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Network Safety Analysis & Future of Collision Analysis

Contents

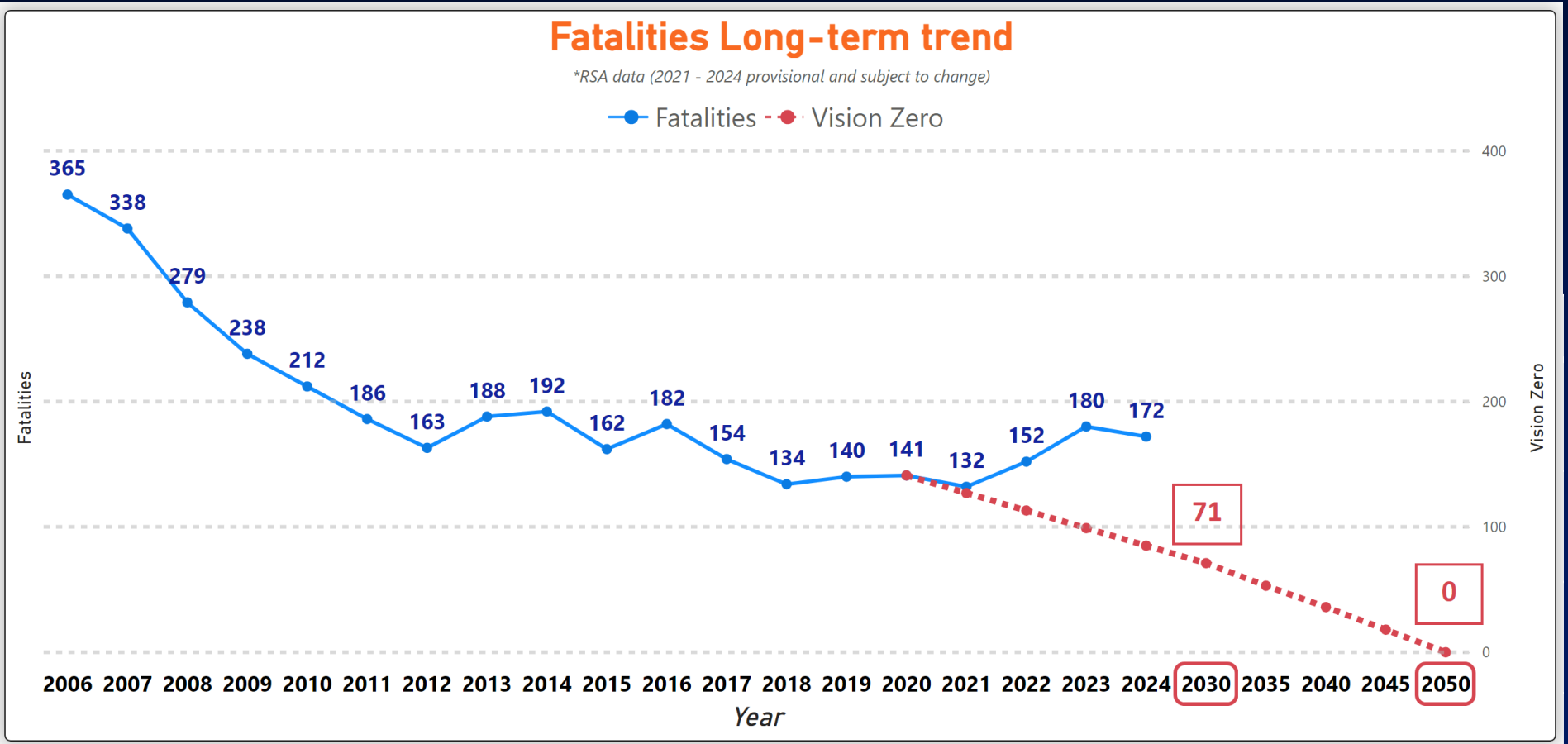
- What/Why
- Trends
- Common Issues
- Future Analysis

What is the NSA

- Spatial analysis of the Regional and Local Road network to identify the worst performing sections in terms of safety – Locations of Interest (Loi)
- Determine at each Loi site
  - What happened - desktop analysis
  - How did it happen – desktop analysis and site visit
  - How do we stop it from happening again – suitable engineering-based interventions

Why

- Imp
  - V



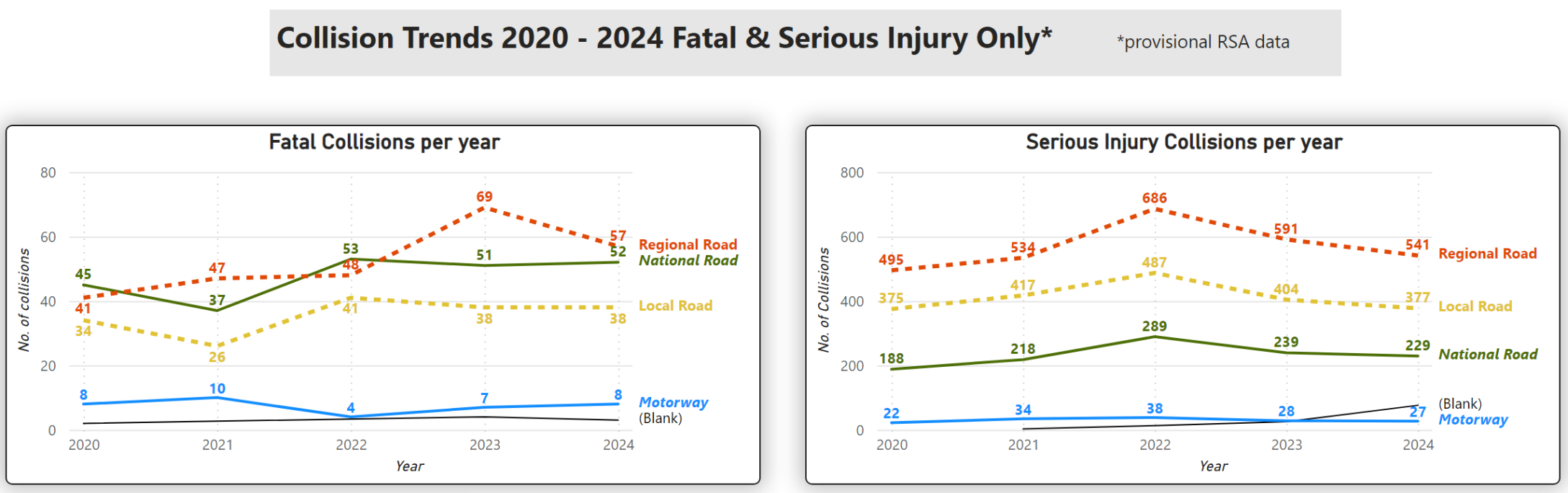
	approach
Saving lives is expensive	Cost effective solutions can have significant safety benefits

Why

- **Improve Road Safety**
  - Vision Zero & Safe Systems
  - Road Safety Strategy
  - Provision of unbiased, factually based data to improve road safety
  - Support the DoT to target investment on the RLR network

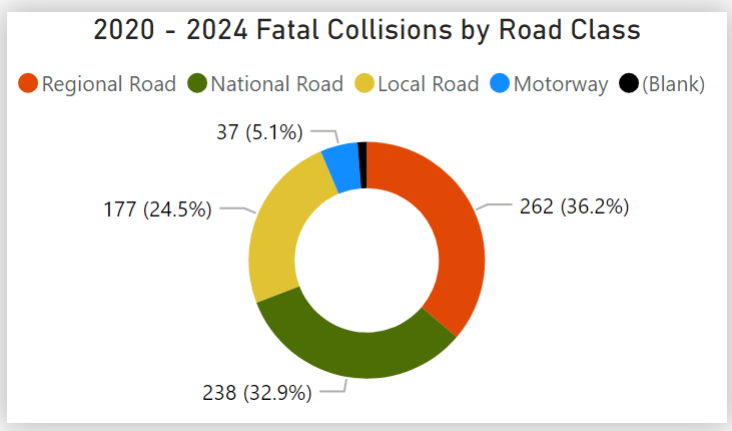
Trends

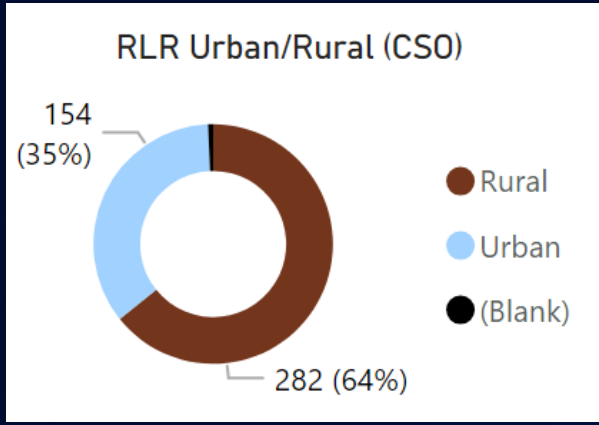
Trends



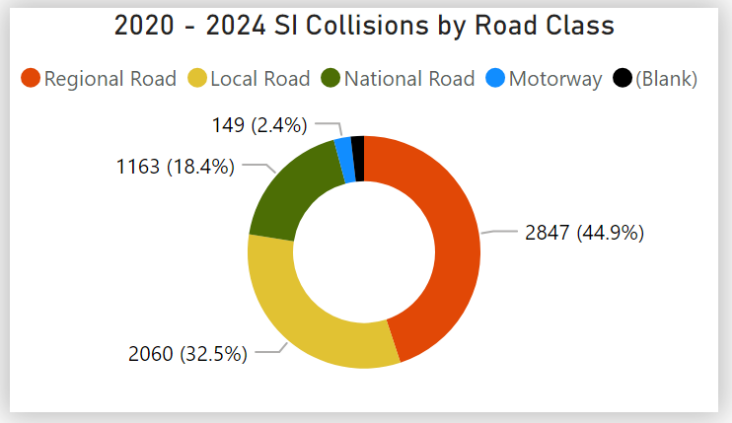
*Data is provisional and may be subject to change

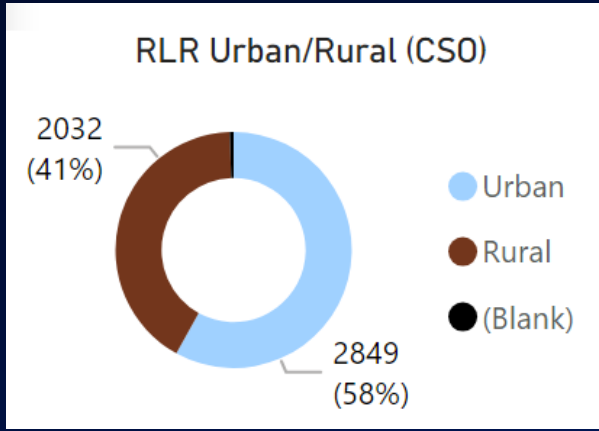
Trends – Collisions by road classification





- 60% of fatal injury collisions occurred on the RLR network





- 78% of serious injury collisions occurred on RLR network

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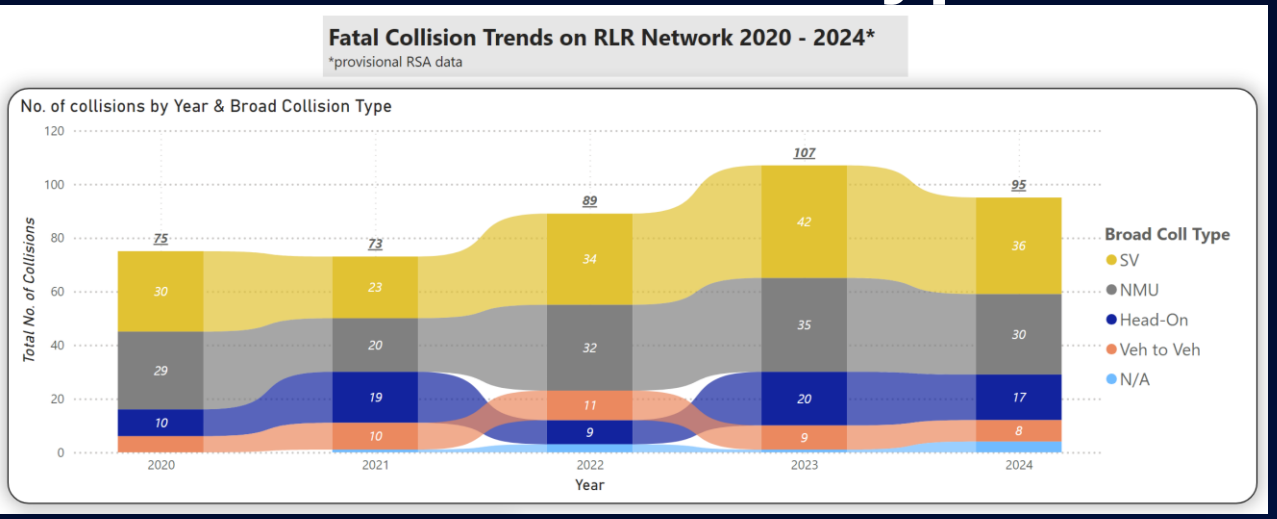
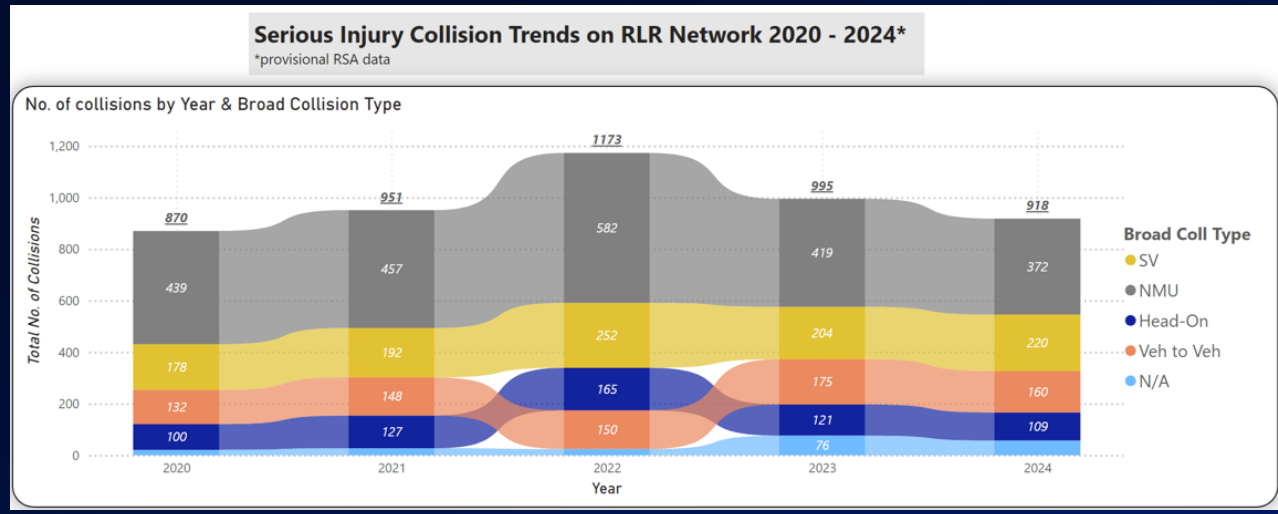
Trends - Collision Types





SVO – 38% of fatal collisions and 21% of serious injury collisions

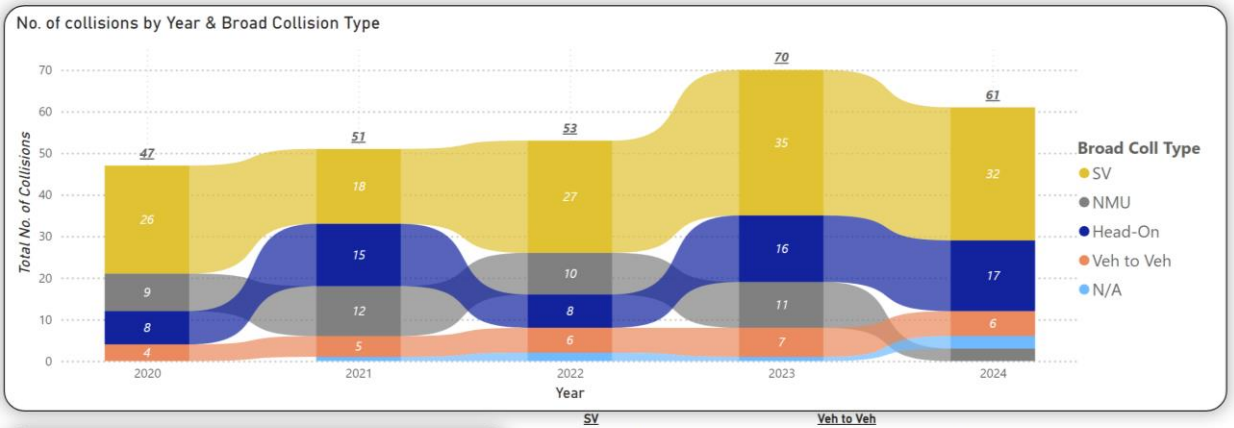
NMU – 33% of fatal collisions and 45% of serious injury collisions

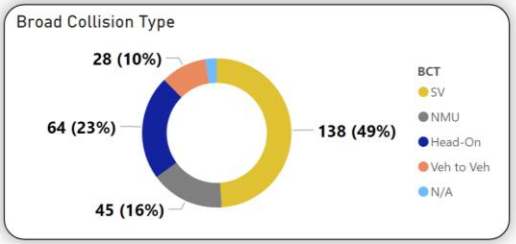
***Data is provisional and may be subject to change**

Trends – Rural Roads

Fatal Collision Trends on RLR Network 2020 - 2024*

*provisional RSA data





SV

% Fatal Coll	Primary Coll Type
40.6%	Road Edge - Ditch
25.0%	Tree
17.7%	Wall - Stone
8.3%	Wall - Brick
8.3%	Wall - Pillar of Wall

Veh to Veh

% Fatal Coll	Primary Coll Type
28.6%	Angle, Both Straight
25.0%	Rear End, Straight
21.4%	Side Swipe
17.9%	Angle, Right Turn
3.6%	Rear End, Left Turn
3.6%	Rear End, Right Turn

NMU

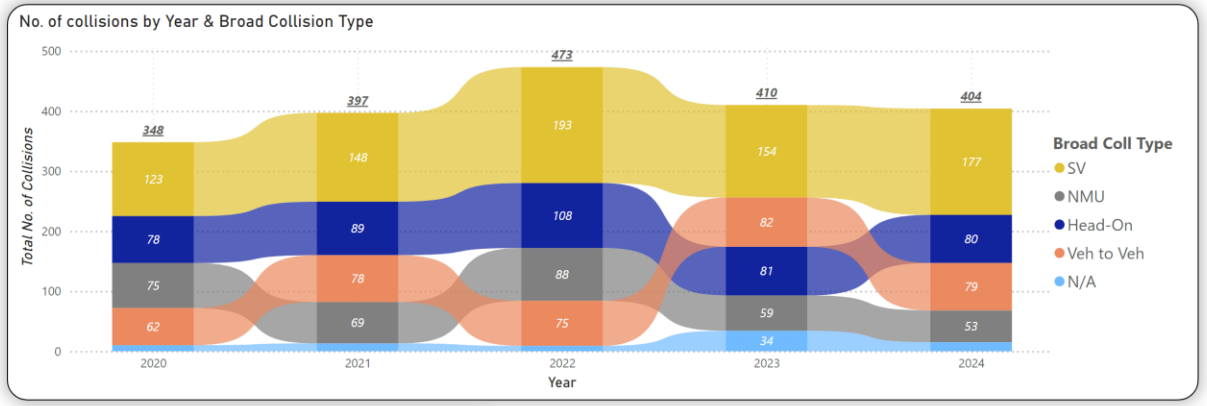
% Fatal Coll	Primary Coll Type
66.7%	Pedestrian
33.3%	Cyclist

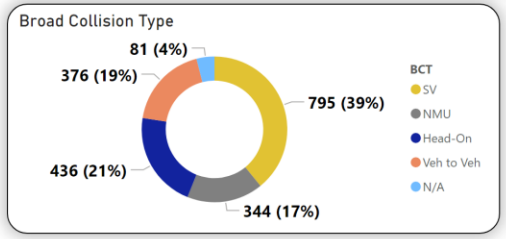
Head-on

% Fatal Coll	Primary Coll Type
95.3%	Head-On
4.7%	Head-On, Right Turn

Serious Injury Collision Trends on RLR Network 2020 - 2024*

*provisional RSA data





SV

% Serious Coll	Primary Coll Type
51.4%	Road Edge - Ditch
17.1%	Wall - Stone
16.0%	Tree
8.7%	Road Verge - Embankment
6.8%	Wall - Brick

Veh to Veh

% Serious Coll	Primary Coll Type
25.4%	Angle, Both Straight
25.4%	Side Swipe
24.8%	Angle, Right Turn
17.9%	Rear End, Straight
6.6%	Rear End, Right Turn

NMU

% Serious Coll	Primary Coll Type
61.3%	Cyclist
38.7%	Pedestrian

Head-on

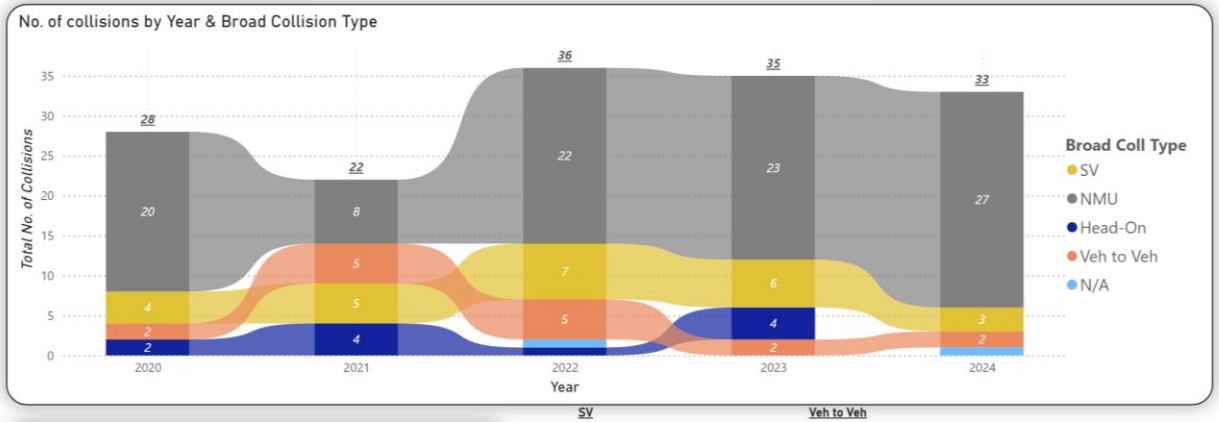
% Serious Coll	Primary Coll Type
89.9%	Head-On
10.1%	Head-On, Right Turn

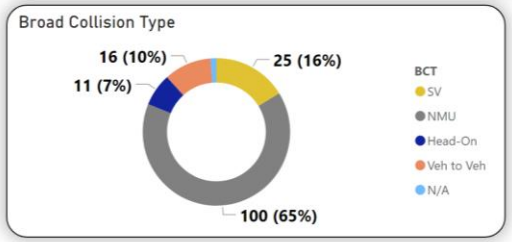
***Data is provisional and may be subject to change**

Trends - Urban Road

Fatal Collision Trends on RLR Network 2020 - 2024*

*provisional RSA data





SV

% Fatal Coll	Primary Coll Type
31.6%	Wall - Stone
15.8%	Pole/Post - Other
15.8%	Road Verge - Embankment
15.8%	Wall - Brick
10.5%	Barrier - Concrete
10.5%	Barrier - Steel

Veh to Veh

% Fatal Coll	Primary Coll Type
37.5%	Rear End, Straight
25.0%	Angle, Right Turn
12.5%	Rear End, Right Turn
12.5%	Side Swipe
6.3%	Angle, Both Straight
6.3%	Angle, Left Turn

NMU

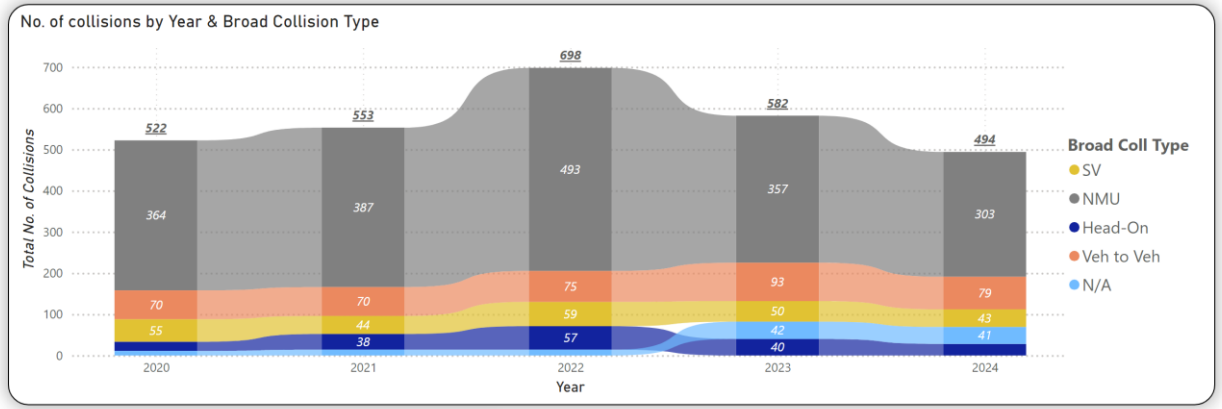
% Fatal Coll	Primary Coll Type
80.0%	Pedestrian
20.0%	Cyclist

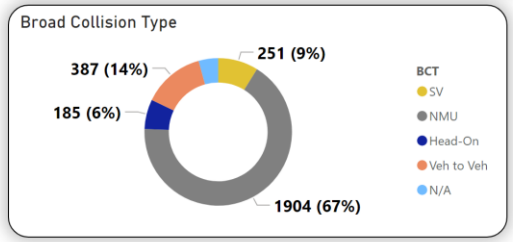
Head-on

% Fatal Coll	Primary Coll Type
72.7%	Head-On
27.3%	Head-On, Right Turn

Serious Injury Collision Trends on RLR Network 2020 - 2024*

*provisional RSA data





SV

% Serious Coll	Primary Coll Type
25.3%	Parked Vehicle
20.7%	Wall - Brick
20.0%	Pole/Post - Other
17.3%	Wall - Stone
16.7%	Tree

Veh to Veh

% Serious Coll	Primary Coll Type
31.1%	Angle, Right Turn
25.7%	Side Swipe
20.6%	Rear End, Straight
15.3%	Angle, Both Straight
7.3%	Angle, Left Turn

NMU

% Serious Coll	Primary Coll Type
57.9%	Pedestrian
42.1%	Cyclist

Head-on

% Serious Coll	Primary Coll Type
66.5%	Head-On
33.5%	Head-On, Right Turn

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How

How

- Round 3 NSA – 2 Phases
  - Phase I – Reactive approach – collision data used to identify Loi
  - 5 years of collision data (2020-2024)
    - Regional Road Network
      - Site visits at rural Loi and urban Loi under 5,000 population density
      - Report only for Regional Road urban Loi above 5,000 population density
    - Local Road Network
      - Site visit at rural Loi

How

- Phase II – limited collision dataset – no in-depth collision analysis
- NSA adapted - Proactive approach – Inspection style process

How

- Focus on
  - 5 injury collisions in 5 years
  - Locations with fatal and serious injury clusters
  - Collision types likely to result in fatal or serious injuries
  - Locations with NMU collision clusters
  - Injury cluster locations with supporting material damage
  - 218 Site Visits – Will be issued Q3 2025

Common Issues

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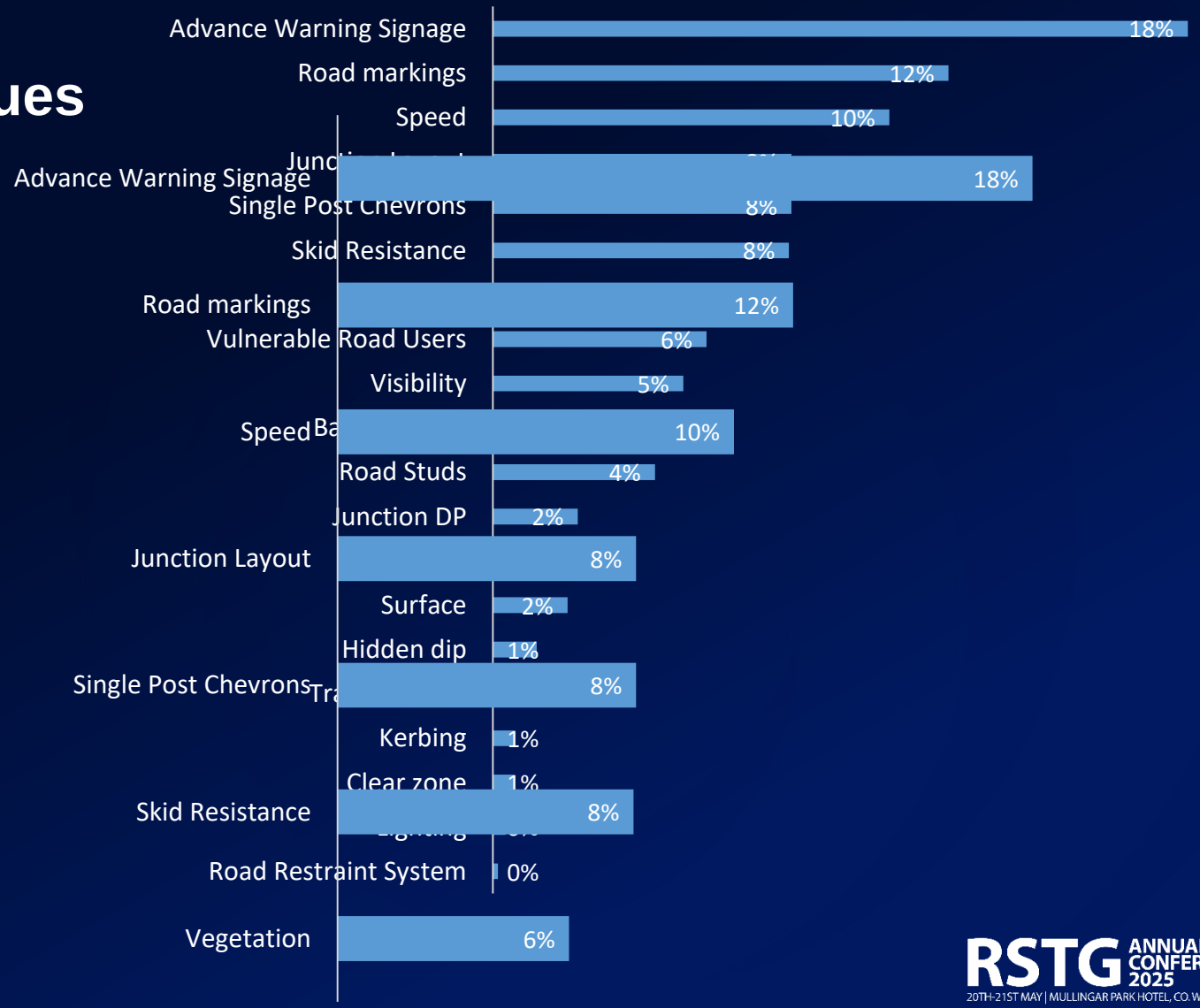
Common Engineering Related Issues

- **Round 1 & 2 Loi**



Common Issues - Signage

- Is the sig
- Sign loca
- Visibility
- Sight visi
- Proliferation of signage – information overload

Common Issues

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Problem
Vehicles failing to stop/yield at the junction
Poor AWS, obscured by vegetation
STOP signage difficult to see on approach

Solution
Advance warning STOP ,relocate AWS & improved line markings

LASNTG Local Authority Services National Training Group

An Roinn Iompair
Department of Transport

CCMA
Cumann Lucht Bainistiochta Contae agus Cathrach
County and City Management Association

Session 1: Network Safety Analysis & Future of Collision Analysis

Future Analysis

- Regional Road Network Ranking – AADT – collision rates
- NSA Review – review of Round 1a schemes that received funding – Q1 2026
- Trend Analysis – National & Local Authority Level
- Road Safety Standard details
- Provision of support to Local Authorities with safety funding & RSTWG

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THANK YOU

Join the Q&A session at Slido.com and enter 3873601 or via the QR Code.
Questions must include name and associated Local Authority to be considered by the panel.