





Selwyn Road Safety Strategy to 2020

September 2014



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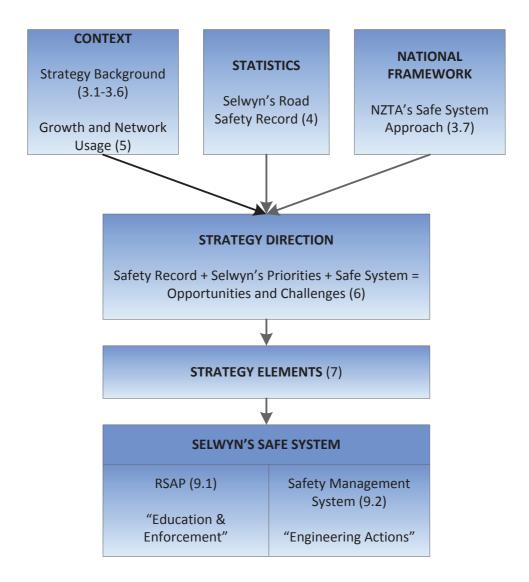
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A Guide to this Strategy

This strategy has been prepared to provide direction to Selwyn District Council's Road Safety Actions and align with wider priorities at regional and national levels.

The following diagram illustrates the components of the strategy.



Note: Throughout this document data is used from a range of sources, the data included is the most up to date at the time of writing.



1. Strategy Summary

Road Safety - A long term plan for Selwyn District

"The work ahead is demanding and requires community, key stakeholders and political support. I am asking you to join me in confronting the great challenges before us. "Vision Zero" is an ambitious target but its expected outcomes are achievable if we work together".

Kelvin Coe Mayor of Selwyn District Council



"Zero road deaths and serious injuries on Selwyn roads"

The aspiration target of "Vision Zero" to have no deaths and serious injuries on the districts roads applies to a long-term, ultimate level of achievement of Safe System approach to road safety in Selwyn. It needs to deal with Councils unique roading network that consists of 2,400 km of roads including many that are long, flat, and straight 100 km/h roads, and over 2,000 intersections. It is this combination in particular that creates challenges around providing a safe network.

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, to dairy tankers on our rural network servicing new dairy farms.

It is recognised that it is probably not possible to prevent all crashes. "Vision Zero" aims to take a combined view of all the factors involved in road safety and to then progressively work towards implementing a safer road transport system in Selwyn. In the longer-term, this will better protect road users and prevent crashes that may result in death and serious injury.

The aspirational "Vision Zero" is underpinned by the overall goal of this Strategy to:

"Progressively Reduce the Number and Severity of Road Crashes in the Selwyn District"

This will be achieved by the following supporting goals:

- A reduction in drink driving and alcohol related crashes
- Improve the safety of the light vehicle fleet (national goal)
- A reduction in young and older driver related crashes
- A reduction in intersection crashes
- Improve the safety of school children





- A reduction in speed related crashes
- A positive change in all road user behaviour
- Safer Selwyn roads and roadsides

This Strategy is intended to guide the community, key stakeholders, and Council as they work towards reducing crashes on the Selwyn's local roading and transport network. While mainly focused on the Council activities, it is also intended to indicate Council's direction to stakeholders and the community to aid the co-ordination and fostering of their mutual efforts to reduce death and injury. Council oversees this through its District Road Safety Subcommittee who represents the key partners involved.

However, we have to be realistic on what practically we can achieve based on the resources we have available at any one time. This then requires an understanding on the risks involved in delivering a Safe System so that we can target any available resources in the best possible way.



1.1 Strategy Development

Road safety has always been considered an inherent and routine part of our transport activities, but to separate out what is viewed as second nature by engineers and transport planners, and present it as a describable, tangible and controllable activity, is a challenge that this Strategy rises to.

This Road Safety Strategy has been developed by the Council along with its key partners, that include the Police, Accident Compensation Corporation (ACC) and the New Zealand Transport Agency (NZTA) in the fight to reduce road trauma and crashes improve road safety.

More specifically, the purpose of the Selwyn Road Safety Strategy is to:

- ✓ Provide strategic direction using the Safe Systems¹ approach for key road safety partners and stakeholders in the district
- ✓ Outline a vision, and to tailor responses to address road safety issues and deliver solutions in line with stated goals and objectives
- ✓ Provide a monitoring framework to assess progress across the outcomes sought
- ✓ Integrate the existing Selwyn Safety Management System (SMS) into the Strategy to fully enhance the Safe Systems approach in a comprehensive manner
- ✓ To prioritise road safety funding

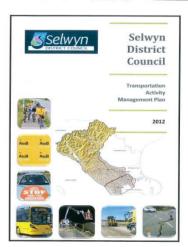
¹ The Safe Systems approach is part of the Safer Journeys (the government's 2010-2020 road safety strategy)



- ✓ To promote a road safety culture through all Council transport activities and operations
- ✓ To attract funding for road safety based on a defined Strategy and issues based approach
- ✓ Give effect to and align with the Selwyn Transportation Activity Management Plan visions and goals
- ✓ Give effect to and align with the Council Community Outcomes and related service targets
- ✓ Align with the Regional Land Transport Plan strategic goals and to guide investment decisions on road safety
- ✓ To support the role of the Regional Road Safety Working Group in providing co-ordinated road safety planning

This Strategy has its origins in Council's overall transportation activity goal that guides all of its related enterprises as follows:

"To maintain, operate, and if necessary improve, the road network and other transport activities to achieve a range of facilities that provides for the safe and efficient movement of people and goods to a standard that is both acceptable and sustainable."



1.2 Strategy Benefits

Ultimately "Vision Zero" will help reduce the impact of road trauma on all our lives, ensuring a healthier lifestyle for all Selwyn residents. It aims to:

- Align with the Council Community Outcomes to enhance the quality of life and wellbeing for Selwyn residents
- Reduce the number of hospital admissions and pressure on health resources
- Align with and compliment the Selwyn Walking and Cycling Strategy, Urban Development Strategy, Travel Demand Management Strategy, and Greater Christchurch Metro Strategy by encouraging other transport options and alternatives to car use and encouraging more active lifestyles
- Align with the outcomes and goals of the National Safer Journeys Road Safety Strategy to 2020
- Influence children's behaviours from a young age to support future road safety behaviour improvements
- Create safer local communities

1.3 Strategy Recommendations

'Vision Zero" incorporates the Safe Systems approach, which aims to improve road safety through four key cornerstones:



- Safer Road Users
- Safer Roads, Roadsides and Intersections
- Safer Speeds
- Safer Vehicles

In Selwyn we take this new approach seriously and believe that ideally, no one should be killed or injured on a Selwyn road. As such the



recommendation of this Strategy is that all practical and realistic measures be taken to support road safety in the district in line with this Strategy's Vision

1.4 Strategy Contributors

This strategy was developed by the Selwyn Road Safety Subcommittee. It included the use of a Steering Committee of key members to provide more direct input.

The Selwyn community also played a vital role in the development of this Strategy through high levels of consultation and feedback gathered. It included pre-consultation with the community and key stakeholders over the key road safety issues and concerns facing the district, as well as behaviour change and engineering ideas.

It also acknowledged the input of Waugh Infrastructure Management Ltd and the initial author, Ms Lee Wright, to bring the strategy to fruition.

Members of the Selwyn Road Safety Strategy Subcommittee include:

- Selwyn District Councillors (Two)
- New Zealand Transport Agency Representative
- NZ Police Representative
- NZ Road Transport Association representative
- NZ Trucking Association Representative
- Accident Compensation Representative
- Mayor (ex-officio)

Supported by the following Council Staff:

- Road Safety Co-ordinator
- Roading Engineer
- Asset Manager Transportation

The role of the subcommittee is stated in the Terms of Reference as:

The Selwyn District Council Road Safety Subcommittee is established by the Selwyn District Council (SDC) to inform, co-ordinate and progress, matters



relating to road safety in the District for the benefit of all road users. The Subcommittee shall support the Council's stated aspiration of "zero road deaths and serious injuries on Selwyn roads" and any related strategic outcomes and goals. To this end the Subcommittee will work to the guiding principles of a "Safe System" approach to road safety.





2. Overview

While Selwyn has made progress in reducing road crashes and road trauma, between 1990/91 and 2013/14 191 people have lost their lives on Selwyn roads. Any lives lost on Selwyn roads must be considered to be fundamentally unacceptable and is the starting point for this strategy and its "Vision Zero" target. However on the plus side this decrease is occurring during a period of significant population growth and additional road use growth. This growth is coming about from significant land use changes in the district relating to new urban subdivisions in the Greater Christchurch area, industrial developments, and increasing dairy farming leading to more milk tankers and trucks on our roads.

Having an effective roading network is crucial for the economic, social and cultural well-being of our district. However this can come at a price in terms of road safety if not carefully considered. Road crashes on Selwyn roads place a heavy burden on our community, individuals, and families. The estimated social cost of crashes is \$3.85 million per fatality, and \$409,100 per serious crash (MoT 2013). Improvements in road safety are needed, not only to save lives, but to also enhance the economic development and productivity of the district through both effective and safe and road use.

To fully implement this strategy it will take leadership, innovation, and commitment by the whole Selwyn community. The Council fully supports the Safe Systems approach to road safety and believes having an aspirational vision of zero road deaths and injuries will inspire the community and road safety stakeholders to work together to reduce road crashes and trauma.



But in the end really it comes down to each drivers responsibility to drive safely when they get behind the wheel. This is were education and behaviour change is a key approach, and as such is one of the 4 cornerstones to the safe systems approach.



An extract fron the April 9 2014 edition of the Central Canterbury News outlines the disappointment of a former Police Officer in the behavior of drivers in Selwyn District that is typical of the apathay on road safety we need to deal with.





3. Strategy Background

3.1 Introduction

Road deaths and injuries are preventable. Research and best practice interventions have given us the knowledge about how to develop and implement strategies and measures that can significantly improve road safety. It is clear that we now need strong and focused efforts to reduce crashes on Selwyn roads.

This Strategy moves us beyond the typical "3 E's" of delivering road safety to date of Engineering, Enforcement and Education to a more integrated "Safe Systems" approach. This will carry us much further with our drive to improve road safety.

Road safety involves individual and shared responsibility. All road users have a primary responsibility for making safe decisions. The Government's share of the responsibility is to provide resourcing to enact the objectives of "Safer Journeys". Safer Journeys is the government's strategy to guide improvements in road safety over the period 2010 to 2020. The strategy's vision is a safe road system increasingly free of death and serious injury and introduces the Safe System approach to New Zealand. This includes developing effective policies and enforcing laws, providing safe roads, and fostering improvements in vehicle safety.

The Government has already made a commitment through the introduction of the National Road Safety *Safer Journeys* Strategy and many of its first actions are currently being implemented. Locally, Councils will need to lead the charge to reduce crashes by - leadership, fostering partnerships, influencing and undertaking local road improvements, and innovation. This also needs to include raising awareness of the overall importance of a "Safe Systems" approach, and continually working to change road users' behaviour. This will be our enduring contribution.

Selwyn roads play a part in the kind of road crashes that occur in the district. Selwyn has predominately long, straight 100 km/h rural roads. Failing to stop, poor observation, inattention, loss of control, speed too fast for conditions, drink driving and fatigue are some of the key factors for road crashes in the district.

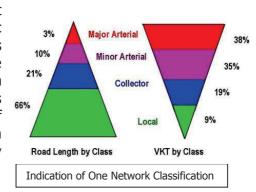
Selwyn has:

- 1,300 km of sealed roads
- 1,100 km unsealed roads
- 163 bridges
- Over 2,000 intersections





Council has developed a road network hierarchy that reflect the function of the road and the level of traffic use; this is used to assist with the prioritisation of works and responses. In 2013 NZTA released the "One Network Road Classification System" which provides a nationally consistent approach to roading hierarchies across State Highways and local roads. As levels of service are developed in terms of this classification system, it is expected that this will influence roads safety initiatives and investment prioritisation.



Road safety does not exist in isolation to other transport activities, so it is important to consider the potential for achieving wider community outcomes such as those associated with transport efficiency and sustainability.

Selwyn has a comprehensive Walking and Cycling Strategy and is a key partner in the Greater Christchurch Travel Demand Management Strategy and Greater Christchurch Metro Strategy.

For example, low-speed environments in urban areas can improve safety and encourage walking and cycling. Off-road trails are conducive to safer walking and cycling, as well as the development and implementation of school travel plans. They not only improve road safety and encourage more walking and cycling, but also improve community cohesion and support public health objectives.

Policy changes within the Selwyn District Plan and supporting Subdivision Design Guidelines can encourage streets with sustainable slower speed environments to be developed – safe system – safer speeds.

Since 2007 Council has had in place a Safety Management System (SMS) which documents policies, standards and procedures, to ensure road safety is a central consideration in every decision about the maintenance, operation and construction of is transport networks. This Strategy becomes the "umbrella" system to these and other related road safety endeavours Council has used to date.

3.2 District State Highways

There are four State Highways running through the district – SH1, 73, 75 and 77. The state highway network has a vital role as the main strategic road network for the country, enabling people to get to key destinations, and also providing the main supply



routes for freight, and to connect major communities. This strategic network is 12% of New Zealand's total road network but carries 50% of the vehicle traffic and around two-thirds of the kilometres driven by heavy vehicles.

Keeping this network safe, efficient, reliable and resilient is a top priority for NZTA who manage and operate the state highway network. The NZTA works closely with its transport partners,



especially Councils, throughout the country with the aim to provide a "one network" approach², including that relating to safety.

State Highway roads tend to be higher quality roads and motorways, due to the higher traffic volumes and demands placed on them as freight routes. State highways are fully funded by central government through the NZTA, compared to local roads that are funded by both the local ratepayer and the NZTA.

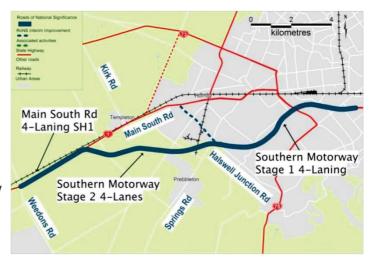
The main aim of the State Highways is that they can be used by a range of transport types safely and efficiently without being hindered by congestion. In Selwyn there are excellent working relationships with the State Highways Network and Operations Group and other NZTA divisions relating to planning and funding. It has to be remembered that the majority of our local roads intersect with the state highway network, so we have a common interest to promote safety for the wider network and public benefit as a whole.

Around half of the reported fatal and serious crashes occur on the State Highway network in Selwyn, which reflects the relatively high use of these roads compared to local roads. For Selwyn as a whole to work towards achieving its 'Vision Zero', there also has to be a reduction in crashes on State Highway roads too. NZTA has a strong focus towards "Safe Systems" and are continually improving the state highway network using "Safe System" actions, for example: rumble strips; double yellow centre markings; barrier treatments, clear zones etc. A new State Highway safety rating initiative, called KiwiRAP has rated the safety of State Highways.

3.3 Roads of National Significance

The RoNS programme represents one of New Zealand's biggest ever infrastructure investments. The seven RoNS projects are based around New Zealand's five largest population centres. The focus is on moving people and freight between, and within, these centres more safely and efficiently.

The *Christchurch Roads of National Significance* includes various sections of state highways that provide critical routes to the Christchurch International Airport (SH1), into the



Christchurch Central Business District (CBD) and to the Port of Lyttleton (SH74 and SH73).

Of these the most relevant to Selwyn is the extension of the Southern Motorway to Rolleston consisting of

² The One Network Road Classification (ONRC) involves categorising roads based on the functions they perform as part of an integrated national network.



- (CSME 1) Brougham St (Collins St) to Halswell Junction Road (completed)
- (CSME 2) Halswell Junction Road to SH1 to Weedons Road, Rolleston (construction due to commence 2016)

With the construction of these and other Christchurch RoNS projects, this will elevate congestion and safety issues on both the existing state highway and local road networks, in addition to providing high quality motorways that have sophisticated elements of safety engineering included.

The extension of the Southern Motorway in conjunction with connections from Selwyn's arterial roads will serve Selwyn's high growth areas around Rolleston, Lincoln and Prebbleton where there is an increasing demand to cater for commuter and freight traffic to and from Christchurch and the ports. Council will need to programme the improvement of its local roads where they interact with the RoNs, such as at interchanges near Prebbleton and Rolleston. The cost of this has been estimated to be \$100million.

3.4 Key Stakeholders

The implementation of the Strategy and its associated Action Plan are not just matters for the Council. It requires the involvement and participation of many other organisations and agencies to be successful. The other principal stakeholders likely to be involved are listed below. The Council will play a key role in ensuring that all these organisations work together to achieve the Strategy's goals and objectives. The list, while comprehensive, does not attempt to be definitive or to list all those likely to be involved or have an interest.

Table 3.1: Key Stakeholders

National and Regional	Local			
Ministry of Transport	Selwyn District Council (the Councillors as an elected body)			
New Zealand Transport Agency	Neighbouring Councils: Christchurch City, Waimakariri and Ashburton Districts			
New Zealand Police	Joint TLA Road Safety Groups			
New Zealand Automobile Association	Selwyn Road Safety Sub-Committee			
New Zealand Trucking Association	Selwyn based Police			
Environment Canterbury	Selwyn Schools and Early Childhood Centres			
Accident Compensation Corporation	Christchurch to Little River Railtrail Trust			
Age Concern	Township Committees			
New Zealand Road Transport Association	Community Boards			
Ministry of Health	Urban Development Strategy (Greater Christchurch) Transport providers			
Ministry of Education				
Kiwi Rail				
The Active and Passenger transport Working				
Group (established by the Canterbury				
Regional Transport Committee)				
Regional Road Safety Working Group				
Federated Farmers				



National an	d Regional			Local
Canterbury Committee	Regional	Land	Transport	
Canterbury District Health Board				
Maintenance Contractors				
Utilities Contractors				

3.5 Selwyn's Community Outcomes

The following outcomes are among those detailed in the Council's 2012-22 Long Term Plan (LTP). The vision, outcomes, goals and objectives of this Strategy support them and help ensure they are realised.

Table 3.2: Community Outcomes

Community Outcomes	The Transportation Activity Contributes to the Community Outcomes by:		
Air, land, water and general environment to be kept in a healthy condition	Providing an efficient and sustainable transportation system, including non-polluting transport options that contribute to the reduction of exhaust emissions and by installing and providing infrastructure in environmentally sensitive ways		
A safe place in which to live, work and play	Designing, constructing, maintaining and upgrading roads, intersections and other transport facilities to industry standards and best practice where hazards have been identified and by providing warning, advisory and regulatory signs advising of hazards as well as educational initiatives to reduce the risk to people		
Effective and accessible transport system	Designing, constructing, maintaining and upgrading the road and transport network to achieve a robust and flexible system for the movement of people and freight, including facilities for pedestrians, cyclists, public transport and other non-motor-vehicle-based road users		
A prosperous community	Providing a transportation system that allows for the safe and efficient movement of people, goods and services around the district		

3.6 Decade of Action for Road Safety

The United Nations and the World Health Organisation have called for a Decade of Action for Road Safety, and this Strategy is needing this call because road safety isn't just about the Government taking action, everyone needs to play a part.



Nearly 1.3 million people worldwide die as a result of a road crash every year, making road traffic injuries the tenth leading cause of death globally. 'Time for Action' was launched around the world on 11 May 2011. With this Strategy, Selwyn can play its part for the global push to reduce road crashes and will support the Decade of Action – together we can contribute to save lives.

Take regular

DRIVE FRESH



3.7 Safe System Principles

This strategy is part of a wider interlinked group of transport strategies, plans and other policy documents produced by the Council, regional and central government.

The Local Government Act 2002 and the Land Transport Management Act 2003 provide very clear legislative direction to the formulation of any transport related documents. This includes how transport activities:

- Assists economic development
- Assists safety and personal security
- Improves access and mobility
- Protects and promotes public health
- Ensures environmental sustainability

The safety and well-being of Selwyn people is at the heart of this strategy. Approaches to improving road safety in Selwyn will be guided by the "Safe System" principles, which fundamentally involve two objectives:

- 1. Making the road transport system more forgiving of human error, while acting to minimise the contribution of unsafe road user behaviour to road crashes.
- 2. Roads and vehicles should be designed to reduce the risk of crashes, and to reduce the harm to people if a crash does happen.

In other words, this means:

- ✓ Helping us to get it right and avoid crashes
- ✓ Providing protection to people when things go wrong
- ✓ Making sure we don't exceed our limits

The "Safe System" approach requires more specifically:

- Designing, constructing and maintaining a road system (roads, vehicles and operating requirements) so that forces on the human body generated in crashes are generally less than those resulting in a fatal or serious injury
- Improving roads, roadsides and intersections to reduce the risk of crashes and minimise harm using treatment philosophies and guidelines (e.g.) the High Risk Rural Roads Guide (HRRRG) and others
- Advising, educating and encouraging road users to obey road rules and be responsive to potential risk situations
- Using enforcement and penalties to deter road users from breaking the rules, especially in regard to driving under the influence of alcohol or drugs, or driving while tired



 Undertaking crash reduction studies/audits to identify the most cost-effective interventions to improve the safety of intersections and routes especially where there are known problem "black spot" problems

Figure 3.1: The Selwyn Safe System Diagram

