

In-Depth Road Traffic Fatalities Report for the Years 2015-2020

co-authored by
Police Scotland and Transport Scotland



**POLICE
SCOTLAND**
Keeping people safe

Executive Summary

Introduction

1. Aim and Purpose

Since 2000, the number of people killed on Scotland's roads has decreased by 47% with 2020 having the lowest number of fatalities ever recorded. However, in 2022, there was a rise in recorded fatalities which follows on from the long-term downward trend and although the figures remain low, one fatality on our roads is simply one too many.

To continue to deliver a reduction in road casualties and gain an understanding of how fatal collisions are happening on Scotland's road network an in-depth analysis of all fatal road traffic collisions on Scotland's road network for the years 2015-2020 was conducted. Working in partnership, in the delivery of Scotland's Road Safety Framework 2030 (RSF2030) Police Scotland and Transport Scotland have established a road traffic fatality database, with an analyst from Police Scotland interrogating the data to create a detailed report.

The outcomes of the report provides insight into the causation of fatal collisions and has allowed for the identification of countermeasures and pro-active recommendations which if implemented, may have prevented or reduced the severity of these collisions and can be used in order to reduce the risk and harm of future collisions that have similar characteristics.



Figure 1: Safe System Wheel

The research supports RSF2030 which has a vision to have the best road safety performance in the world by 2030 and a compelling long-term goal for road safety where there are no deaths or serious injuries on Scotland's roads by 2050.

These outcomes align with the five pillars of the Safe System which puts people at its centre, and aims for a more forgiving road system that takes human vulnerability and fallibility into account; people are fragile and make mistakes that can lead to collisions. A Safe (road) System mitigates that problem with its five pillars which effectively act as layers of protection: safe road use; safe roads and

roadsides; safe vehicles; safe speeds; and better post-crash response; all working in harmony to prevent deaths and serious injuries

All road users are exposed to a variety of risks at all times. The alignment of one or more risks can result in a collision. It is therefore important to understand the nature of collision causation, as it may be any combination of factors that result in a collision and any combination of factors that result in a fatality. Changing the risk in any layer can mitigate the severity of the collision or prevent it from happening entirely.

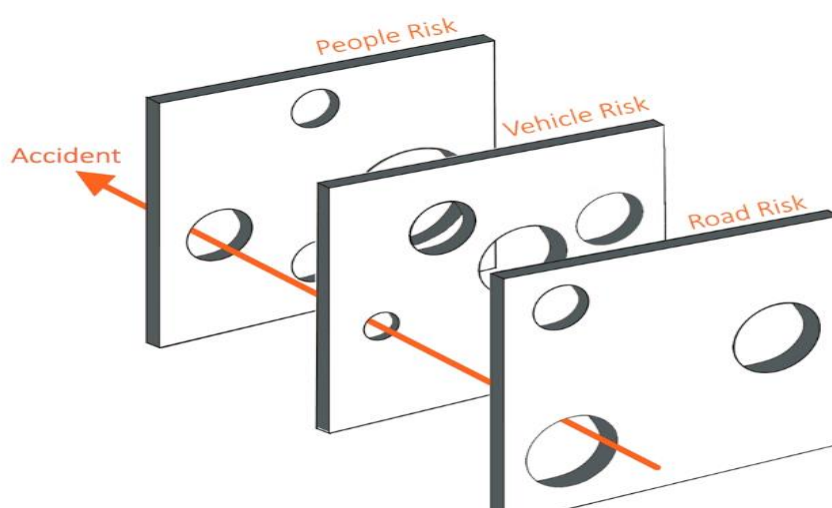


Figure 2: Swiss Cheese Model of Risk

In the course of analysis a number of at risk groups of road users were identified. In addition to vulnerable road users (motorcyclists, pedal cyclists and pedestrians), younger drivers, older drivers and foreign drivers were prominent.

Where key findings, countermeasures or recommendations are specific to these groups, this has been highlighted.

This executive summary provides an overview of the key findings, proposed recommendations and a brief overview of countermeasures identified through the analysis. For more detail, please see the full report.

2. Key Findings

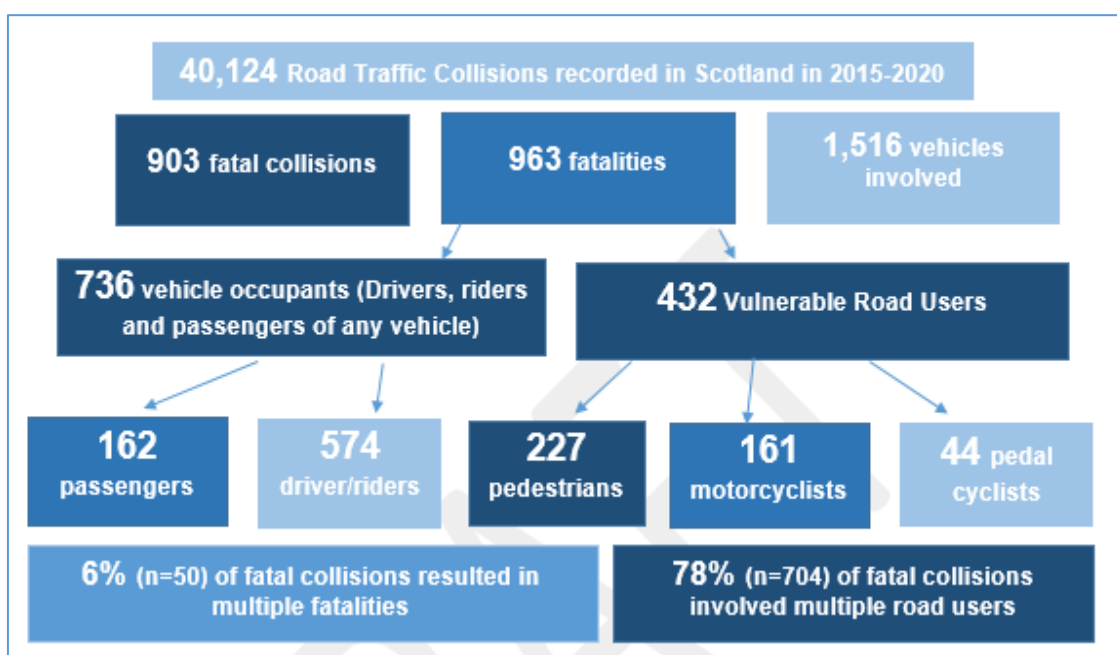


Figure 3 picture of key findings

The main contributory factors which influenced fatal collisions were people being careless, reckless or in a hurry, failing to look properly and losing control of their vehicle. Nonetheless, the analysis identified a combination of Road, Vehicle and People countermeasures (CM's) were required to mitigate the risk of the collision taking place, or reducing the severity of the collision.

2.1 Collision Avoidance:

Training to improve hazard perception and Advanced Emergency Braking Systems (AEBS) were identified to be the most significant countermeasures for collision avoidance.

2.2 Severity Reduction:

Seatbelt use and improved occupant/pedestrian secondary safety were found to be most effective in severity reduction.

2.3 Avoidance and Severity Reduction:

Reduction in speed limits was a countermeasure identified most frequently for both avoidance and severity reduction.

2.4 Social Deprivation:

Links between social deprivation and driving behaviour were identified, with those from more deprived areas more commonly linked to drink and drug driving, as well as risk taking behaviour such as speeding, aggressive driving, racing and using a vehicle in the course of crime.

This requires a wider public health approach to tackle the root causes of social deprivation and related inequalities.

Additionally, the lack of safe, sustainable and affordable public transport and the lack of adequate, high quality cycling infrastructure were also significant contributors to road safety. All of which require to be addressed to realistically achieve 2050 targets.

2.5 Previous Convictions:

A large number of drivers/riders at fault had previous convictions for driving related offences including dangerous driving, careless driving, drink driving and speeding. Some had multiple convictions prior to being involved in a fatal collision and a number went on to commit further offences following a fatal collision.

A wider review of penalties and criminal justice is required to ensure a robust preventative and enforcement strategy to address this behaviour.

2.6 Young Drivers:

A large number of young drivers were found to be at fault for the fatal collisions and were also more frequently killed as passengers driven by peers around the same age. They often displayed risky behaviour, travelling too fast, getting distracted, drink-driving and not wearing a seatbelt.

A wide ranging, multi-tiered approach is required to address this behaviour, from consideration of a Graduated Driver Licencing system to inclusion of young drivers who have been involved in collisions in a Young Drivers Working Group to identify the best solutions to tackle the issue.

2.7 Older Drivers:

Contributory factors were commonly identified relating to health and eyesight issues and delayed reaction times for older drivers.

A whole system approach is required to review processes around notification by family members, GPs and opticians of fitness to drive, mandatory cognitive assessments and use of assessment simulators.

The full report provides more detail on all fatal collision data, contributory factors and countermeasures and provides recommendations for police and partners to try to reduce risk and make Scotland's roads safer.

3. Safe System – Key Statistical Findings

Key statistical findings from the analysis are presented below and have been aligned to the Safe System Pillars.

Safe Road Use – Key Findings:

- Between 2015 and 2020, there were 903 fatal collisions resulting in 963 fatalities.
- 48% of fatalities were car occupants (n=460).
- 45% of fatalities were Vulnerable Road Users (VRUs). 227 were pedestrians, 161 motorcyclists and 44 pedal cyclists. Motorcyclist and pedal cyclist fatalities were over-represented when compared with their levels of road use.

3.1 Gender:

Males were killed at a significantly higher rate than females. 673 (70%) males were fatally injured compared with 290 females (30%).

Notable differences were highlighted between the sexes. Males were more likely to be killed as drivers/riders (n=461 of 574) and pedestrians (n=146 of 227), however more females were killed as passengers (n=96 of 162).

67% (n=799 of 1,190) of all male drivers/riders involved in fatal collisions were found to be at fault compared with 57% (n=175 of 305) females. They were also more likely than females to exhibit dangerous driving behaviours including speeding, aggressive driving and impairment by alcohol and/or drugs.

3.2 Pandemic:

The number of fatal collisions remained relatively steady from 2015-2019 with a notable decrease in 2020. This can largely be accounted for due to the Covid-19 pandemic which placed travel restrictions on the majority of the population.

3.3 Vehicle Occupants:

Of the 736 fatalities of vehicle occupants, 38% (n=278) were within a vehicle which left the carriageway and hit an object. The most common objects were trees (n=82) and wall or fence (n=75).

3.4 Location:

71% (n=642) of all collisions occurred in a rural environment.

The highest number of collisions occurred in the west of Scotland (38%, n=344)

The Local Authority Area with the highest number of collisions was Highland (11%, n=99) followed by Aberdeenshire (7%, n=64).

3.5 Collision Types:

The most common collision types were 'Cornering (left hand or right hand bend)' and 'Loss of control or off road (straight road)' accounting for 401 collisions (44%).

'Pedestrian – crossing road' was the third most common collision type (15%, n=132).

3.6 Time and Day of the Week:

The most frequent time for fatal collision occurrence was 4pm to 5pm. Thursday and Friday from 4pm to 5pm and Saturday from 11am to 12pm were the days and times when most fatal collisions occurred.

Collisions resulting in car occupant fatalities occurred across all days of the week with the most frequent days being Saturday (n=84) and Sunday (n=75).

The majority (92%, n=12 of 13) of Heavy Goods Vehicles (HGV) occupant fatal collisions occurred on a weekday.

3.7 Age:

Drivers/riders aged 46-55 (n=303, 20%) and 26-35 (n=286, 19%) were most frequently involved in fatal collisions.

3.8 Contributory Factors (CFs) – People:

Almost all collisions (901 of 903) featured contributory factors relating to people. 75% (n=680) collisions featured only contributory factors relating to people, highlighting the significant role of human error and behaviour.

The five most prevalent 'People' contributory factors – 'Careless, reckless or in a hurry'; 'Failed to look properly'; 'Loss of control'; 'Poor turn or manoeuvre' and 'Failed to judge others path/speed' – accounted for almost half of all 'People' factors. Distraction and speed related contributory factors were also common.

3.9 Seatbelt:

21% of fatalities in vehicles, where seatbelt use is required or recommended were not wearing a seatbelt (n=107 of 520). This was more common in younger age groups.

3.10 Alcohol or Drugs:

Impairment by alcohol or drugs was a factor in 14% (n=127) of collisions. Of these, 45 involved alcohol, 48 involved drugs and 34 involved both. Of the 79 drivers found to have been 'Impaired by alcohol', criminal history was available for 17 of them. There was evidence of previous convictions for drink-driving.¹

Drivers from more socially deprived areas were twice as likely to have been impaired by alcohol and/or drugs as drivers from less deprived areas (n=64 in the most deprived areas, versus 31 in the least deprived areas). They were also more likely to display risky behaviours including not wearing a seatbelt and driving at excessive speed.

¹ An individual's CHS record will only be retained for three years after death, therefore the records for many of those at fault who died in a collision will no longer be held. The quoted figures, therefore are likely to under-represent the true picture.

3.11 Fatigue and Illness:

Fatigue and illness or disability were more common amongst drivers with home postcodes in the least deprived areas.

Safe Vehicles – Key Findings:

'Vehicle' contributory factors related to both poor vehicle maintenance such as 'Illegal tyres' and vehicle design issues including 'Vehicle blind spot'. 98% (n=873 of 903) of collisions had countermeasures relating to 'Vehicle' highlighting the significant role vehicle safety, design and maintenance has to play in fatality reduction.²

3.12 Tyres:

'Illegal tyres' was the most common 'Vehicle' contributory factor (n=33 of 100) particularly in spring and summer (61%, n=20 of 33).

3.13 Blind Spot:

'Vehicle blind spot' was relevant to larger vehicles, primarily Heavy Goods Vehicles. All collisions involving an HGV blind spot resulted in a pedestrian or pedal cyclist fatality.

Nearly half (46%, n=6) of fatal collisions where an HGV blind spot was a recognised CF were in Aberdeen City and City of Edinburgh. Pedestrians and HGVs are likely to be in closer proximity in such built up, urban areas.

3.14 Technology:

Enhanced vehicular technology safety systems including AEBS and distraction monitoring were identified as potentially being highly effective in reducing pedal cyclist and pedestrian fatalities.

Other vehicle technology, such as Alco-lock devices, may also be advantageous.

3.15 Gender:

Females were more likely to die as a result of injuries to their lower body than males. This is largely attributable to vehicle design and safety testing which has historically been based on the 'average male'.

Safe Speeds – Key Findings:

There were 322 collisions where exceeding the speed limit or travelling too fast for conditions were identified as contributing factors.

3.16 Type of Road:

86% of these (n=277), took place on single carriageway roads.

² Under the EU's Vehicle General Safety Regulation, many of the technologies and safety systems identified as potential countermeasures are now mandatory on all new vehicles. The UK Government have not yet made a decision as to whether they will adopt the same standards for new vehicles manufactured in this country.

Almost two thirds (64%, n=205) of collisions occurred on roads with a 60 mph speed limit.

A reduction in the speed limit was proposed most frequently on the A82 and the A9, where clusters of collisions in close proximity were identified.

The roads most frequently identified for addition of speed cameras were the A9, A82, A92 and A93.

3.17 Month:

The most commonly recorded month was July accounting for 38 (12%) collisions involving excessive speed.

3.18 Young Drivers:

Factors pertaining to speed are noted to be prevalent amongst younger driver.

32% (n=68 of 212) of those assigned 'Exceeding speed limit' were aged 16-25.

Of these 65 were male.

29% (n=62 of 212) of those 'Travelling too fast for conditions' were aged 16-25.

Of these 51 were male.

Safe Roads and Roadsides – Key Findings:

66% (n=600 of 903) of fatal collisions occurred on A class roads. Fatal collisions that occurred on Motorways accounted for 4% (n=37).

3.19 Type of Road:

While A class roads account for both the highest proportions of road traffic volume and fatal collision occurrence, there is a stark difference in the levels between the two. Less than half of all vehicle kilometres travelled were on A class roads, but more than half of the fatal collisions occurred on these roads.

Several small clusters of collisions were identified, occurring on various stretches of the A82, the A915 and the A985.

The majority (57%, n=542 of 963) of fatalities occurred on 60 mph roads. 30 mph roads accounted for 20% (n=197).

3.20 Contributory Factors:

'Road' contributory factors included issues with road layout including restricted views and inadequate road markings. 45% (n=88 of 197) of 'Road' factors were assigned to collisions that occurred in the North of Scotland, largely attributable to the topography of many roads in this area.

3.21 Location:

Highland local authority area saw the most fatal collisions overall across these collision types. 19% (n=30 of 157) of all 'Cornering – left hand bend' collisions occurred in Highland. Again, this is attributable to the topography of many of the roads within this local authority and the large geographical area it covers.

3.22 Vulnerable Road Users:

84 Vulnerable Road User fatalities were identified where the addition of barrier may have been an effective countermeasure.

3.23 Pedal Cyclists:

In 36% (n=16 of 44) of collisions that resulted in a pedal cyclist fatality, addition of a cycle lane was identified as a suitable countermeasure. These cycle lanes are likely to be most effective on roads with higher posted speed limits.

Pedal cyclists were most frequently killed on 60mph roads (45%, n=20 of 44) where they share roads with other faster moving vehicles, followed by 30mph roads where 32% (n=14) of cyclists were fatally injured.

3.24 Foreign Drivers:

29% (n=6 of 21) of collisions involving a tourist driver who was inexperienced with driving on the left occurred on the A82. 19% (n=4) of these occurred on an approximately 40 mile stretch of the road between Arden, Alexandria and Bridge of Orchy.

3.25 Pedestrians:

Collisions resulting in a pedestrian fatality occurred more frequently at lower speeds with 53% (n=120 of 227) occurring on 30mph roads and 7% (n=17) on 20mph roads. A further 20% (n=45) occurred on roads with 60mph.

4. Countermeasures

Countermeasures (CMs) are pivotal in the prevention of fatal collisions.

For the purposes of this research, countermeasures were identified that if implemented at any stage of the collision (pre, post or during) were assessed to have an impact on the outcome: either stopping the collision from occurring at all or reducing the severity of injuries sustained.

Almost all collisions (98%) had countermeasures relating to Safer Vehicles (n=886) and Safer Road Use (n=881).

This supports the need for vehicles on Scotland's roads to be as safe as possible in terms of maintenance, design, technology and safety systems. There is also a need to ensure that drivers and road users are able to utilise the road safely, efficiently and sustainably.

The most commonly assigned countermeasures include:

- 'Training to improve hazard perception skill' (People-related CM)
- 'Reduce speed limit' (Road-related CM)
- 'Advanced Emergency Braking System' (Vehicle-related CM)
- Highlighting the variety of measures which could influence the outcome of a collision.

Detailed analysis of countermeasures relating to collision avoidance and severity reduction is provided in the full report alongside focussed analysis of countermeasures assigned to vulnerable road users.

5. Recommendations

The following recommendations have been identified through analysis and are presented for consideration

General - Education and Awareness

5.1 Encourage bus passengers (public and private) to wear seatbelts where they are fitted:

A campaign could be developed in collaboration with major bus providers operating both public and private hire vehicles in the East and West of Scotland, to encourage passengers to wear seatbelts where they are fitted.

Existing national campaigns around seatbelt use, such as those run by Road Safety Scotland, should be cognisant of including messaging aimed at bus passengers

5.2 Raise awareness of the dangers of mobile phone use while behind the wheel: Continue campaigns such as Road Safety Scotland's 'Drive like Gran's in the car' to target young males

5.3 Provide access to relevant materials and support for drink and/or drugs misuse when taken into custody:

Drivers who are found to be under the influence of drink and/or drugs and taken into custody should be signposted to relevant materials and support for substance misuse issues.

Custody suites should ensure they have relevant materials available with information regarding appropriate local and national Third Sector Organisations.

Younger Drivers

5.4 Raise awareness of the importance of wearing a seatbelt to younger age groups and in areas of deprivation:

Campaigns should continue to be developed by Road Safety Scotland, Police Scotland, Transport Scotland and similar organisations which highlight the importance of wearing a seatbelt and the financial penalties incurred by those who don't.

To reach this audience, the campaigns should be targeted both in person and virtually in locations such as gyms/leisure centres, fast food chains, TikTok, YouTube and using other media appropriate to the audience.

Older Drivers

5.5 Develop campaigns regarding eyesight and fitness to drive:

Campaigns should be developed to target older drivers' eyesight. This will involve utilising different communication methods from other national campaigns as older

people are less likely to be utilising the internet and social media. This may include adverts on TV or in print, in GP and optician surgeries, supermarkets etc.

Work in partnership with pharmacies should be considered, to develop a package which highlights important messages about fitness to drive.

5.6 Develop a campaign on when is the right time to give up driving:

A campaign could be developed in conjunction with organisations such as Age Scotland highlighting the signs to look for in older drivers regarding their fitness to drive.

A particular focus of any campaign should be on signposting resources and organisations that can be utilised for assistance

Police Scotland and Transport Scotland should work with DriveAbility Scotland to highlight the available services and encourage older drivers to self-refer.

Motorcyclists

5.7 Develop or continue to run campaigns on motorcycle safety:

Targeted campaigns should continue to be cognisant of seasonal differences for motorcyclist fatalities.

Police Scotland's Motorcycle Safety Campaign in 2022 ran from April to September, the findings of this report support this time period for future similar campaigns.

5.8 Consider young male riders when developing any messaging and campaigns for motorcyclists:

Campaigns highlighting the importance of motorcycle helmet use could be developed and targeted at young male riders.

5.9 Consider ways to reduce or manage speed for motorcyclists:

Improved training and education are required for motorcycle riders in addition to speed management measures, including speed limit reductions and the addition of Intelligent Speed Assistance systems, to address riding style and behaviour.

Pedal Cyclists

5.10 Continue to roll out the driver awareness training by Cycling Scotland, consider rolling this out further or developing further initiatives:

National Highways recently launched a new safety campaign aimed at educating drivers to 'know the zones', highlighting blind spots where HGV drivers have limited visibility. A similar campaign could be developed in conjunction with bodies such as the Road Haulage Association aimed at educating pedestrians and cyclists about blind spots and ensuring they remain visible to HGV drivers.

While a national campaign would be beneficial (particularly in busy, densely-populated areas), given a large percentage of collisions with these characteristics

occurred in Aberdeen and Edinburgh, consideration should be given to targeted campaigns in these areas

5.11 Consider cycle helmet use:

Police Scotland, Transport Scotland and relevant partners such as Cycling Scotland should encourage cyclists to consider wearing a helmet in line with the Highway Code recommendation.

Any communications should consider targeting child cyclists and older cyclists.

Should The Child Safety (Cycle Helmets) Bill 2020 be passed, appropriate communications and campaigns should be developed to raise awareness.

Dedicated enforcement campaigns should run alongside any awareness campaigns

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Foreign Drivers

5.12 Develop foreign driver materials and distribute at relevant locations:

Posters/display materials could be developed and displayed in various establishments on the A82 such as the Green Welly Stop.

Materials should reinforce the requirement to drive on the left and provide an overview of common road layouts and driving practices including giving way when joining traffic and the direction of travel of other vehicles

Transport Scotland and other relevant partners could work in partnership with major car rental companies to develop materials that can be disseminated to foreign drivers on obtaining a hire vehicle.

Hire companies should also have such materials available on their websites for foreign drivers when booking online.

Road Safety Scotland has a wealth of materials available in various languages that could be utilised.

Transport Scotland could work in partnership with major UK airports and ferry ports to display materials aimed at foreign drivers.

Materials should reinforce the requirement to drive on the left and provide an overview of common road layouts and driving practices, including giving way when joining traffic, and the direction of travel of other vehicles.

Materials should also be available on ferries servicing many of Scotland's islands which are popular with tourists, including Caledonian MacBrayne and Northlink Ferries.

5.13 Use technology to inform:

Road Safety Scotland has developed a video for foreign drivers prior to them travelling to the UK. The dissemination of this video should be supported by Transport Scotland and Police Scotland and further utilised where appropriate.

Pedestrians

5.14 Develop material targeting socially deprived areas aimed at pedestrians: Campaigns and safety interventions for pedestrians, particularly those aimed at children should be targeted towards more socially deprived areas.

6. Potential Actions

6.1 Vehicle Safety, Drink and Drug Testing:

Increased policing patrols by Police Scotland officers to undertake roadside stops, breath tests and drug wipes.

6.2 Seatbelt Safety:

Enforcement and increased policing patrols by Police Scotland to both deter drivers and passengers from not wearing a seatbelt and to stop and issue fines to those not adhering to the law.

6.3 Mobile Phone and Distraction:

Continued enforcement by Police Scotland for drivers seen to be utilising a mobile phone at the wheel alongside ongoing public education around the relevant legislation and associated dangers.

6.4 Eyesight / License Removal:

Ensure that Cassie's Law is referenced at Roads Policing officer training at the Scottish Police College.

A briefing should be prepared for Police Scotland's intranet highlighting Cassie's Law and the background to its implementation, highlighting the available legislation and associated processes to all officers across the force.

6.5 Mental Health:

Police Scotland should continue to refer cases involving possible mental health aspects to Partnerships, Prevention and Community Wellbeing (PPCW). This will allow for a multi-agency review of these collisions by a group of partners to identify various approaches to be considered and ultimately implement better practices for moving forward.

6.6 Driving Assessments:

Police Scotland should consider the development of a pilot project where suitable drivers are directly referred for DriveAbility Scotland driving assessments.

Younger Drivers

6.7 Campaign - Drink and Drug Driving – Younger Drivers:

Consideration should be given to a drink and drug driving campaign aimed at younger drivers. This campaign should highlight both the dangers of the behaviour and the associated enforcement. Policing presence from both divisional and Roads Policing should be focused at the weekend during the hours of 10pm and 6am.

6.8 Focus Group – Young Drivers:

Police Scotland, Transport Scotland and appropriate partners should establish a 'Young Drivers Working Group' to ensure collaborative working to target and effectively prevent collisions amongst this group of drivers.

6.9 In-Car Technology:

Telematics or black box insurance for younger drivers is widely available and should be encouraged. Insurance companies should continue to advertise and incentivise their use, offering reduced insurance premiums for safer driving.

Motorcyclists

6.10 Community Engagement – Safety Initiatives:

Police Scotland should collaborate with motorcycle clubs and venues such as Knockhill Racing Circuit to develop roadshows and/or drop-in points where motorcycle helmets can be checked by a knowledgeable expert, ensuring they are correctly fitted and that riders are aware how to secure them correctly.

Foreign Drivers

6.11 Road Safety Messaging – Foreign Drivers:

Liaison with ferry ports and airports in Germany and France to develop and display materials aimed at tourists travelling to Scotland with relevant road safety messaging.

Vehicle familiarisation inputs should be available for all foreign drivers obtaining hire vehicles to ensure they are accustomed to left-hand drive and all vehicle controls. These should be facilitated by car hire companies.

7. Funding / Grant Projects

Campaigns

7.1 Drink and Drug Driving – Initiatives:

The Scottish Government should consider funding for the development of awareness campaigns that involve the distribution of free portable breathalysers for drivers. This could be developed in conjunction with local licensing authorities and night-time economy establishments.

Pedal Cyclists

7.2 Safety Helmets – Initiative:

The Scottish Government should consider the development of a scheme in partnership with major retailers offering discounts on safety helmets.

8. Legislation

General

8.1 Education:

Road Safety education could be included in the Curriculum for Excellence to ensure that high quality road safety information is shared at the earliest stages

8.2 Fitness to Drive:

Police Scotland, DVLA and relevant health professionals should discuss and evaluate the processes currently in place regarding licence revoking and subsequent enforcement; D751 form processing and DVLA medical assessments to ensure they are all fit for purpose

The introduction of mandatory reporting requirements for relevant medical professionals should be considered. Further research and discussions required with bodies including the DVLA, Royal College of General Practitioners and the General Medical Council around the benefits and challenges.

8.3 Seatbelts – Penalties:

Not wearing a seatbelt should be made an endorsable offence and the current financial penalties should be increased. This may act as a further deterrent, particularly for younger drivers who will lose their licence if they reach six or more penalty points within two years of passing their test.

8.4 Driving Standards:

Enhanced hazard perception training for drivers, directed particularly at the risk posed to Vulnerable Road Users (VRUs), should be incorporated into any discussions around altering and improving driver training standards.

Younger Drivers

8.5 Driving Offences – Young Drivers:

Further engagement is required with young drivers to identify more effective ways to engage with this cohort and assist in developing effective preventative measures. When a young driver is convicted of a road traffic offence, a sentencing condition could be participation in a national working group where they are able to share thoughts and experiences. Discussion will be required with COPFS.

8.6 Restrictions – Young Drivers:

In light of the number of younger passenger fatalities in collisions involving younger drivers, consideration should be given to a Graduated Driver Licensing system that could place restrictions on driving times/number of passengers/zero tolerance approach to alcohol for new drivers.

Older Drivers

8.7 Fit to Drive Assessment – Wider social Consideration for Older Road Users:

The introduction of a form of cognitive assessment when licence renewal is required at 70 (and at agreed intervals thereafter) should be considered. Further research and review will be required. However, it should be noted such an assessment would undoubtedly lead to a reduction in older drivers and, therefore, lead to an increase in older pedestrians, cyclists and public transport users. It is imperative, therefore, that appropriate measures be put in place to ensure fatalities amongst these groups do not increase and that suitable, fit-for-purpose public transport infrastructure is available.

8.8 Eyesight Requirements – Older Road Users:

The introduction of mandatory reporting requirements for relevant eyesight professionals should be considered. Further research and discussions required with bodies including the DVLA, Royal College of Ophthalmologists and College of Optometrists around the benefits and challenges.

The introduction of mandatory eyesight tests for older drivers should be considered.

The processes and forms currently used for Group 2 licence renewals could be utilised and adapted to develop similar robust practices for older drivers.

Motorcyclists

8.9 Rider Standards – Motorcyclists:

Working in conjunction with the Driver and Vehicle Standard Agency and DVLA, the potential impact of the introduction of a minimum period of learning and a requirement to demonstrate experience in different driving conditions via log books for motorcyclists should be further researched and reviewed

9. Safe Vehicles

General - Education and Awareness

9.1 Driving Conditions – Winter / Summer Campaign:

Police Scotland should continue 'Get Ready for Winter' campaigns and messaging to encourage drivers to ensure their vehicles are roadworthy and prepared for Winter driving conditions. However, consideration should be given to developing a similar national summer tyre safety campaign.

9.2 Enhanced Campaign - Car Seat:

An enhanced campaign should be developed between Police Scotland, Transport Scotland and Good Egg Safety highlighting the importance of an age and size appropriate car seat that is properly-fitted as well as the benefits of rear-facing for younger children. Consider an enforcement period by Police Scotland to run alongside the campaign with increased roadside stops to check car seats.

9.3 Car Seat:

Collaborative working between Transport Scotland, Police Scotland and Good Egg Safety to develop roadshows or drop-in points that parents and care givers can attend to ensure that they have an appropriate child restraint and to assist them with fitting.

10 Action

General

10.1 Campaign – Tyre Safety – Summer:

Increased policing patrols and roadside stops by Police Scotland Roads Policing officers in North East Division in conjunction with a summer tyre safety campaign with a particular focus on Aberdeenshire and Moray. Benefits may also be seen from a national campaign

10.2 Tyre Safety:

Increased roadside stops by Police Scotland Roads Policing officers to check tyre conditions

10.3 Driving for Work:

Membership of the Scottish Occupational Road Safety Alliance (ScORSA) should be actively encouraged and promoted. Companies and employers who have responsibility for employees who drive as a part of their role must be reminded of their legal duty to ensure the safety of their employees. This includes ensuring vehicles are safe and roadworthy and employees are fit to drive.

11. Funding / Grant Projects

11.1 Car Seat

The Scottish Government should consider the development of a grant project towards the cost of car seats. They are expensive items and the cost may mean some care-givers compromise safety as a result. This could be done in collaboration with major retailers.

11.2 Car Seat – Awareness

Transport Scotland should work in partnership with retailers to raise awareness of already available free in-store car seat fitting and safety demo. This could involve the development of a financial incentive programme offering discounts or monetary vouchers which can be redeemed towards car seats when they participate in a fitting and safety demonstration.

12. Legislation

General

12.1 Equality - In car Safety

The UK and Scottish Governments should remain aware of the developments and impacts of the ongoing safety testing around the use of a female crash test dummy. If requirements are introduced into EU legislation to use such a seat evaluation tool, the UK Government should also introduce this to ensure optimum safety of UK manufactured vehicles.

12.2 Vehicle Technology

The UK Government should adopt the vehicle safety provisions within the EU's Vehicle General Safety Regulation which includes AEBS, Intelligent Speed Assist (ISA) and distraction monitoring and alert systems. This will ensure all new vehicles manufactured in the UK meet maximum safety standards and ultimately assist in preventing a potentially large number of road deaths.

12.3 Older Vehicles

The Scottish Government should consider the development of a pilot scheme similar to the Mobility and Scrappage Fund with a road safety focus on removing older and potentially less-safe vehicles from the roads.

12.4 Driving Standards

Inclusion of tyre and vehicle maintenance training as mandatory for learner drivers should be considered. An understanding of the importance of ensuring a vehicle is roadworthy alongside practical training on practices such as checking and altering tyre pressure may have a positive impact. This could also form part of a theoretical and practical driving test.

12.5 In-vehicle Technology

Consideration should be given to mandatory installation of Alco-lock devices in vehicles of younger drivers. This could be established through requirements from insurance companies.

13 Safe Speeds

Education and Awareness – General

13.1 Speeding and Dangerous Driving Campaign:

Campaigns highlighting the dangers of speeding and other risky driving behaviours should be targeted in areas frequented by young males – both physically and virtually. This could include sporting events, fast food chains, YouTube and TikTok.

13.2 Speeding – Offence Initiative:

Development of a National Speed Awareness Course and referral programme which drivers who have been caught speeding must attend. Consideration should be given as to whether this would be offered as an alternative to prosecution or as a mandatory additional requirement.

14. Legislation

14.1 Speeding – Penalties:

Consideration should be given to increasing the penalties for speeding offences (heavier fines and increased points) and increasing the time points remain on a driver's licence.

14.2 Speeding / Dangerous Driving – Penalties:

Consider increasing penalties or bans for repeat offenders of speeding/careless driving/dangerous driving, such as a graduated endorsement system with increased points for each offence.

15. Safe Roads and Roadsides

Education and Awareness - Foreign Drivers

15.1 Campaign / Material – Distraction:

Materials/advertisements should be developed that remind tourists to avoid becoming distracted by scenery. These could be situated within service stations on main routes utilised by tourists including the A82, A9 and the North Coast 500 route.

15.2 General - Signage – Vulnerable Road User (VRU):

A review of signage on the A82 at Great Western Road should be conducted to ensure adequate signage is present relating to the presence of VRUs.

15.3 Collaborative Approach to Roadside Safety:

Police Scotland Roads Policing and Transport Scotland should liaise with Police Scotland's Counter Terrorism Security Advisor Team who carry out site visits to assess the requirement and feasibility of street furniture, bollards etc. to mitigate terrorist attack opportunities such as preventing a vehicle from mounting the pavement in a busy pedestrian area.

Collaborative working may identify common areas of interest, resulting in cost saving and avoiding duplication of efforts.

Pedal Cyclists

15.4 Infrastructure – Cycling:

Transport Scotland and Police Scotland should work in partnership with organisations such as Cycling Scotland and Sustrans to continue to develop and improve cycling infrastructure on Scotland's roads.

Foreign Drivers

15.5 Signage:

The installation of road signs in non-British languages including Polish should be considered.

A review of the signage on the A82 for foreign drivers/riders should be undertaken to ensure it is sufficient. Regular usage should be made of matrix signs to display messages reminding drivers to drive on the left. Consideration could be given to displaying this in different languages, particularly German and French.

16. Post Crash Response

General

16.1 Data – Response times:

Consult with partners (Public Health Scotland, Scottish Ambulance Service etc.) to identify suitable datasets for analysis relating to post-crash response.

17. Further Analysis

Fatality Report

17.1 Data Maintenance

Further analysis should be conducted on the available data for fatal collisions in 2021 and 2022 when traffic volumes were returning to more in keeping with pre-pandemic levels. This will further enhance the available picture and provide more up-to-date analysis.

17.2 Thematic Analysis

Further in-depth analysis should be undertaken on the currently available data set to identify trends and subsequent recommendations for pedestrians, motorcyclists, pedal cyclists and child fatalities.

17.3 Geographic Analysis

Further analysis should be undertaken to identify more specific areas of deprivation and affluence where certain contributory factors are more prevalent. This will allow more specific targeting.

17.4 Hot Spot Analysis

Further in-depth analysis should be conducted on fatal and serious collisions on the A82 at Great Western Road. Further risk assessment can then be conducted based on these findings

Additional Analysis

17.5 In-Depth Analysis

Further analysis should be undertaken on those involved in a fatal collision who were injured but not fatally. This may provide an insight into why some casualties sustain fatal injuries when others do not e.g. age factors, position within vehicle. If this data is not currently available, it is recommended that processes are developed to capture it.

The total number of occupants in vehicles involved in fatal collisions should be recorded at the scene. At present, only the number of casualties is recorded as per STATS19 form. This would allow further analysis on those who are involved in a fatal accident but are uninjured. This may provide an insight into why some casualties sustain fatal injuries when others do not e.g. age factors, position within vehicle.

Further analysis should be conducted on the types of injuries sustained in serious injury collisions. This would enhance the body of evidence available on sex-related differences in injury type and inform research around inequalities in vehicle safety and design.

17.6 Evaluation of Previous Campaign – Eyesight

Police Scotland undertook a National Driver Eyesight Campaign from 20th February to 12th March 2023 to raise awareness through education and enforcement campaigns highlighting the risks associated with defective vision. The results of this campaign should be analysed to enhance the available information around older drivers and defective eyesight.

17.7 Thematic Analysis – Cyclists:

Further analysis should be undertaken to include the locations of serious and slight collisions involving pedal cyclists. This will help to further identify priority locations where the addition of a cycle lane may be most beneficial and assist with informing the scoring criteria required for infrastructure funding.

17.8 Reduction of Speed:

Further analysis and research should be conducted on the stretches of road identified in this report for a potential reduction in the speed limit.

17.9 Prevention – Safety Cameras:

Further exploration of identified sites in this report for the potential addition of a speed camera should be undertaken to establish if they would reach the minimum site selection requirements as per the Scottish Safety Camera Programme Handbook. Any sites identified as potentially suitable by demonstrating a collision and speed history should be assessed and prioritised. Consideration will be required as to whether a fixed, mobile or average speed camera system would be most appropriate. This should include collision data for 2021 and 2022 prior to any decision making.

17.10 Engineering – Barriers:

Further analysis and research should be undertaken on the stretches of road identified in this report for the addition of a barrier. Other alternatives should also be considered if barrier implementation is unsuitable, including the removal of trees or a change in road layout.

17.11 Increase Minimum Driving Age:

The potential impact of increasing the minimum driving age should be further researched. This report supports previous findings that younger drivers are disproportionately at fault for fatal collisions and are more likely to display risky driving behaviours. Therefore, an increase in the minimum driving age, until cognitive maturity may have improved, could have a positive impact on fatality numbers.

17.12 Minimum Driving Period:

The potential impact of the introduction of minimum driver training hours with a licensed instructor should be further researched in conjunction with bodies such as The Driver and Vehicle Standards Agency, the DVLA and The Driving Instructors Association.



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