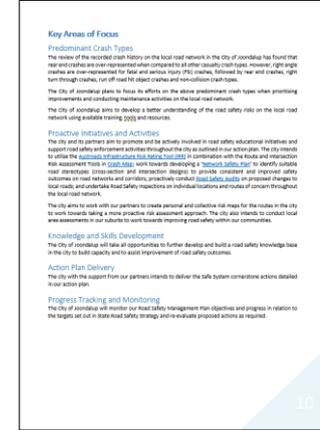
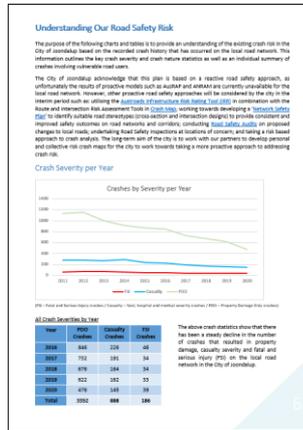
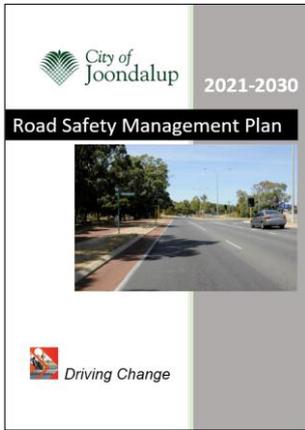


Local Government Road Safety Management Planning Process Guide

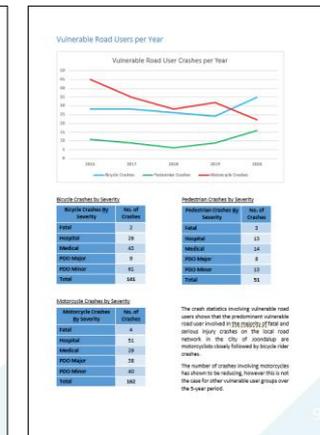
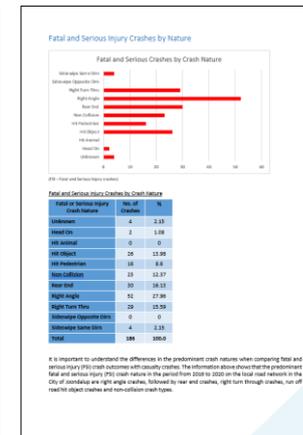
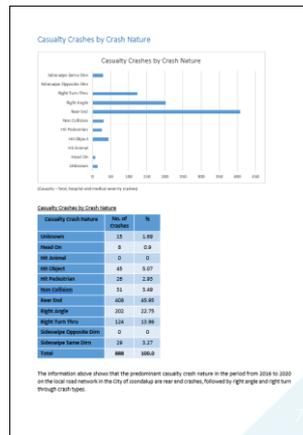
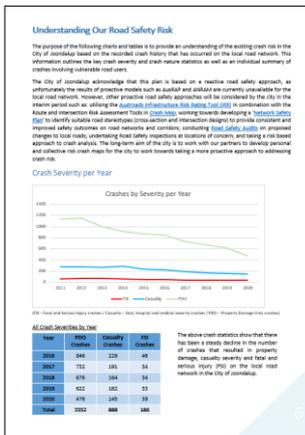
Step 1 – Review and Update Report Template

Update any formatting in the report template to reflect your corporate branding and update any content in the report that does not reflect your local governments' current or planned future policies, practises, strategies or aims.



Step 2 – Consider Your Crash Risks

Consider the overall crash trends, the predominant casualty crashes, fatal and serious injury crashes, and crashes involving vulnerable road users that occurred on the local road network in your local government area.



Step 3 – Select Proposed Actions for Your Action Plan

The Action Plan list of *Safety Performance Indicators* is a selection of all Safe System Action Plan items currently available in Western Australia that a Local Government may select for their plan.

Study the list of possible *Safety Performance Indicator* actions in the Action Plan template and select action items for each of the four cornerstone areas of the Safe System. This exercise should consider the crash trends and predominant crashes evaluated in the previous step.

Any action items that do not apply to your particular road safety circumstances or availability of resources should be removed from your Action Plan list.

The final Action Plan list for each of the safe system areas should include a selection of both proactive and reactive actions.

Any other actions currently being delivered by your local government that are not listed on the Action Plan can be added to the applicable Safe System cornerstone area list.

Actions Plan			
Safe Roads and Roadside – Safety Performance Indicators			
Item	Action	Reporting Body and Resources	City / Partner Commitment
1.1	Conduct cost-benefit assessments to identify potential locations for alternative funding solutions (e.g. tolling, user charges, etc.)	City of Mandurah	City of Mandurah
1.2	Conduct high-risk road and infrastructure assessments at known areas of concern	City of Mandurah	City of Mandurah
1.3	Develop a Network Safety Plan to identify vehicle road user safety issues and interventions designed to provide enhanced road user safety outcomes in road networks and corridors	City of Mandurah	City of Mandurah
1.4	Apply the Australian Safe System Assessment	City of Mandurah	City of Mandurah
1.5	Identify the local road network safety audit and conduct safety inspections of road networks	City of Mandurah	City of Mandurah
1.6	Conduct road safety audits of permanent changes to the road network and conduct road safety inspections of corridors	City of Mandurah	City of Mandurah
Safe Speeds – Safety Performance Indicators			
Item	Action	Reporting Body and Resources	City / Partner Commitment
2.1	Conduct speed monitoring to identify locations or segments in public spaces where speed enforcement is required	City of Mandurah	City of Mandurah
2.2	Conduct speed monitoring to identify locations or segments in public spaces where speed enforcement is required	City of Mandurah	City of Mandurah
2.3	Apply to promote, support and enable speed awareness campaigns for the road safety	City of Mandurah	City of Mandurah
2.4	Introduce speed cameras to high-risk road networks	City of Mandurah	City of Mandurah
2.5	Identify potential locations for speed cameras	City of Mandurah	City of Mandurah
2.6	Identify potential locations for speed cameras	City of Mandurah	City of Mandurah
2.7	Take advantage of vehicle speed cameras to identify locations of high risk road networks	City of Mandurah	City of Mandurah
Safe Vehicles – Safety Performance Indicators			
Item	Action	Reporting Body and Resources	City / Partner Commitment
3.1	Commitment to purchase the latest vehicle technology for the City fleet	City of Mandurah	City of Mandurah
3.2	Introduce contractual arrangements to the vehicle fleet to ensure compliance with the latest vehicle technology	City of Mandurah	City of Mandurah
3.3	Introduce a vehicle safety program to ensure compliance with the latest vehicle technology	City of Mandurah	City of Mandurah
3.4	Identify locations where vehicle safety issues are identified from the Road Safety Commission	City of Mandurah	City of Mandurah
3.5	Identify locations where vehicle safety issues are identified from the Road Safety Commission	City of Mandurah	City of Mandurah
3.6	Identify locations where vehicle safety issues are identified from the Road Safety Commission	City of Mandurah	City of Mandurah
3.7	Identify locations where vehicle safety issues are identified from the Road Safety Commission	City of Mandurah	City of Mandurah
Safe People (Road Use) – Safety Performance Indicators			
Item	Action	Reporting Body and Resources	City / Partner Commitment
4.1	Apply to promote, support and enable safe road use campaigns and campaigns from the Road Safety Commission and WA State Government	City of Mandurah	City of Mandurah
4.2	Promote and support road safety initiatives at schools	City of Mandurah	City of Mandurah
4.3	Identify vehicle users who are at risk of being involved in a crash	City of Mandurah	City of Mandurah
4.4	Take advantage of WA State Government Road Safety Campaigns	City of Mandurah	City of Mandurah
4.5	Identify vehicle users who are at risk of being involved in a crash	City of Mandurah	City of Mandurah
4.6	Identify vehicle users who are at risk of being involved in a crash	City of Mandurah	City of Mandurah
4.7	Support schools in applying for traffic lights	City of Mandurah	City of Mandurah

Step 4 – Gain Support for Your Road Safety Management Plan from Your Organisation (Vital Step)

A Road Safety Management Plan is a working policy/strategy document. To have the greatest chance of success, it is strongly recommended that your Road Safety Management Plan is endorsed by your Local Government Council Executive/Committee so that the plan is supported by the organisation.

It is also recommended that your endorsed Road Safety Management Plan is published on your website.

Step 5 – Take Full Advantage of the Tools and Resources to Assist Manage Your Plan

Ensure that you take full advantage of all the various tools and resources that are referenced in the Action Plan for particular ‘Safety Performance Indicator’ action items, which have been developed to assist you to get the most out of your Road Safety Management Plan.

The recently launched [Crash Map](#) and [Road View](#) tools have been specifically developed to assist with the road safety assessment of your road network for the application of the Road Safety Management Plan process.

Example of new powerful road safety assessment tool:

Once you have an understanding of the predominant crashes on your local road network that are set out in your Road Safety Management Plan, the ‘Cluster’ tool in [Crash Map](#) can be utilised to identify and prioritise the locations of the predominant crashes that may be located at intersections or road sections throughout the local road network within your particular local government area.

The screenshot shows the 'Crash Map' application interface. On the left, there are navigation tabs for 'Cluster', 'Crash', and 'Black Spot'. Below these are filter options for severity (Fatal, Hospital, Medical) and crash nature (Right Turn Thru). A 'Cluster Options' section allows selecting 'Intersection' as the cluster type and setting a minimum number of crashes to 2. The 'Areas' section shows 'PERTH (C) (LGA)' is selected. The 'Cluster Analysis Results' window is open, showing a summary table and a detailed table of road sections.

Severity	Fatal, Hospital, Medical				
Crash Nature	Right Turn Thru				
Area Details	PERTH (C) (LGA)				
Cluster Type	Intersection				
Min. Number of Crashes	2				
Date Range	01/01/15 to 31/12/19				
Road No.	Road	Slk Start	Slk End	Crash Count	
zoom select 1240116	WELLINGTON ST	3.31	3.31	5	
zoom select 1240007	THOMAS ST	3.28	3.28	5	
zoom select 1280310	LOFTUS ST	0	0	5	
zoom select 1280304	RAILWAY PDE	0	0	5	
zoom select 1240086	COLIN ST	0.75	0.75	5	
zoom select 1240060	RAILWAY ST	0.56	0.56	5	
zoom select 1240007	THOMAS ST	1.83	1.83	4	
zoom select 1240103	MOUNTS BAY RD	1.06	1.06	4	
zoom select 1240105	MILL ST	0	0	4	

Other examples of tools to assist include the ‘Route and Intersection Assessment tools’ that can be found in the ‘RSE Resources’ menu in Crash Map:

Route Risk Assessment Tool

Enter route names, route lengths in km, traffic volumes in AADT, crashes numbers in a 5 year period. Use risk score and road environment type in the top table, crash rates and AADT, and calculate risk using tool or automatically calculated and displayed in the bottom table to allow routes to be compared.

Route Data	(Enter Route 1 Name)	(Enter Route 2 Name)	(Enter Route 3 Name)	(Enter Route 4 Name)	(Enter Route 5 Name)
Route Length (km)	2.25	2.25	2.25	2.25	2.25
Traffic Volume (AADT)	2000	2000	2000	2000	2000
All Crashes (5 years)	10	10	10	10	10
Casualty Crashes (5 years)	20	20	20	20	20
KID Crashes (5 years)	10	10	10	10	10
Footpaths Risk Score	1.00	1.00	1.00	1.00	1.00
Road Environment Type	Rural	Rural	Rural	Rural	Rural

Results

Crash Criteria	(Enter Route 1 Name)	(Enter Route 2 Name)	(Enter Route 3 Name)	(Enter Route 4 Name)	(Enter Route 5 Name)
All Crashes - Crash Density (Crashes per km)	4.44	4.44	4.44	4.44	4.44
All Crashes - Crash Rate (Crashes per 100km AADT)	666.67	666.67	666.67	666.67	666.67
Casualty Crashes - Crash Density (Crashes per km)	1.78	1.78	1.78	1.78	1.78
Casualty Crashes - Crash Rate (Crashes per 100km AADT)	243.53	243.53	243.53	243.53	243.53
KID Crashes - Crash Density (Crashes per km)	0.89	0.89	0.89	0.89	0.89
KID Crashes - Crash Rate (Crashes per 100km AADT)	121.77	121.77	121.77	121.77	121.77
Footpaths Risk Rating	1.00	1.00	1.00	1.00	1.00

Intersection Assessment Tool

Enter intersecting road names, select intersection type and speed limit, enter the total traffic volume for all intersecting roads in AADT and enter crashes numbers for the current 5 year period. The crash rates will then be automatically calculated and displayed in the bottom table to allow intersections to be compared.

Intersection Data	(Enter Intersecting Road Names)				
Intersection Type	(Select Intersection Type)				
Speed Environment	(Select Speed Limit)				
Total Intersection Traffic Volume (AADT)	5000	5000	5000	5000	5000
All Crashes (5 years)	30	30	30	30	30
Casualty Crashes (5 years)	20	20	20	20	20
KID Crashes (5 years)	10	10	10	10	10

Results

Crash Criteria	(Enter Intersecting Road Names)				
Intersection Type	(Select Intersection Type)				
Speed Environment	(Select Speed Limit)				
All Crashes - Intersection Crash Rate (Crashes per 100km AADT)	0.60	0.60	0.60	0.60	0.60
Casualty Crashes - Intersection Crash Rate (Crashes per 100km AADT)	0.40	0.40	0.40	0.40	0.40
KID Crashes - Intersection Crash Rate (Crashes per 100km AADT)	0.20	0.20	0.20	0.20	0.20

The [Road View](#) tool is a relational video application that allows users to upload and view georeferenced video files captured using a GPS enabled dashcam. Road View then geospatially relates the video captured with crash data and asset information, enabling relational analysis of the road environment to assist in the process of conducting road safety route assessments.

Ballbank Source:		Left Shoulder		Sealed Lanes		Right Shoulder		Hazard Rating		Alignment					
Advisory Speed	Unsealed	Sealed	Total Seal Width	Lanes	Sealed	Unsealed	Left	Right	Vertical Curve Type	Grade	Vertical Design Speed	Horizontal Profile	Curve Radius	Calculated Safe Speed	Crosfall
80			0.5m	7m	2		3	2	Uniform Downgrade	7%		RCUR	210m	70km/h	

Line Marking											
Road	Road Name	Common Usage Name	Start SLK	End SLK	CWY	Line Marking Type	Edge Line	Glass Bead	Raised Pavement Marker	GEOLOC	
M043	Caves	Caves Rd	49.72	58.54	Single	Separation			No		

For more information about Crash Map and Road View's key features please refer to the [Crash Map and Road View tutorial](#) videos that can be found on Main Roads website.

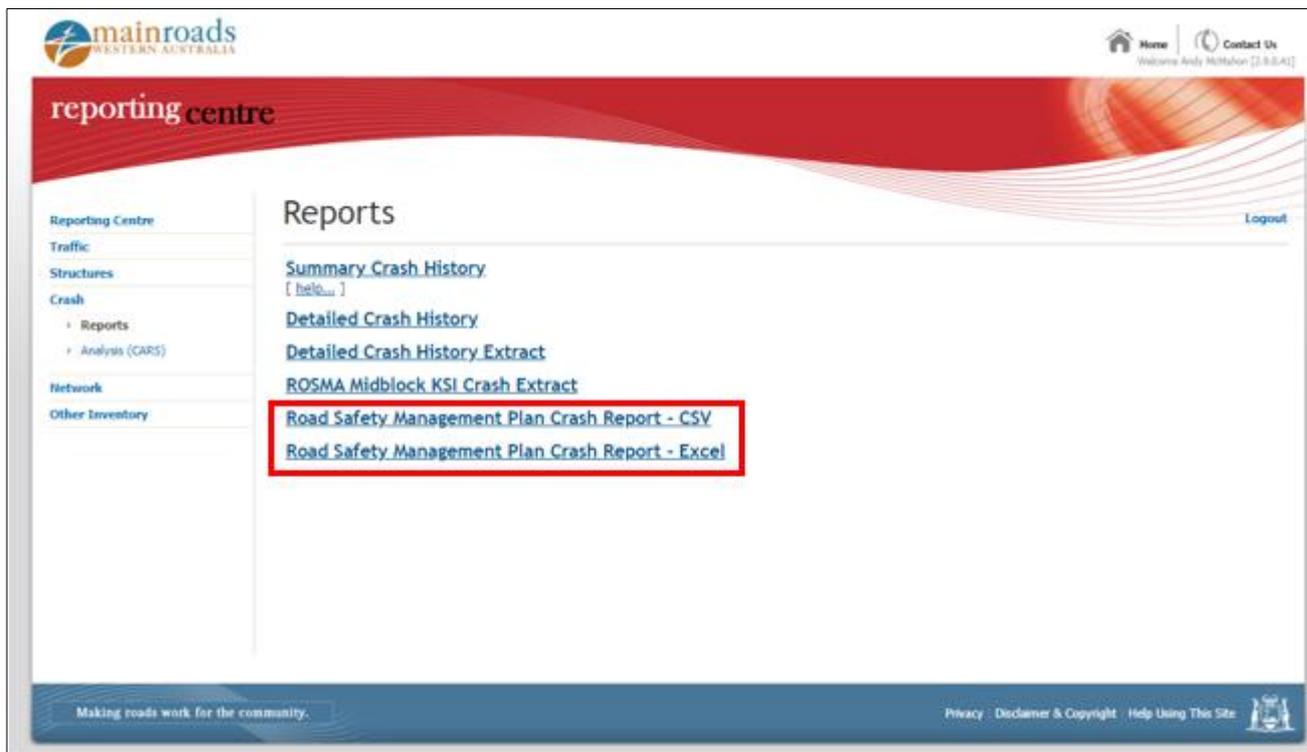
Step 6 – Monitor the Progress of Your Road Safety Management Plan

A new crash summary report has been created to assist you to monitor your Road Safety Management Plan which can be accessed on Main Roads website.

To access this report, firstly login to your account on Main Roads website or create an account if you don't already have one by visiting the [Crash Investigation](#) webpage on Main Roads website.

Then select the 'Crash Analysis' page and then the 'Reports' webpage where you will find the 'Road Safety Management Plan Report' options in CSV and MS Excel file formats.

You then select your Local Government area or Regional Road Group area for plans managed by a Regional Road Group and the report will be automatically generated and sent to the email address linked to your user account.



Example of Road Safety Management Plan Crash Report:

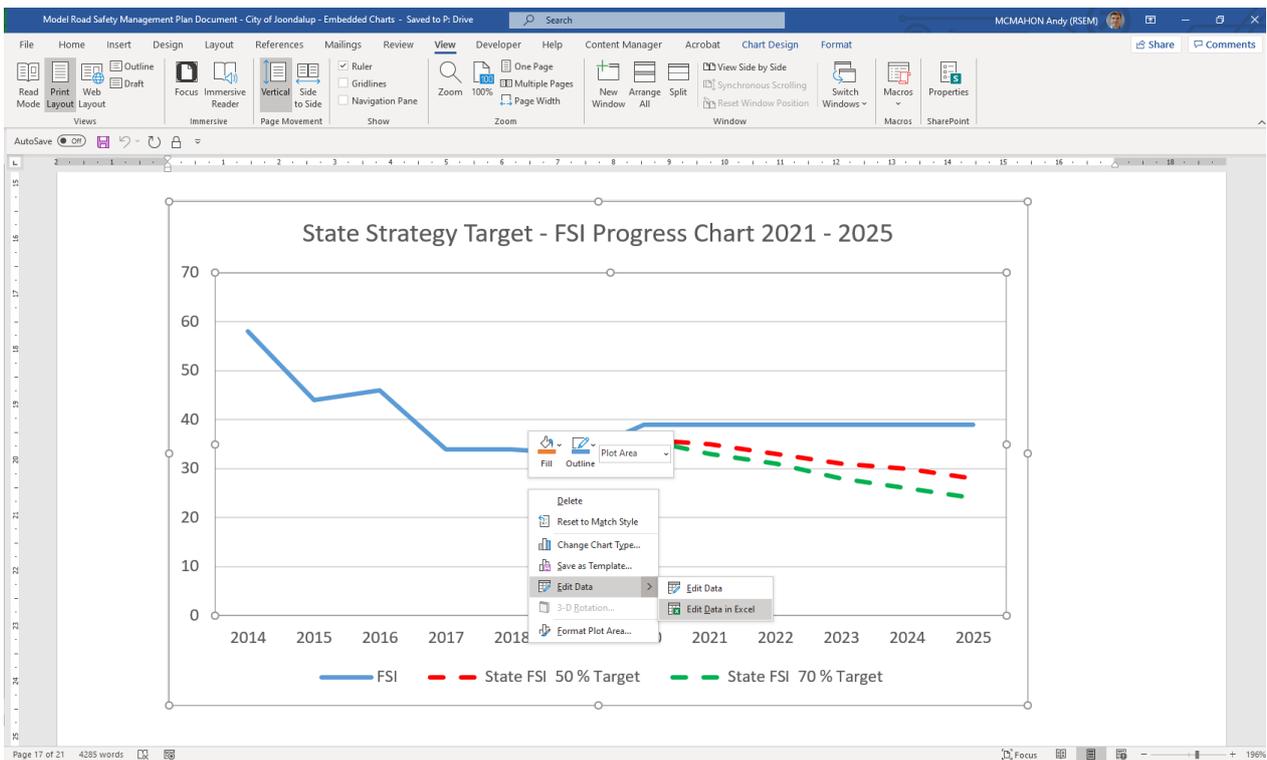
The screenshot shows an Excel spreadsheet titled 'Road Safety Management Plan Crash Report' for 'LG131 Joondalup (C)'. The report includes a table for 'Crash Severity by Year' from 2011 to 2020. The table has the following data:

Year	PDO	Casualty	PSI	All
2011	1136	283	58	1419
2012	1153	278	72	1431
2013	1051	263	71	1364
2014	912	292	58	1204
2015	865	236	44	1101
2016	846	228	46	1072
2017	720	191	34	920
2018	676	184	34	840
2019	622	162	33	784
2020	476	145	39	621

Updating the Charts in Your Plan:

All the data associated with Road Safety Management Plan charts is embedded within the document making charts simple to update.

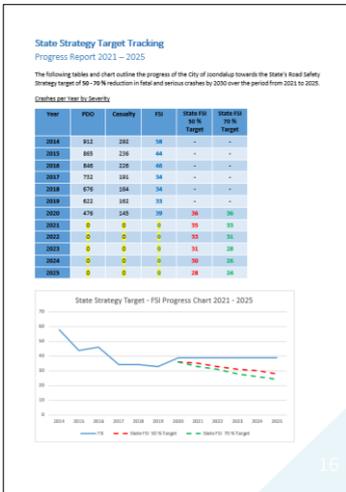
To update charts in your plan you simply 'right click' on the chart and select the options, 'Edit Data', followed by the 'Edit Data in Excel' option which opens an Excel window, allowing you to simply update the data in the chart using the latest data from your 'Road Safety Management Plan Crash Report' explained in step 6, see images below:



Year	FSI	State FSI 50 % Target	State FSI 70 % Target
2014	58		
2015	44		
2016	46		
2017	34		
2018	34		
2019	33		
2020	39	36	36
2021	39	35	33
2022	39	33	31
2023	39	31	28
2024	39	30	26
2025	39	28	24

Step 7 – Consider the Crash Results for Your Mid-Point Plan Target Tracking

Consider the crash data results at the mid-point of the plan and determine if there are any changes required to your *Safety Performance Indicators* in your Action Plan.



Casualty Crashes by Nature

Casualty Crash Nature	2014 - 2020	2021 - 2025	Percentage Change (%)
Unknown	14	0	+/- 0%
Head On	8	0	+/- 0%
Hit Animal	0	0	+/- 0%
Hit Object	47	0	+/- 0%
Hit Pedestrian	28	0	+/- 0%
Non Collision	22	0	+/- 0%
Rear End	411	0	+/- 0%
Right Angle	207	0	+/- 0%
Right Turn Thru	128	0	+/- 0%
Sideswipe Opposite Dirn	0	0	+/- 0%
Sideswipe Same Dirn	29	0	+/- 0%
Total	904	0	+/- 0%

Action Plan Update 2025

The following items in the action plan have been updated based on results from the monitoring of the progress report from 2021 to 2025.

Item ID	Item Description	Available Tools and Resources	City/Partner Responsible	Updated Target
3.1	Details of actions to be updated	Updated tools and resources	City is responsible	New Target
3.2	Details of actions to be updated	Updated tools and resources	City is responsible	New Target
3.3	Details of actions to be updated	Updated tools and resources	City is responsible	New Target
4.1	Details of actions to be updated	Updated tools and resources	City is responsible	New Target

Please provide further background to any action plan updates.

Step 8 – Complete Your Final Plan Monitoring

Complete your final Road Safety Management Plan monitoring once 2030 crash data is available on Main Roads website and identify the actions that performed well and any poorly performing action items.

Report the results and prepare a concluding statement of the Road Safety Management Plan process to be provided to all relevant stakeholders and customers and consider any learnings to be carried onto your next Road Safety Management Plan.



Casualty Crashes by Nature

Casualty Crash Nature	2021 - 2025	2026 - 2030	Percentage Change (%)
Unknown	0	0	+/- 0%
Head On	0	0	+/- 0%
Hit Animal	0	0	+/- 0%
Hit Object	0	0	+/- 0%
Hit Pedestrian	0	0	+/- 0%
Non Collision	0	0	+/- 0%
Rear End	0	0	+/- 0%
Right Angle	0	0	+/- 0%
Right Turn Thru	0	0	+/- 0%
Sideswipe Opposite Dirn	0	0	+/- 0%
Sideswipe Same Dirn	0	0	+/- 0%
Total	0	0	+/- 0%

Results and Concluding Statement

At the end of the term of the plan present an outline of the overall results of the plan and provide a concluding statement, also provide details of any learnings from the plan to be carried forward to the next road safety management plan.