	
<b>Policies / Bylaws:</b>	
<b>Standards:</b>	PFM 6: Road Condition Rating and Roughness Manual; Transfund New Zealand, 1997
<b>Guidelines:</b>	Transfund New Zealand Maintenance Guidelines for Local Roads, August 2004 TNZ Standards and Specifications for Testing and Evaluation T10: Specification for Skid Resistance Deficiency Investigation and Treatment Selection (SCRIM only) TNZ Bituminous Sealing Manual Austroads – Friction Related Crashes – Guidelines for Minimising Friction Related Crashes on Road Networks, 2002 Draft Austroads – Guide to the Selection of Pavement Surfacing, 2000

#### SMS Procedures

	<b>Urban</b>	<b>Rural</b>
<b>Inspection / Monitoring</b>	Not seen as an issue on a network basis as high quality chip provides good skid resistance. Contractor monitoring bleeding sites etc. where skid resistance may be an issue.	
<b>Emergency Maintenance</b>		
<b>Routine Maintenance</b>		
<b>Capital Works</b>	Continue to use high quality and appropriately sized chip for all sealing	
<b>Review, Monitor &amp; Evaluation Requirements</b>	Review skid resistance inspection / testing procedures (eg Grip Tester), based on road hierarchy and potential risk sites such as intersections (Improvement Plan)	

#### Organisation

<b>Primary Responsibility:</b>	Asset Roading Engineer	<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Assets / Maintenance SMS 3.5
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Pavement Condition – Sealed / Unsealed</b>
<b>Description / Purpose:</b>	To ensure the carriageway is free of surface defects for the provision of a safe and efficient trafficable surface
<b>Safety Issues:</b>	<p>Potholes, subsidence, pavement shape (deformation, rutting, shoving, edge breaks), low shoulder, service covers, crossfall, ponding.</p> <p>Reverse crossfall cambers and rapid changes of camber.</p> <p>Inadequate pavement width around curves</p> <p>Shoulder rutting – safety issues on outside of curves</p> <p>Edge break – can contribute to loss of control</p> <p>Rutting and shoving – particularly on curves</p> <p>Surface cleanliness at intersections</p> <p>Excessive chip / chip loss following on from reseals</p> <p>Flushing / bleeding bitumen</p> <p>Spillages (diesel, fertiliser, effluent, etc)</p> <p>Potholes, crossfall, ponding, loss of metal on unsealed roads.</p> <p>Metal drift, grading shape and wind-rows, material type on unsealed roads.</p> <p>Driver behaviour and unfamiliarity with loose surfaces and stones.</p>

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	Resource Management Act Local Government Act (Part XXI, 1974)
<b>Policies / Bylaws:</b>	SDC RAMP SDC Policy R413 Grading of Roads
<b>Standards:</b>	Refer Maintenance Contracts – standards derived from TNZ C-series specifications. PFM 6: RAMM Road Condition Rating and Roughness Transfund (1997)
<b>Guidelines:</b>	Transit New Zealand Code of Practice for Temporary Traffic Management ARRB Sealed Roads Manual, Guidelines to Good Practice for the Construction, Maintenance and Rehabilitation of Pavements 1995 ARRB Unsealed Roads Manual, Guidelines to Good Practice, 2000

#### SMS Procedures

	Urban	Rural
<b>Inspection / Monitoring</b>	<p>Condition rating procedure – biannual RAMM rating.</p> <p>Maintenance contracts define the characteristics of “defects” and response / repair times, and recording requirements.</p> <p>Routine inspection of network and identification of defects / faults by network maintenance contractors.</p> <p>Record and respond to all complaints about faults, such as potholes.</p>	
<b>Emergency and Routine Maintenance</b>	<p>Refer maintenance contract documents and Land Transport NZ KPI's and annual level of service / performance agreements. (District Road Maintenance Contract 850).</p>	

	Urban	Rural
<b>Review, Monitor &amp; Evaluation Requirements</b>	Ongoing - no formal review process at present. Routine inspections with audits by maintenance contractor. Reviews of Maintenance Contract to consider and provide for LOS related to safety ( <i>Improvement Plan action</i> ). Activities to be defined in the Maintenance Contractor's Safety Intervention Plan ( <i>Improvement Plan action</i> ).	

#### **Organisation**

<b>Primary Responsibility:</b>	Asset Manager Roding – RAMM Roding Engineer – all other procedures	<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Assets / Maintenance
December 2005		SMS 3.6

#### Activity Information

<b>Activity:</b>	<b>Traffic Control Devices</b>
<b>Description / Purpose:</b>	<p><b>Roadmarkings</b> - Highlight roadway, regulate traffic movements and provide guidance and information to road users</p> <p><b>Traffic Signs</b> - Road signs need to be installed and maintained to a standard that provides good visual guidance/control, warning, information and regulates road users.</p> <p><b>Delineation</b> - To provide guidance to drivers by defining the traffic lane, carriageway alignment and roadside hazards, to ensure the safe movement of traffic eg. Edge marker posts, RRPM's, sight rails.</p>
<b>Safety Issues:</b>	<p><b>Road Markings</b> - Faded/poor quality road markings Incorrect/inappropriate road markings Can not be seen on very wet nights Can be slippery (eg when ridden over by cyclists and motorcyclists). Poor transition when moving from the State Highway to SDC local roads.</p> <p><b>Traffic Signs</b> - Signs incorrectly/poorly located could provide a hazard for certain user groups, eg disabled, cyclists. Loss of reflectivity, cleanliness Placement and visibility, obstructions Damaged or missing signs. Signs obscured by foliage. Inadequate signage.</p> <p><b>Delineation</b> - Consistency in delineation to reduce loss of control crashes Placement and spacing Missing or damaged items Type of delineator</p>

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	<p>Land Transport Rule: Traffic Control Devices 2004 Local Government Act (Part XXI, 1974) Transit NZ Act (1989) Transport Act (1962)</p>
<b>Policies / Bylaws:</b>	SDC policy R412 Directional Signs
<b>Standards:</b>	<p>LTSA and TNZ Road and Traffic Standards. TNZ / LTSA Manual of Traffic Signs and Markings, MOTSA Parts I and II. TNZ Standards for Design, Construction &amp; Materials. RSMA Standards for the Manufacture and Maintenance of Traffic Signs, Posts and Fittings.</p>
<b>Guidelines:</b>	<p>RTS 1: Guidelines for the implementation of traffic controls at crossroads (1990) RTS 2: 1990 – Guidelines for Street Name Signs Road Signs Manufacturers Association Specification Edge Marker Posts Guidelines RTS 4: Guidelines for flush medians RTS 5: Guidelines for Rural Roadmarking and Delineation. Austroads Guide to Traffic Engineering Practice, Part 8 "Traffic Control Devices".</p>



### SMS Procedures

	Urban	Rural
<b>Inspection / Monitoring</b>	Regular inspection regime included in Maintenance contracts, covering all traffic control devices. Data for all signs held in RAMM (Renewal & replacement data collected as part of maintenance contract)	
<b>Routine Maintenance</b>	Annual re-marking generally. Some more frequent, eg high wear sites. Current practice uses alkylid paints only Intend to move to a performance based contract during 2006 ( <i>Improvement Plan action</i> ).	
<b>Capital and Renewal/Replacement Works</b>	Working progressively towards achievement of RTS 5 standards through upgrades to road markings, edge markers, and raised pavement markers Remarking times for re-instatement after works specified under contract. Signs – generally use, high visibility signs. All new and replacement signs are High Visibility Planned approach to improving delineation ( <i>Improvement Plan action</i> ), including: <ul style="list-style-type: none"> <li>• Improve delineation as part of capital works wherever possible and cost-effective.</li> <li>• Hazard markers to be considered for routine use on kerb extensions, planters, poles, culverts, potential obstructions adjacent to road-ways, etc.</li> <li>• Progressive delineation upgrades undertaken on arterial roads, medians, and islands. Other roads are treated following rehabilitation or re-seal where the need for new work is identified.</li> <li>• Delineation includes the role of kerb and channel.</li> </ul>	
	Provide minimum of one black on reflectorised white street name blade on end of every urban street and at all intermediate intersections (lower than RTS 2 standard).	Rural road name signs are the same as urban roads, black on reflectorised white, working towards a sign at every intersection SDC provide rural rapid no's as means of unique ID for rural properties
<b>Review, Monitor &amp; Evaluation Requirements</b>	Minimum criteria for reflectivity and fading are to be assessed, standard to be developed and based on traffic volume / road function ( <i>Improvement Plan action</i> ). Consider use of RAMM data and development of KPI's as part of this review. (Land Transport NZ safety survey findings on reflectivity and marking frequency and costs to be considered).	

### Organisation

<b>Primary Responsibility:</b>	Roading Engineer	<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Assets / Maintenance SMS 3.7
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Safety Barriers</b>
<b>Description / Purpose:</b>	Safety barriers provide protection for road users from potential hazards such as bridges, embankments, and high drops, and can improve delineation.
<b>Safety Issues:</b>	Damaged or missing guardrail can present hazards to motorists. Many different standards and types Length for hazard protection Correct installation and end treatment Sight rails can be inappropriately used and can present a hazard in themselves

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	Local Government Act (Part XXI, 1974) Transport Act (1962) Transit NZ Act (1989) Land Transport Rule: Traffic Control Devices 2004
<b>Policies / Bylaws:</b>	
<b>Standards:</b>	AS/NZS 3845: 1999 Road Safety Barrier Systems TNZ standard specification M23 for design, manufacture and maintenance of guardrails
<b>Guidelines:</b>	Transit New Zealand Draft Geometric Design Manual Austroads Guides – 13 and 14 RTS 8: Guidelines for safe kerbline protection (1993) RTS 11: Guidelines for Urban Roadside Barriers and Alternative Treatments

#### SMS Procedures

	Urban	Rural
<b>Inspection / Monitoring</b>	Inspected as a part of bridge inspection programme where associated with a bridge approach	
<b>Emergency Maintenance</b>		
<b>Routine Maintenance</b>	All safety barriers are covered by maintenance contract	
<b>Capital Works</b>	Safety barriers installed as appropriate for the site. Case by case assessment for new barriers which are identified through investigations (refer also Roadside Hazard Zone Management – SMS 5.6)	
<b>Review, Monitor &amp; Evaluation Requirements</b>	Older style barriers reviewed on a case by case basis at renewal.	

#### Organisation

<b>Primary Responsibility:</b>	Roading Engineer	<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Assets / Maintenance SMS 3.8
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Street Lighting</b>
<b>Description / Purpose:</b>	To provide a safe level of road lighting to a standard appropriate for the road hierarchy
<b>Safety Issues:</b>	Light levels, uniformity and glare Light outages result in inconsistent lighting levels Light level at transition from SH to rural and urban to rural Crash risks due to poor lighting

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	
<b>Policies / Bylaws:</b>	Asset Management Plan W303 Intersection Flag Lights on Subdivisions
<b>Standards:</b>	AS/NZS 1158 – Road Lighting NZS 4404:2004 : Land Development and Subdivision Engineering Asset Management Plan
<b>Guidelines:</b>	Austroads Guide to Traffic Engineering Part 12 : Roadway Lighting

#### SMS Procedures

	Urban	Rural
<b>Inspection / Monitoring</b>		Generally no lighting in rural areas.
<b>Emergency Maintenance</b>		
<b>Routine Maintenance</b>	Maintain lighting standard to AS/NZS 1158 Urban P3 Separate maintenance contract for street lighting. Response times set in maintenance contract. Move towards block-change programme.	Rural Residential to P4 Standard
<b>Capital Works</b>	AS/NZS 1158 has been achieved by road type. Use above Standards and Guidelines for new and renewal lighting design.	Develop policy on Flag Lights at Intersections ( <i>Improvement Plan action</i> )
<b>Review, Monitor &amp; Evaluation Requirements</b>	Illumination survey to check lighting outputs ( <i>Improvement Plan action</i> )	

#### Organisation

<b>Primary Responsibility:</b>	Asset Roading Engineer / Roading Engineer	<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Assets / Maintenance SMS 3.9
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Bridges, Culverts, Structures and Fords</b>
<b>Description / Purpose:</b>	<p>To provide safe and effective access across waterways, gullies, high volume roads, railway lines, flood prone areas.</p> <p>To protect road users from the effects of slips or collapse of the road structure.</p> <p>Refer also to SMS 2.2.</p>
<b>Safety Issues:</b>	<p>Structural integrity.</p> <p>Containment (vehicles, pedestrians, other road users).</p> <p>Guardrails, handrails, joint movement, loading, structure (super and sub-structure) abutments/ approaches and "end-protection", drainage and ponding.</p> <p>Bridge approaches and delineation at bridges.</p> <p>One lane priority (traffic management).</p> <p>Proximity to the road of retaining walls, headwalls, culverts, drains or intrusion into the clear zone which creates a traffic hazard.</p> <p>Innapropriate use (overloading) of bridges with posted weight restriction</p>

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	<p>NZ Building Act (2004)</p> <p>Resource Management Act</p> <p>Health and Safety in Employment Act</p>
<b>Policies / Bylaws:</b>	
<b>Standards:</b>	<p>Asset Management Plan</p> <p>NZ Building Act (2004)</p> <p>Transit NZ Bridge Inspection &amp; Maintenance Manual (2001) SP/M/016</p>
<b>Guidelines:</b>	

#### SMS Procedures

	Urban	Rural
<b>Inspection / Monitoring</b>	<p>Annual routine visual inspection.</p> <p>5 yearly detailed structural inspection, and more frequently where condition is deteriorating.</p> <p>Signage, width, passing and stopping provisions for one-lane bridges to be regularly monitored for safety by the Maintenance Contractor.</p>	
<b>Routine Maintenance</b>	Maintenance contract.	
<b>Capital Works</b>	<p>Renewal is based on criteria from Land Transport NZ for low volume roads improvements.</p> <p>Need for safety related improvements may be identified through safety planning processes (refer Figure 3.1).</p>	
<b>Review, Monitor &amp; Evaluation Requirements</b>	Progressive replacement of older bridges and removal of weight restricted bridges.	

**Organisation**

<b>Primary Responsibility:</b>	Asset Manager Roding – Overweight Permits Roding Engineer – maintenance and inspection
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<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Assets / Maintenance SMS 3.10
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Road-side watercourses and water races</b>
<b>Description / Purpose:</b>	To provide land drainage to minimise the risk of flooding on and off the carriageway. Water races also provide stock water. To minimise the hazard created by having watercourses (drains and water races in the road reserve).
<b>Safety Issues:</b>	Entrapment of vehicles in deeper drains, risk of drowning Crash hazard/risk from cleanings left between road & watercourse. Water channels not always obvious to motorist and can be driven into. Culvert head wall structures close to the edge of the road can be a hazard. Rapid willow tree growth beside drains can quickly interfere with sight lines.

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	
<b>Policies / Bylaws:</b>	
<b>Standards:</b>	Rural Road Design: Guide to the Geometric Design of Rural Roads, Austroads, 2003
<b>Guidelines:</b>	Highway Surface Drainage – Design Guide for Highways with a Positive Collection System, National Roads Board

#### SMS Procedures

	Urban	Rural
<b>Inspection / Monitoring</b>		Existing deep roadside watercourses to be monitored for crash risk through existing road safety inspections/audits. Similarly headwalls associated with culverts across the road are to be monitored through network safety inspections
<b>Emergency Maintenance</b>		
<b>Routine Maintenance</b>		Maintain swale cross-fall standards as part of maintenance contract. Ensure vulnerable road users have sufficient safe space, or alternatively that their use is restricted for safety reasons.
<b>Capital Works</b>		Ensure new headwalls are set well back from carriageway and improve delineation where possible.
<b>Review, Monitor &amp; Evaluation Requirements</b>		Need method to improve delineation of culvert headwalls that meets LTNZ guidelines ( <i>Improvement Plan action</i> ).

#### Organisation

<b>Primary Responsibility:</b>	Asset Roading Engineer	<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Assets / Maintenance SMS 3.11
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Amenity Maintenance and Vegetation Control</b>
<b>Description / Purpose:</b>	<p>Maintain landscaping and vegetation on various parts of road reserve so they support and assist in defining safety works.</p> <p>Trees can also provide a visual backdrop and assist with visual direction provided they are outside the roadside hazard area or outside the road reserve.</p> <p>Refer also to SMS 3.10 and SMS 5.6.</p>
<b>Safety Issues:</b>	<p>The effectiveness of traffic control devices and safety improvement works can be compromised by reduced sight lines if landscaping is not properly maintained.</p> <p>Planting in traffic islands, roundabouts, and planters can restrict visibility if not maintained or of the appropriate type.</p> <p>Vegetation encroaching onto and over footpaths an obstacle for pedestrians.</p> <p>Tree roots can create an uneven footpath and carriageway surface.</p> <p>Public pressure for planting of trees in road reserve compromising safety related to roadside hazard zone.</p> <p>Crash impact with non-frangible planting.</p> <p>Shading of the road exacerbates ice problems in winter.</p> <p>Street trees can limit the effectiveness of street lighting.</p>

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	<p>Local Government Act (s355 1974)</p> <p>Transport Act (1962)</p> <p>Land Transport Rule: Traffic Control Devices 2004</p> <p>Electricity Act</p> <p>Transit New Zealand Act (1989)</p>
<b>Policies / Bylaws:</b>	District Plan: Rule with respect to shading of roads, and vegetation planted while Plan is operative (since 2004).
<b>Standards:</b>	<p>District Plan</p> <p>NZS 4404:2004 : Land Development and Subdivision Engineering</p>
<b>Guidelines:</b>	<p>Traffic sight distance criteria</p> <p>TNZ COPTTM</p> <p>Austroads Guide to Traffic Engineering Part 5</p> <p>Guidelines for Planting for Road Safety (1991), TNZ</p> <p>Guidelines for Highway Landscaping (2002, draft), SP/M/020, TNZ</p>

#### SMS Procedures

	Urban	Rural
<b>Inspection / Monitoring</b>	Road and reserves (City Care) maintenance contractors monitor for maintenance purposes. They also respond to public complaints/comments.	
<b>Emergency Maintenance</b>		
<b>Routine Maintenance</b>	Vegetation control work is undertaken within the routine maintenance contract for urban and rural networks.	

	Urban	Rural
	Roundabouts and islands vegetation level to be controlled in accordance with the Guidelines for Planting for Road Safety.	<p>"Clear corridor" dimensions defined in the maintenance contract for vegetation control.</p> <p>Maintain vegetation "set-back" standard to minimise shading and icing problems in winter (as defined in the District Plan policy).</p> <p>Monitor sight lines relating to trees.</p>
<b>Capital Works</b>		
<b>Review, Monitor &amp; Evaluation Requirements</b>	Develop urban and rural roadside planting policy ( <i>Improvement Plan</i> )	

#### **Organisation**

<b>Primary Responsibility:</b>	Roading Engineer	<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Assets / Maintenance SMS 3.12
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Maintenance Contracts Management</b>
<b>Description / Purpose:</b>	Regular review of all roading maintenance contracts to ensure that the levels of service, standards, and specifications are optimal in relation to network safety performance.
<b>Safety Issues:</b>	Response times not being met. Safety intervention standards. LOS needs to include safety factors

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	Local Government Act (Part XXI, 1974) Transit NZ Act
<b>Policies / Bylaws:</b>	SDC Policy R401 Construction and Maintenance of Road
<b>Standards:</b>	Asset Management Plan Land Transport NZ Levels of Service / Performance Agreement
<b>Guidelines:</b>	

#### SMS Procedures

	Urban	Rural
<b>Operational Procedures</b>	All Maintenance contracts (Roading, Utilities, Parks – involving activities on roads) to include requirements for Site Safety Plan, Temporary Traffic Management. SIP to be developed for principal road network maintenance contract, and Parks and Utilities maintenance contracts ( <i>Improvement Plan</i> ).	
<b>Inspection / Monitoring</b>	Contractor must carry out routine inspections of various aspects of the network. These are done on an area and road hierarchy basis	
<b>Emergency Maintenance</b>	Contract provides for works to be prioritised on safety grounds	
<b>Routine Maintenance</b>		
<b>Capital Works</b>		
<b>Review, Monitor &amp; Evaluation Requirements</b>	Need to develop a better safety culture so that safety issues are considered routinely alongside asset maintenance when contractors carry out inspections. Monthly meetings with contractor to include “safety” issues as a regular meeting agenda item ( <i>Improvement Plan</i> ). All maintenance LOS are to be reviewed regularly in relation to the safety performance of the network. Normally this will be on a 3-yearly cycle and / or when contracts are being re-tendered.	

#### Organisation

<b>Primary Responsibility:</b>	Roading Engineer	<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Assets / Maintenance SMS 3.13
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Emergency Response</b>
<b>Description / Purpose:</b>	Following on from weather/natural hazard events which compromise road user safety, make roads safe and trafficable (to at least one-way) in shortest possible time. Implement detour routes if required.
<b>Safety Issues:</b>	Safety of roads during adverse weather conditions. Obstacles e.g. slips, trees, damaged road surface, surface flooding. Signage on lower level alternative routes. Particularly when SH traffic is diverted on to local roads. Safety of road users during such events Erection of appropriate signs and barriers.

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	Transport Act (1962) Transit NZ Act Civil Defence Emergency Management Act 2002
<b>Policies / Bylaws:</b>	Civil Defence and Emergency Management Group Plans
<b>Standards:</b>	Transit NZ COPTM.
<b>Guidelines:</b>	

#### SMS Procedures

	Urban	Rural
<b>Operational Procedures</b>	TNZ or the SH Network Consultant to advise SDC of diversion of traffic off State Highway. Designated routes for State Highway diversions to be developed ( <i>Improvement Plan action</i> )	
<b>Emergency Maintenance</b>	Maintenance Contractors have to be available for emergency events at all times	
<b>Routine Maintenance</b>		
<b>Capital Works</b>		
<b>Review, Monitor &amp; Evaluation Requirements</b>	Improve documentation of at risk sections of road so not reliant on information held by individuals in SDC & Contractors ( <i>Improvement Plan</i> ).	

#### Organisation

<b>Primary Responsibility:</b>	Roading Engineer	<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Traffic Data SMS 4.1
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Traffic Counting</b>
<b>Description / Purpose:</b>	To monitor traffic flows throughout the network so that a better understanding of traffic demands and patterns can be obtained
<b>Safety Issues:</b>	Traffic flow information assists with road design and in prioritising improvements. This data is also valuable in assessing road safety risk exposure.

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	
<b>Policies / Bylaws:</b>	
<b>Standards:</b>	
<b>Guidelines:</b>	"A Guide on Estimating AADT and Traffic Growth, and a Traffic Count Monitoring Programme Basis", Transit New Zealand Project Evaluation Manual, Land Transport NZ

#### SMS Procedures

	Urban	Rural
<b>Data Capture Programmes and Application</b>	<p>Traffic count on each section on a 3 yearly cycle.</p> <p>Capture speed, volume and axle data.</p> <p>Progressive development of a network of classified sites for counting on an annual basis.</p> <p>Data is used for prioritisation of works including rural seal extensions, minor safety, intersection seal backs and seal widening.</p> <p>All data recorded in RAMM.</p> <p>Traffic counting incorporated in RAMM Professional Services contract.</p>	
<b>Review, Monitor &amp; Evaluation Requirements</b>		

#### Organisation

<b>Primary Responsibility:</b>	Roading Assets Engineer	<b>Controlling Documents:</b>	Professional Services Contract
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Traffic Data SMS 4.2
December 2005		

#### Activity Information

<b>Activity:</b>	<b>RAMM Data</b>
<b>Description / Purpose:</b>	Collection and analysis of road asset and condition data to enable the assessment of compliance with safety related standards, and contribute to project prioritisation
<b>Safety Issues:</b>	Identifying asset safety deficiencies (e.g. width, skid resistance/surface condition, knowledge of signs and markings etc.) Consistency of road environment.

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	Transit NZ Act
<b>Policies / Bylaws:</b>	
<b>Standards:</b>	PFM 6 - RAMM Road Condition Rating and Roughness Manual, Transfund
<b>Guidelines:</b>	PFM 7 - Local Authority RAMM Database Operation Manual, Transfund

#### SMS Procedures

	Urban	Rural
<b>Data Capture Programmes and Application</b>	Data for all asset types is captured in RAMM. Condition and Roughness ratings done every two years. Major use of the data is developing maintenance programmes and forwards works programmes. dTIMS being developed. Data records based on road displacement, not GIS. RAMM and dTIMS incorporated in RAMM Professional Services contract.	
<b>Review, Monitor &amp; Evaluation Requirements</b>	Consider integrating RAMM and CAS data for crash analysis and road safety risk assessments in the future ( <i>Improvement Plan action</i> ).	

#### Organisation

<b>Primary Responsibility:</b>	Roading Assets Engineer	<b>Controlling Documents:</b>	Professional Services Contract
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Safety Operations SMS 5.1
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Speed Management</b>
<b>Description / Purpose:</b>	To ensure that the posted speed limit is appropriate for the surrounding environment and development, and to manage speed so that it is consistent and appropriate to the environment.
<b>Safety Issues:</b>	Road side development can require speed restrictions to be reviewed. Inconsistent speed limits can lead to erratic driver behaviour Excessive speeds in urban areas

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	Land Transport Rule: Traffic Control Devices 2004 Land Transport Rule: Setting of Speed Limits 2003 SDC Speed limit bylaw 2006
<b>Policies / Bylaws:</b>	
<b>Standards:</b>	
<b>Guidelines:</b>	RTS 15: Guidelines for urban-rural speed thresholds Code of Practice for Temporary Traffic Management (COPTTM), TNZ

#### SMS Procedures

	Urban	Rural
<b>Planning Procedures</b>	Covered by Engineering approvals, although this process needs to be improved ( <i>Improvement Plan action</i> ).	
<b>Operational Practice</b>	Speeds limits set by Bylaw process. (Speed limit bylaw has been approved by Council for consultation). Township Committees are the groups which influence the process of starting a review. SDC have no formal speed measurement process. Speed trailer used as an education tool only at present, and it is intended that data will be captured and analysed in the future ( <i>Improvement Plan action</i> ).	
<b>Capital Works</b>	Identified speed problem sites are considered under the minor safety works processes. Engineering works, such as speed thresholds at urban/rural boundaries, may be considered for managing speed. LATMS devices may be considered for use in new subdivisions.	
<b>Review, Monitor &amp; Evaluation Requirements</b>	Refer Setting of Speed Limits Rule 2003 – results reviewed by Land Transport NZ	

#### Organisation

<b>Primary Responsibility:</b>	Asset Manager Roading	<b>Controlling Documents:</b>	Land Transport Rule: Setting of Speed Limits 2003
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Safety Operations SMS 5.2
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Crash Reduction Studies</b>
<b>Description / Purpose:</b>	Detailed studies of crash site locations to identify improvement options, primarily focusing on low cost solutions to remedy engineering deficiencies. Identification of potential emerging crash site locations for proactive intervention.
<b>Safety Issues:</b>	Potential for crash numbers to continue unabated or to increase at identified crash sites. Hazards need to be identified as early as possible so remedial works to reduce risk exposure can be carried out. Some sites may become future crash location sites – ie crash migration

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	
<b>Policies / Bylaws:</b>	
<b>Standards:</b>	Austroads Ch 4 Treatment of Crash Locations (also refer NZ supplement by LTSA)
<b>Guidelines:</b>	Policy Guidelines for Traffic Accident Reduction and Prevention, 1990, TNZ, MoT Standard Operating Procedure for CRS Monitoring Final Ver.1 November 2003.

#### SMS Procedures

	Urban	Rural
<b>Operational Procedures</b>	No formal CRS cycle in place. Use LTNZ / CAS data to identify problem crash locations which are then assessed to see what the appropriate remedial action is. If engineering works are appropriate then work is programmed as either a separate capital work based on a B/C or as a minor safety work. Studies of crash locations at SH intersections are attended to by Transit NZ. Refer also to Figure 3.1.	
<b>Routine Maintenance</b>	Safety works that can be attended to as part of the maintenance contract are assigned to the maintenance contractor.	
<b>Capital Works</b>	Identified needs for capital expenditure treatment are fed into the minor safety works process. This may result in the development of specific capital works or minor safety improvements.	
<b>Review, Monitor &amp; Evaluation Requirements</b>	No formal review process. It is planned to review the CRS process, based on crash data and where issues are evident ( <i>Improvement Plan action</i> ).	

#### Organisation

<b>Primary Responsibility:</b>	Asset Manager Roading / Road Safety Coordinator	<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Safety Operations SMS 5.3
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Network Safety Audits</b>
<b>Description / Purpose:</b>	To ensure that existing roads are safety audited for consistency and compliance with current safety standards
<b>Safety Issues:</b>	Inappropriate / inconsistent standards on existing roads Potentially unsafe roads or features that can be readily remedied Nearby features that may adversely affect safety. Achievement of a "no surprises" environment.

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	
<b>Policies / Bylaws:</b>	
<b>Standards:</b>	
<b>Guidelines:</b>	Guidelines for Auditing Existing Roads, 2000, Transfund Rural Road Design: Guide to the Geometric Design of Rural Roads, Austroads, 2003 Guide to Traffic Engineering Practice (various Parts), Austroads LTSA Traffic Notes and Information Sheets

#### SMS Procedures

	Urban	Rural
<b>Inspection and Audit Procedures</b>	Currently no formalised process in place for SDC network safety audits. Maintenance contractor currently undertakes regular inspections. These are focused on asset maintenance rather than with an eye on safety issues. Change emphasis of inspections so safety is considered (culture change) ( <i>Improvement plan action – refer also to SMS 3.13</i> )	
<b>Emergency Maintenance</b>	Immediate safety items are automatically attended to by Contractor.	
<b>Routine Maintenance</b>	Items requiring more routine response are to be implemented through monthly maintenance programme.	
<b>Capital Works</b>	Identified needs for capital expenditure treatment are fed into the safety planning process (see Fig 3.1). This may result in the development of specific capital works or minor safety improvements.	
<b>Review, Monitor &amp; Evaluation Requirements</b>		

#### Organisation

<b>Primary Responsibility:</b>	Asset Manager Rooding	<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Safety Operations SMS 5.4
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Deficiency and road safety hazards register and analysis</b>
<b>Description / Purpose:</b>	SDC needs to be aware of the specific safety deficiencies within the road network, so that improvements can be programmed. Deficiencies need to be systematically recorded and ranked for remedial action.  Included here are recurring, intermittent road safety hazards that may not be able to be remedied permanently. The register enables an RCA to identify, eliminate or manage all road safety hazards in a risk prioritised manner.
<b>Safety Issues:</b>	Development of future safety problems / crash sites. Any safety hazard that may occur in the road reserve has the potential to increase the number and/or severity of crashes.

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	
<b>Policies / Bylaws:</b>	
<b>Standards:</b>	
<b>Guidelines:</b>	Refer to LTNZ report (2005) on deficiency databases.

#### SMS Procedures

	Urban	Rural
<b>Operational Practice</b>	Concerns and Issues from all sources recorded on the Public Enquiry and Complaint (PEC) system. System reports can be used to bring up repeated issues. LTNZ annual road safety reports and outputs are also used to identify candidate deficiencies. Minor Roading issues currently forwarded to the Maintenance Contractor to attend to. More significant issues considered under minor safety works process. The base list of issues used to develop the minor safety works programme is effectively a deficiency database for the network. Currently there is no system in place for recording and managing road safety hazards, with reliance on local knowledge. Refer also to Figure 3.1.	
<b>Emergency Maintenance</b>	Procedures and emergency response plan are being developed as part of CDEMG activity. Much of the knowledge is held by long serving individual staff who know the sites at risk from natural hazards such as snow or ice or flooding. Information needs to be documented in a suitable database ( <i>Improvement Plan</i> ).	
<b>Routine Maintenance</b>	Ice prone sites are documented and updated within the Maintenance Contract.	



	<b>Urban</b>	<b>Rural</b>
<b>Review, Monitor &amp; Evaluation Requirements</b>	Currently no processes in place.	

***Organisation***

<b>Primary Responsibility:</b>	Asset Manager Roading / Road Safety Coordinator	<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Safety Operations SMS 5.5
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Development of Minor Safety Works Programme</b>
<b>Description / Purpose:</b>	The preparation of an annual list of small-scale projects which qualify (within a "cap") for Land Transport NZ financial assistance, with expected road safety benefits.
<b>Safety Issues:</b>	Any road engineering problem with a safety concern.

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	Transit New Zealand Act
<b>Policies / Bylaws:</b>	Land Transport NZ Programme Funding Manual.
<b>Standards:</b>	
<b>Guidelines:</b>	

#### SMS Procedures

	Urban	Rural
<b>Inspection / Monitoring</b>		
<b>Capital Works</b>	<p>Prepare annual list of candidates from following sources – Land Transport NZ annual road safety report, complaints (PEC), inspections, speed measurements, Road Safety Coordinating Committee, Road Safety Coordinator.</p> <p>Review crash data, traffic use and composition, potential for conflicts between users (eg cyclists / motor vehicles), community concerns.</p> <p>Identify projects which fit the criteria for Minor Safety Improvements (others to be actioned through maintenance contracts or CAPEX process).</p> <p>Prioritise the list of candidates. Candidates will be approved by Council annually.</p> <p>Ranking is on the basis of crash history and traffic volume.</p> <p>Refer also Figure 3.1.</p>	
<b>Review, Monitor &amp; Evaluation Requirements</b>		

#### Organisation

<b>Primary Responsibility:</b>	Asset Manager Roading	<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	Safety Operations SMS 5.6
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Roadside Hazard Zone Management</b>
<b>Description / Purpose:</b>	<p>Roadside hazard zones attempt to keep road shoulders clear of obstructions so that an out of control vehicle has some chance of recovery or stopping without striking a solid obstruction.</p> <p>The intention is to manage the road reserve adjoining the road carriageway to ensure that safety is not compromised by the location of inappropriate or hazardous objects.</p>
<b>Safety Issues:</b>	<p>Objects such as trees, substantially mounted rural letterboxes, street light columns, service poles, as well as shoulder design, shoulder gradient, side drains, water races, and banks represent potential hazards for loss of control vehicles.</p> <p>Fences on road reserve can also be a safety concern, particularly in rural areas, however in Selwyn fences are generally positioned on the boundary.</p> <p>Temporary fences used when stock are grazing the roadside can be a safety hazard.</p>

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	<p>Local Government Act (Part XXI, 1974)</p> <p>Electricity Act (1992)</p> <p>Telecommunications Act (2001)</p> <p>Gas Act</p>
<b>Policies / Bylaws:</b>	<p>Policy for road grazing encroachment of the road reserve in rural areas.</p> <p>Policy for undergrounding services within new urban subdivisions.</p> <p>SDC Stock Control Bylaw</p> <p>SDC policy W104 Water Race Tailings</p>
<b>Standards:</b>	District Plan
<b>Guidelines:</b>	<p>SNZ HB 2002:2003 Code of Practice for Working in the Road (NZUAG Roadshare).</p> <p>Guide to Geometric Design for Rural Roads, National Roads Board, 1985</p> <p>Rural Road Design: Guide to the Geometric Design of Rural Roads, Austroads, 2003</p>

#### SMS Procedures

	Urban	Rural
<b>Operational Practice</b>	<p>Where legally and practically possible, roadside margin is to be kept clear and poles set as close as possible to boundary.</p> <p>Drains and water races within the road boundary are marked and maintained to minimise the hazard to road users.</p> <p>Roadside vegetation must be appropriate, and may be used to assist with providing visual guidance.</p>	
<b>Planning Approvals</b>	Undergrounding of power and telecommunications services requested for urban subdivisions.	<p>Encourage undergrounding for rural-residential subdivisions.</p> <p>Liaison with Lines company on new pole routes. Pole replacement is usually in same location. Approval procedure to include consideration of at risk sites and crash history involving poles.</p> <p>Permit required for roadside grazing</p>

	Urban	Rural
	Note that Electricity Act means that the Council cannot impose, or set rules on pole locations. Hence must negotiate to get best safety outcomes.	
<b>Routine Maintenance</b>	Potential hazards removed where possible as part of maintenance contract.	
<b>Capital Works</b>	Design to consider hazard zone requirements.	
<b>Review, Monitor &amp; Evaluation Requirements</b>	Develop Roadside hazard zone policy, standards and criteria ( <i>Improvement plan action</i> ).	

#### **Organisation**

<b>Primary Responsibility:</b>	Asset Manager Roading	<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	External Agencies SMS 6.1
December 2005		

#### **Activity Information**

<b>Activity:</b>	<b>Temporary Traffic Management (inc approval and auditing)</b>
<b>Description / Purpose:</b>	Standards are needed to ensure the safe and efficient passage of traffic through work-sites on the road, and a safe environment is needed for those working on the road.  The process requires the approval and auditing of a specific Traffic Management Plan (TMP) for the works.
<b>Safety Issues:</b>	The existence of a worksite on any road is a hazard which alters the normal operating condition of a road, and must be managed to eliminate, isolate or minimise it.  Traffic travelling past or through works sites is a danger to workmen, particularly if they are working outside the work zone.  Machinery operating on works sites is a danger to the travelling public, for example, mechanised roadside slashers, vehicle mounted hedge trimmers. Insufficient recognition by operators of need to comply with COPTTM.  Drivers travelling at speed over rough, uneven surfaces or loose gravel can lose control of their vehicles.  Restriction of traffic flow at a works site can cause congestion and long delays.  Signs/directions have been inappropriate and/or are left on the road when there is no work. Signs need to be clear and comply with standards.  Provision for pedestrians/cyclists must be appropriate and safe.  OSH issues - building contractors are of concern.

#### **Legislation, Policies / Bylaws, Standards and Guidelines**

<b>Legislation:</b>	Health and Safety In Employment Act 1993 Land Transport Rule: Traffic Control Devices 2004 Local Government Act (Part XXI, 1974)
<b>Policies / Bylaws:</b>	SDC Occupational Health & Safety Policy
<b>Standards:</b>	OSH documents Contractors Health and Safety procedures Transit New Zealand COPTTM (Local Roads supplement)
<b>Guidelines:</b>	Land Transport NZ Guidelines for Audit of Temporary Traffic Management SNZ HB 2002:2003 Code of Practice for Working in the Road (NZUAG Roadshare).

### SMS Procedures

	Urban	Rural
<b>Operational Procedures</b>	<p>Suitably trained Engineering staff (minimum STMS level L1) to review and check TMPs that have been submitted for approval. (Majority of external works have TMP's submitted).</p> <p>Only a few worksites are inspected to determine if TMP is being followed. There is currently a reliance on Contractor self auditing.</p> <p>Consultants to approve TMP's for projects they have designed, and provide evidence to SDC of compliance.</p> <p>Desire is to improve the level of conformance so that TMPs are submitted for all projects and that they are followed correctly (<i>Improvement Plan action</i>).</p> <p>Develop ongoing education/awareness programme for vegetation control operators, so that voluntary compliance with agreed safe practices results (<i>Improvement Plan action</i>).</p>	
<b>Events on Road Reserve</b>	External events. Organisers prepare a TMP often with assistance from SDC staff	
<b>Routine Maintenance and Capital Works</b>	Use COPTTM in all internal SDC contracts.	COPTTM - L1LV rural.
	<p>Generic TMPs developed and used for roading, utilities and parks maintenance contracts.</p> <p>Regular communication and awareness raising with contractors to improve worksite management and safety.</p>	
<b>Audit Procedures</b>	Develop audit regime that follows COPTTM. Audit regime should include random audits. ( <i>Improvement Plan action</i> )	
<b>Review, Monitor &amp; Evaluation Requirements</b>		

### Organisation

<b>Primary Responsibility:</b>	Asset Manager Roading Roading Engineer	<b>Controlling Documents:</b>	COPTTM (local roads supplement)
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	External Agencies SMS 6.2
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Road Openings by utility and external service authorities and other departments within Council</b>
<b>Description / Purpose:</b>	<p>RCA's need to exhibit some control over others who work on the road. This can only be effective when the RCA knows who is working on the road, and where and when – eg using an openings register system.</p> <p>Controls are needed to ensure the safety of the utility / service provider and the public, and to ensure that reinstatement complies with Engineering Standards.</p> <p>These include requirements for a Traffic Management Plans and appropriate temporary traffic control.</p> <p>Internal utility units – water, sewerage, and stormwater, also undertake Road openings. It is possible to improve internal controls through a "service level agreement"</p> <p>Final location of utility covers / trenches can be a safety hazard in wheel tracks</p>
<b>Safety Issues:</b>	As for Temporary Traffic Control

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	<p>Local Government Act (Part XXI, 1974)</p> <p>Land Transport Rule: Traffic Control Devices 2004</p> <p>Electricity Act</p> <p>Telecommunications Act</p>
<b>Policies / Bylaws:</b>	District Plan
<b>Standards:</b>	<p>SDC Engineering Standards</p> <p>Transit NZ COPTTM</p> <p>SNZ HB 2002:2003 Code of Practice for Working in the Road (NZUAG Roadshare).</p>
<b>Guidelines:</b>	Network Utilities Within the Road Corridor: The Role of the Resource Management Act: A Guide to Best Practice (NZUAG Roadshare)

#### SMS Procedures

	Urban	Rural
<b>Operational Procedures</b>	<p>Trenchless Technology to be used wherever possible on Arterial and Collector Roads.</p> <p>A new Road Opening Notice (RON) process is being developed to formalise and approve applications, and to control work-sites being managed by others, this is being adapted from the CCC RON. (Require a better process for recording and inspection to ensure 'restoration' is to standard).</p> <p>Contractors and utility authorities must notify SDC of proposed work and request underground service plans. Application information is kept on a database.</p> <p>Traffic Management Plans are often supplied at the same time or requested to be submitted.</p> <p>Most contractors have generic TMPs approved and refer to these.</p> <p>If there is a problem with restoration then the utility authority is contacted to have it rectified by the relevant contractor.</p> <p>Need to establish a group to develop SDC requirements for a Code of Practice. (<i>Improvement Plan action</i>)</p>	
<b>Audit Requirement</b>	Audit process to be included in Code of Practice.	

**Organisation**

<b>Primary Responsibility:</b>	Asset Manager Roading / Roading Engineer
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<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	External Agencies SMS 6.3
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Cross Boundary Issues</b>
<b>Description / Purpose:</b>	To ensure that there is effective cooperation to deal with adjacent RCA's that have common boundaries.
<b>Safety Issues:</b>	Different standards applying on cross-boundary roads could present "surprises" to motorists. This particularly applies to the State Highways / Local Roads interface, and there are few local road cross-boundary issues.

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	
<b>Policies / Bylaws:</b>	SDC policy R423 Maintenance of Boundary Roads
<b>Standards:</b>	
<b>Guidelines:</b>	

#### SMS Procedures

	Urban	Rural
<b>Inspection / Monitoring</b>	<p>At present communication consists of:</p> <ul style="list-style-type: none"> <li>meetings as required with Transit NZ on SH's.</li> <li>meetings as required with other neighbouring RCA's, for example, to discuss and agree responsibilities for particular works, ensure standards are aligned (eg delineation).</li> </ul> <p>Routine inspection of roads on each side of boundary and identify any current and future differences.</p> <p>Agreement with CCC re maintenance of boundary roads and on a case by case basis for capital expenditure. The provisions of this SMS apply to those boundary roads managed by SDC on behalf of CCC.</p> <p>Agreement with Waimakariri DC re Waimakariri Gorge Bridge.</p> <p>Ashburton DC – no boundary roads (two SH bridges only).</p> <p>Agreement with TNZ to be developed (<i>Improvement Plan action</i>).</p>	
<b>Review, Monitor &amp; Evaluation Requirements</b>		

#### Organisation

<b>Primary Responsibility:</b>	Asset Manager Roothing	<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	External Agencies SMS 6.4
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Railway Crossings</b>
<b>Description / Purpose:</b>	Ensuring that the rail operator maintains and upgrades rail crossings to a safe and acceptable standard for road users, and that appropriate signage is in place.
<b>Safety Issues:</b>	Potential for serious crashes involving trains and motor vehicles. Insufficient stacking length for truck and trailer units under certain roading / side road / railway layouts. Some railway crossings are in poor condition. Rural crossings with no active warning system

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	Local Government Act (Part XXI, 1974) Transit NZ Act Transport Act (1962) Railway Safety and Corridor Management Act (1992) Traffic Regulations (1976) New Zealand Railways Corporation Act (1981) Land Transport Rule: Traffic Control Devices 2004
<b>Policies / Bylaws:</b>	
<b>Standards:</b>	RTS 10: Road Signs and Markings for railway level crossings MOTSAM Parts I and II
<b>Guidelines:</b>	

#### SMS Procedures

	Urban	Rural
<b>Inspection / Monitoring</b>	Regular joint inspection and communication regime required between RCA's and rail authorities (operator and infrastructure management - On Track) so that both the road and rail perspectives can be identified (minimum annual inspection preferred). On Track are responsible for the corridor 5m either side of the rail track centreline and all automatic signals and crossing devices. Beyond that, maintenance is SDC's responsibility. There is reasonable co-operation in terms of maintenance and global upgrade of signs etc. Major issue is the prioritisation of crossings for installing alarms by On Track.	
<b>Routine Maintenance</b>	Maintenance needs to be identified and communicated to rail authority prior to undertaking work. Eg repair of footpaths across level crossings.	
<b>Review, Monitor &amp; Evaluation Requirements</b>	The quality and safety of crossings require ongoing monitoring as the number of trains increases.	

#### Organisation

<b>Primary Responsibility:</b>	Asset Roading Engineer / Roading Engineer	<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	User Services
December 2005		SMS 7.1

#### Activity Information

<b>Activity:</b>	<b>Road Closures (Planned)</b>
<b>Description / Purpose:</b>	To provide effective public consultation procedures for the temporary closure or permanent stopping of roads. Temporary closures are required to enable the holding of a public or sporting event, or to enable the reconstruction of a road or facility. Permanent stopping of roads prevents future use as a road, and allows the land to be used or sold for other purposes.
<b>Safety Issues:</b>	Potential conflict and confusion to road users. Adequacy of signage for detour route.

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	Transport Act Traffic Regulations Resource Management Act Local Government Act (Part XXI, 1974) Public Works Act (1981)
<b>Policies / Bylaws:</b>	At discretion of Asset Manager in accordance with the Tenth Schedule of the Local Govt Act (road stopping). SDC Policy R424 Road Stopping SDC Policy R403 Temporary Road Closures SDC Policy R402 Community Boards to be Advised of Closures SDC Delegations IAM-102 and CD-116 Temporary Road Closures
<b>Standards:</b>	District Plan for permanent road stoppings. MOTSAM Part I for temporary closures.
<b>Guidelines:</b>	TNZ COPTTM for temporary closures.

#### SMS Procedures

	<b>Urban</b>	<b>Rural</b>
<b>Operational Practices</b>	Permanent road stopping is typically reactive, and based on request. Advertising carried out to meet Local Govt Act requirements. Traffic control is to be provided by those asking for a road to be temporarily closed. Advice is provided by SDC.	
<b>Audit Requirement</b>	Audit regime needs to be developed as per SMS 6.1 (TTM) ( <i>Improvement Plan action</i> ).	
<b>Review, Monitor &amp; Evaluation Requirements</b>		

#### Organisation

<b>Primary Responsibility:</b>	Asset Manager Roading	<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	User Services SMS 7.2
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Stock Control, Crossings and Underpasses</b>
<b>Description / Purpose:</b>	To prevent uncontrolled interaction between stock and other road users. This requires processes to manage or separate stock movements from traffic (eg stock crossing points, stock underpasses).
<b>Safety Issues:</b>	Lack of control of stock movement resulting in the potential for crashes between stock being driven along or across the road and vehicles.  Road deterioration with road becoming slippery with effluent and seal surface failing prematurely.

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	Local Government Act (Part XXI, 1974) Land Transport Rule: Traffic Control Devices 2004 Transit New Zealand Act
<b>Policies / Bylaws:</b>	SDC Stock Control Bylaw 2000 SDC Policy R418 Stock Crossings SDC Policy R419 Stock Crossings Funding
<b>Standards:</b>	District Plan
<b>Guidelines:</b>	Transit NZ COPTM Transit NZ Stock Underpass Procedures Manual 2001 Transfund Programme and Funding Manual: clause 7.4.20 Stock Underpasses.

#### SMS Procedures

	Urban	Rural
<b>Operational Procedures</b>		Currently 6-7 stock underpasses on SDC rural roads. Permits required (Bylaw process) for taking stock on the road. Conditions can be imposed. Many farmers don't bother applying. The use of mats and underpasses at regular crossing points is encouraged as is the use of flashing lights and cones. Permits covered by general inspectorate for grazing roadside reserves.
<b>Capital Works</b>		Currently reactive approach to new underpasses – based on public requests and extent of effluent on road surface. The RCAs Forum is developing guidelines and criteria for stock underpass installation. Adoption of this guideline is proposed with a more proactive stance to be taken. ( <i>Improvement Plan action</i> ).
<b>Review, Monitor &amp; Evaluation Requirements</b>		Need to establish a process that encourages safe practice and take all means to mitigate the problems associated with stock on the road. ( <i>Improvement Plan action</i> ).  Bylaw to be reviewed in 2006 ( <i>Improvement Plan action</i> ).

***Organisation***

<b>Primary Responsibility:</b>	Asset Manager Roding
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<b>Controlling Documents:</b>	
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	User Services SMS 7.3
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Vehicle Crossings and Accessways</b>
<b>Description / Purpose:</b>	To control the provision of safe, convenient and efficient property access, so that new and existing crossing places are formed to an appropriate standard and in the appropriate location.
<b>Safety Issues:</b>	Use of inadequate vehicle crossings and accessways (urban and rural) may pose safety hazards to other users.  Design to meet vehicle turning and vehicle clearance requirements.  Location/alignment at intersections.  Poor visibility.

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	Local Government Act (Part XXI, 1974)
<b>Policies / Bylaws:</b>	District Plan Vehicle Crossing is the responsibility of the property owner SDC Policy 421 Sealing of Entranceways
<b>Standards:</b>	NZS 4404 : 2004 : Land Development and Subdivision Engineering District Plan NZS 4121:2001 : Design for Access and Mobility: Buildings and Associated Facilities AS/NZS 3661.2:1994 : Guide to reduction of slip hazards
<b>Guidelines:</b>	LTSA RTS 6 - Guidelines for Visibility at Driveways

#### SMS Procedures

	Urban	Rural
<b>Operational Practices</b>	<p>Resource Consent application process – refer SMS 1.2. This provides control of the location of crossings and access points – refer also to the District Plan.</p> <p>Building permit process does not provide any control except that crossing must follow standards set out in the District Plan .This does not control the standard of crossings. Process required to provide better control for all new crossings. This could be introduced through a new bylaw. (<i>Improvement Plan</i>).</p> <p>Standard plans and designs (urban and rural) are maintained and are available at the public counter.</p> <p>Council provides an annual funding allocation to allow crossings to be upgraded in conjunction with adjoining reseals, seal extensions and street upgrades to residential properties where considered necessary to the benefit of the overall works.</p> <p>Refer to Township volume of District Plan for urban specification.</p> <p>Decision on bridge type crossing vs apron is based on the camber of the road.</p> <p>Refer NZS 4404 – approach and departure grades (kerb) envelope.</p> <p>Prefer to see SDC low profile mountable kerb used as it removes the need for specific cut downs.</p>	<p>Refer to Rural volume of District Plan for rural specification.</p> <p>Visibility – sight distance from access points is controlled, however this does not cover fences or geometry. Defined in District Plan.</p>
<b>Review, Monitor &amp; Evaluation Requirements</b>		

#### Organisation

<b>Primary Responsibility:</b>	Asset Manager Rooding	<b>Controlling Documents:</b>	NZS 4404
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Version 1	SELWYN DISTRICT COUNCIL SAFETY MANAGEMENT SYSTEM	User Services SMS 7.4
December 2005		

#### Activity Information

<b>Activity:</b>	<b>Vulnerable Road Users</b>
<b>Description / Purpose:</b>	Vulnerable road users include those with special needs but whose potential presence or use of the network needs to be considered and evaluated in any project. They include children, the elderly, handicapped, or impaired people. Also includes pedestrians and equestrians using roadside in rural areas
<b>Safety Issues:</b>	Potential for injuries – which may or may not involve motor vehicles. Children playing on rural road berms in lifestyle block areas. People talking dogs for a walk. Farm quad and motorbikes in rural areas Horse riding on roadside Danger to children at Rural School bus stops and routes

#### Legislation, Policies / Bylaws, Standards and Guidelines

<b>Legislation:</b>	Local Government Act (2002) Transport Act (1962) Traffic Regulations (1976)
<b>Policies / Bylaws:</b>	No formal policy.
<b>Standards:</b>	District Plan
<b>Guidelines:</b>	Guide to Traffic Engineering Practice, Part 13: Pedestrians; Austroads RTS 14: Guidelines for Installing Pedestrian Facilities for People with Visual Impairment, LTSA

#### SMS Procedures

	Urban	Rural
<b>Operational Practice</b>	Currently reactive to events or public feedback, e.g. mobility scooter access problems. Liaise with the Disabled Persons Assembly for input on behalf of all impaired groups.	Maintain road verges to a suitable standard where risk has been identified eg: <ul style="list-style-type: none"> <li>slope of rural berms (keep to 1:10 where possible)</li> <li>corner realignments on rural roads.</li> </ul> Currently reactive to events or public feedback e.g. signs for rural schools.
<b>Capital Works</b>	Needs to be considered during design process, for example the use of tactile strips for visually impaired pedestrians. Provide facilities as deemed necessary when making improvements.	
<b>Review, Monitor &amp; Evaluation Requirements</b>		

#### Organisation

<b>Primary Responsibility:</b>	Asset Manager Rooding	<b>Controlling Documents:</b>	
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**NOTES:**

Vehicle overweight permits administered by Transit NZ on behalf of SDC, in accordance with Land Transport Rule 410001 Vehicle Dimensions and Mass 2002