

Southland District Council Introduction to the Safety Management Plan

Presented to SDC Maintenance Contractors

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What is the Safety Management Plan?

It is a comprehensive systematic approach to improve road safety.



The Safety Management Strategy

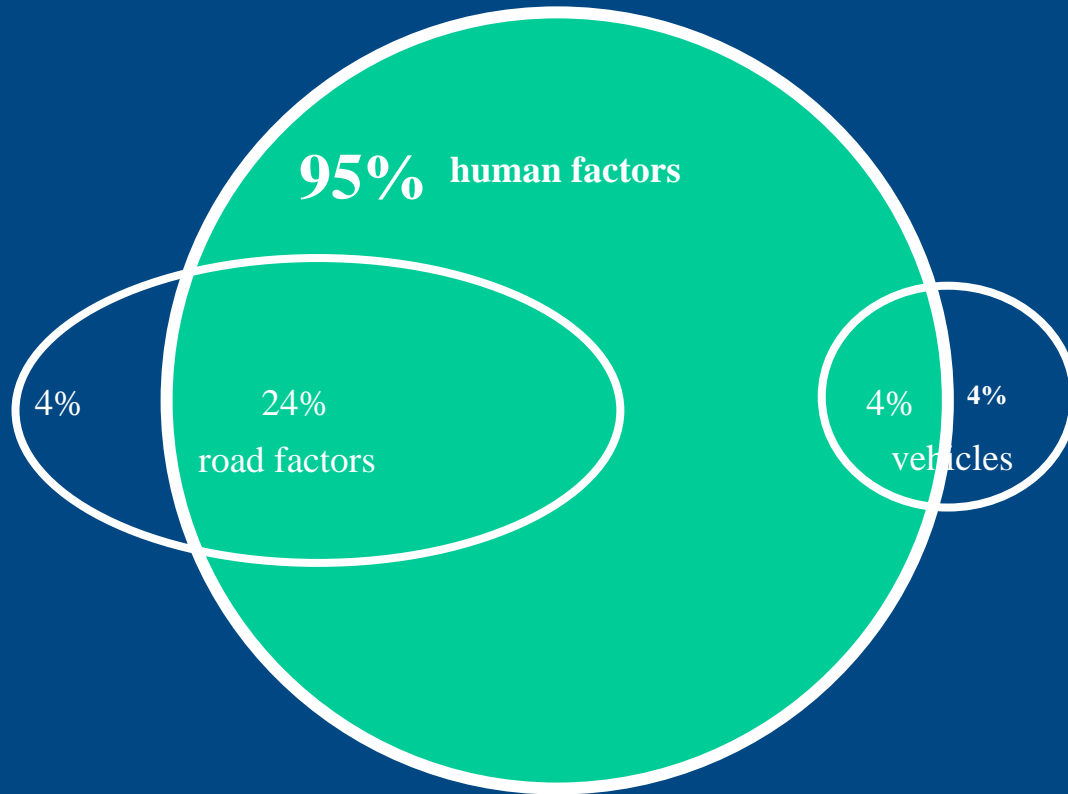
Aim:

- To utilise the appropriate best practice to provide a safe road network.
- It fits well with Southland's guiding principle of "People First Serving Communities together".

Initial Target:

- A trending down of crash numbers better than the national trend within 5 years.

Involvement of Factors of Crashes



Safety Management Strategy Goals Relate to:

1. Road Environment
2. Road Projects
3. Deficiencies
4. Special User Groups
5. Safety Culture
6. Information Management System

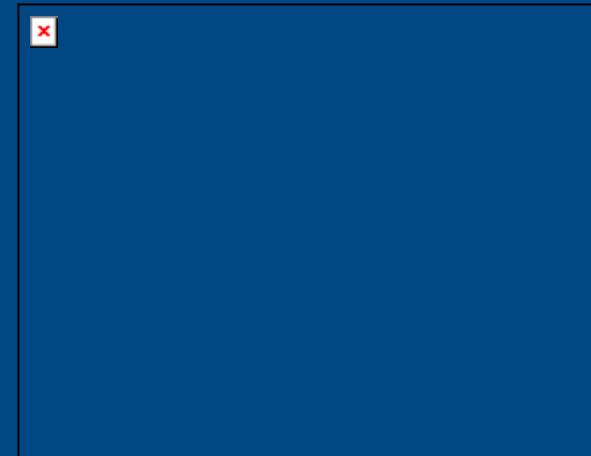
For each goal objectives, methods, deliverables and outcomes have been developed.

Goal 1: To Ensure Road Users have a Consistent Road Environment

- Provide roads with geometry consistent with terrain, traffic volume, mix and road group.
- Provide carriageway widths and shoulders appropriate to the road group.

Goal 1: To Ensure Road Users have a Consistent Road Environment cont'd

- Maintain clear zones along roads.
- Develop SDC Clear Zone Principles.
- Develop Safety Intervention Plan.



Goal 1: To Ensure Road Users have a Consistent Road Environment cont'd

- Manage vegetation within the road reserve appropriately.
- Use SDC policy for Roadside Planting.

Goal 1: To Ensure Road Users have a Consistent Road Environment cont'd

- **Signs.**

- maintain a set standard of signs for each road according to road group
- sign all curves or groups of curves which are 15km/hr below design speed
- chevron boards and chevron curve indicators at curves and tee intersections that are deceptive.

Goal 1: To Ensure Road Users have a Consistent Road Environment cont'd

- **Road Markings.**

- maintain a set standard of markings for each road according to group of road
- ensure correct application and location of no passing lines

Goal 1: To Ensure Road Users have a Consistent Road Environment cont'd

- **Hazard Marking.**
 - remove or mark isolated hazards within the clear zone
 - highlight location of bridges

Goal 1: To Ensure Road Users have a Consistent Road Environment cont'd

- **Surface Conditions.**
 - maintain unsealed roads with no soft spots, consistent camber, no potholes or corrugations
 - maintain sealed roads so they have safe skid resistance values
 - no potholes, loose chips and gravel, etc
- **Minimise effects of adverse weather.**
 - reduce icing by removing vegetation shading roads
 - warning signs
 - gritting snow clearance and consider use of CMA

Goal 1: To Ensure Road Users have a Consistent Road Environment cont'd

- **Intersections.**
 - ensure intersections operate safely
 - is the sight distance adequate
 - priority signs



Goal 1: To Ensure Road Users have a Consistent Road Environment cont'd

- **Delineation Devices.**
 - maintain a set level of delineation for each road according to Level of Service



Goal 1: To Ensure Road Users have a Consistent Road Environment cont'd

- **Delineation Devices cont'd**
 - EMP's must delineate horizontal and vertical curves at night

Goal 1: To Ensure Road Users have a Consistent Road Environment cont'd

- **Delineation Devices cont'd**
 - RRPM's must delineate horizontal and vertical curves at night

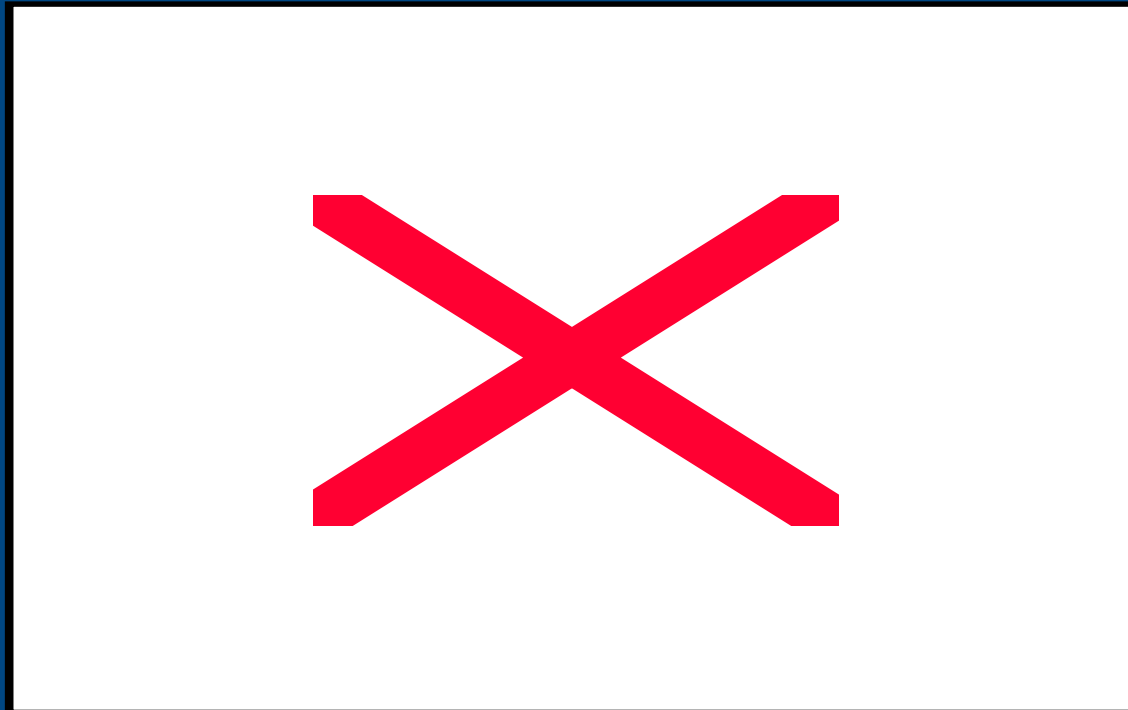
Goal 1: To Ensure Road Users have a Consistent Road Environment cont'd

- **Adjacent Development.**
 - avoid, remedy or mitigate the effects of adjacent development on road users

Goal 1: To Ensure Road Users have a Consistent Road Environment cont'd

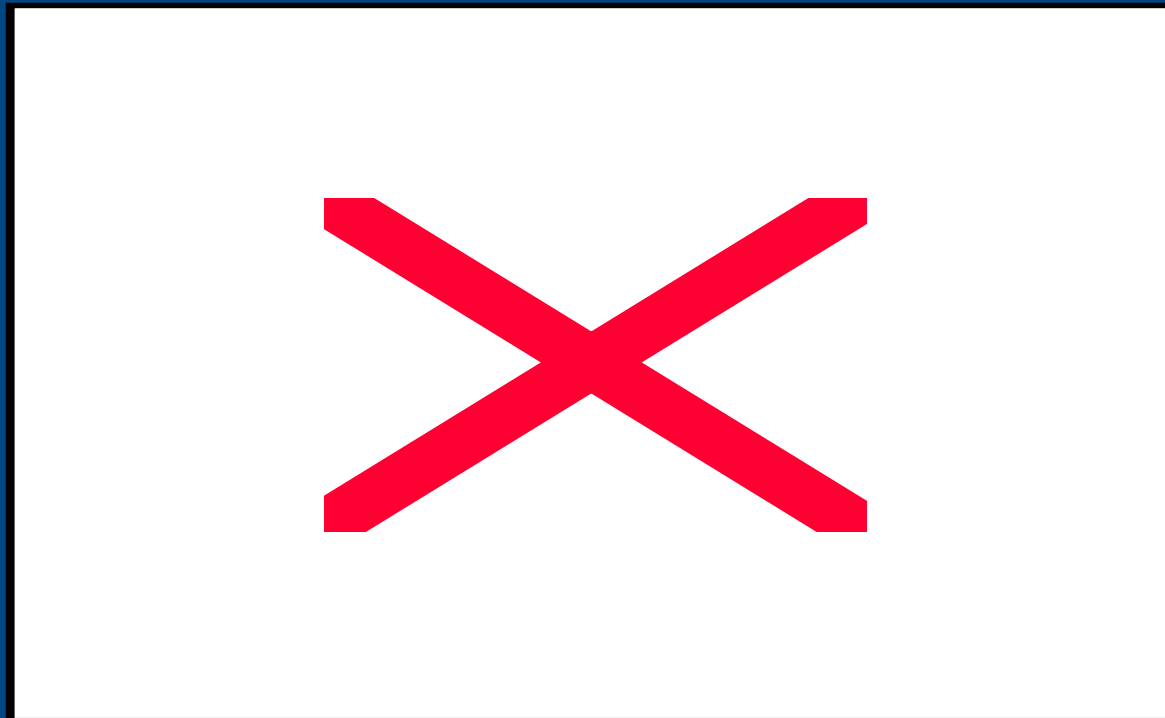
- Maintain consistent speed limits throughout the district.
- Identify road environment deficiencies during safety inspections.

Goal 1: To Ensure Road Users have a Consistent Road Environment cont'd



- One post to coincide with the extended centreline of the approach lane straight.
- A minimum of 3 EMP's to be visible at all times

Goal 1: To Ensure Road Users have a Consistent Road Environment cont'd



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- A minimum of 3 EMP's to be visible at all times

Goal 2: To Consider Safety at all Stages of Roading Projects cont'd

- **Maintenance Programme.**

- maintenance Contractors are required to intervene before routine maintenance items become significant safety hazards
- Contractors are to be assisted to prepare their own Safety Intervention Plans



Goal 2: To Consider Safety at all Stages of Roading Projects cont'd

- **When developing safety programmes.**
 - maintain a database to track reports of safety deficiencies
 - consider wide range of safety information
 - identify and construct minor safety and construction projects
 - consider network safety in Forward Works Programme

Goal 2: To Consider Safety at all Stages of Roading Projects cont'd

- **Safe operation on the road.**
- **Require Contractors, Consultants and SDC to prepare Health and Safety Plans and Traffic Management Plans for all construction and maintenance projects, professional services contracts and investigations on roads.**
- **Other operators to obtain permits before working on the road.**

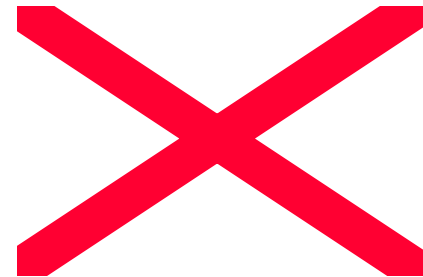
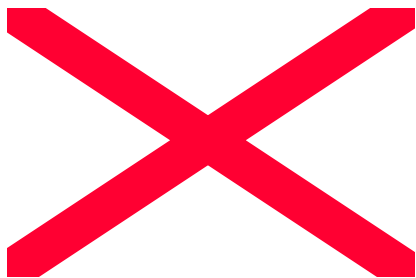
Goal 2: To Consider Safety at all Stages of Roading Projects cont'd

- **Safety Audits.**

- participate in Transfund “Safety Audit of Existing Roads” programme
- undertake additional regular safety audits of existing roads
- undertake pre-design safety audits on all seal extension projects
- random safety audits of projects at all stages of project development
- safety audits at all stages of all safety projects

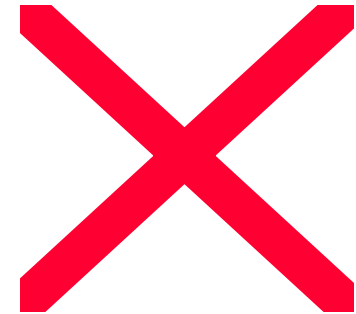
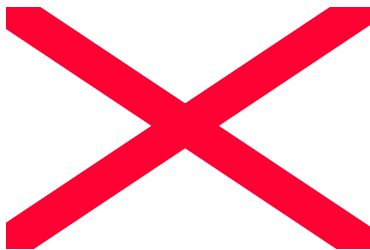
Goal 2: To Consider Safety at all Stages of Roading Projects cont'd

- Undertake before and after studies.



Goal 3: To Identify and Investigate Deficiencies

- Undertake detailed systematic safety inspections.
- Measure is SDC Policies, Standards, Guidelines, Species, etc. for each road level (under development).
- Five year cycle.



Goal 3: To Identify and Investigate Deficiencies : cont'd

- **Safety Inspection Items include:**
 - geometry
 - carriageway and shoulder widths
 - clear zones
 - roadside planting
 - signs
 - marking
 - hazard marking
 - surface conditions
 - intersections
 - delineation
 - adjacent development
 - temporary traffic control

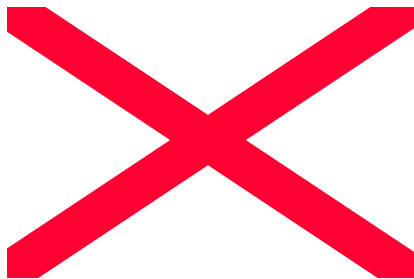


Goal 3: To Identify and Investigate Deficiencies cont'd

- **Take a Proactive Approach to Safety.**
 - Develop a Crash Reporters Network to capture unreported crashes
 - Maintain a Hazardous Sites Database
 - Operate a Safety Deficiency Database
 - Use LTSA Crash Database, Road Safety Report
 - Identify grey spots
 - Undertake Crash Reduction Studies

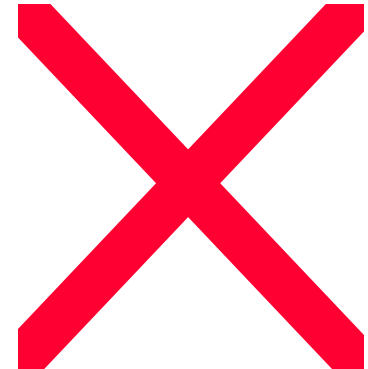
Goal 3: To Identify and Investigate Deficiencies cont'd

- **Undertake Mass Actions.**
 - Overview all available information
 - Identify district wide deficiencies
 - Take mass action to remedy



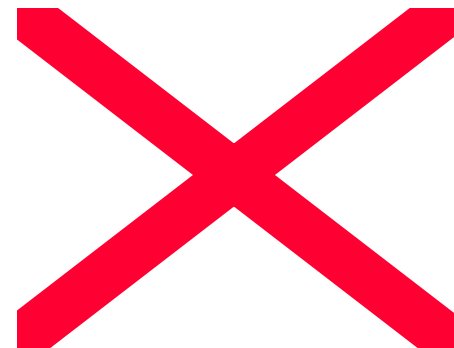
Goal 4: To Ensure that the Safety Requirements of Special User Groups is Considered in all Projects

- Consider the different modes of transport
- Provide all for Disabled Road Users
- Consider the needs of young and elderly road users



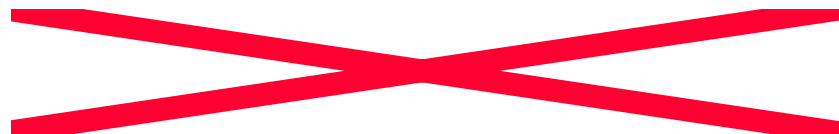
Goal 5: Develop A Safety Culture Among all Road Users and Organisations

- Develop, adopt and promote a safety culture within Council, Consultants and Contractors.
- Utilise education initiatives and targeted enforcement in the wider community.



Goal 6: Maintain an Effective Information Management System





- Databases need to be developed, maintained, updated and interrogated.



Where to from Here?

- **The SMP will improve road safety over time.**
- **Community buy in is important for its success.**
- **Work on the Operations section of the SMP has started:**
 - communication plan in progress
 - trial safety inspections undertaken
 - crash reporter network being established
 - safety intervention plan about to start

How Can You Help Implement the SMP and Improve Road Safety?

-  **Promote the SMP to the Community.**
-  **Promote a safety culture by your own life style choices and networking.**
-  **Use your own networks to help establish the crash reporters network.**
-  **Participate in development of the Operations section of the SMP, particularly the Safety Intervention Plan.**

Safety Intervention Plans (SIP's)

- Relatively new.
- Early SIP's prepared by consultant.
- Most now a joint effort by contractors and consultants.
- Information / education / guidance tool.
- Usually a mix of words, photos, diagrams and plans.

Southland's Safety Intervention Plan (SIP)

- **SIP is to be developed in conjunction with contractors.**
- **Purpose : Yet to be defined, ideas are:**
 - To provide guidance to maintenance staff on how to ensure road users have a consistent road environment
 - To provide guidance to maintenance staff on how to ensure road users have a no surprises road environment
 - To provide guidance to maintenance staff when maintenance intervention is required
 - Your ideas welcomed

Southland's Safety Intervention Plan (SIP) cont'd

- **Who will use the SIP ?**
- **Who are “Maintenance Staff” ?**
 - Contractors Field Staff ?
 - Foremen ?
 - Contractor Management ?
 - Consultants ?
 - SDC Staff ?
- **Who is the main audience ?**

How Many SIP's Should There Be For Southland Roads ?

- There are 3 contract areas.
- Each contract area has a:
 - Maintenance contract
 - Pavement Marking contract, and a
 - Signs contract
- **Maximum scenario 9**
- **Medium scenario 3**
 - Maintenance
 - Pavement Mark
 - Signs
- **Minimum scenario 1**
- There are pros and cons for each option

Where to From Here ?

- How can we best develop an SIP / or SIP's for Southland ?
- What are you willing to contribute ?