

Isle of Man
Government

Reiltys Ellan Vannin



ROAD SAFETY STRATEGY 2019-2029

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FOREWORD

Whenever I talk to members of the public, one of the most emotive issues that crops up is that of road safety. People often hold strong views about how our roads are used, how safe they are (especially for cyclists and pedestrians) and how we could do more to reduce the harm caused by serious collisions. I am therefore pleased to be able to bring forward the first ever comprehensive Road Safety Strategy for the Isle of Man.

Our Strategy is ambitious and wide-ranging. It is a true collaboration between Departments and I am grateful to the hard work of Public Servants from across Government who have brought these plans together. The Strategy is rigorous and is based upon the Safe System Approach, which is widely accepted around the world as offering the best, structured approach to making roads safer. I fully endorse the ambitious targets that this Strategy sets for reducing casualties and I give my unequivocal support to what it sets out to achieve.

One of the most important aspects of the Strategy is that it is informed by data. This allows us to better understand the implications of our policy decisions. We all have views about road safety, but for the first time comprehensive data collection and analysis has allowed us to understand exactly what is happening on our roads and why. Some of the issues are perhaps obvious: for example, many collisions coincide with motorcycle racing events, but the Strategy sets out clear ways for us to make our roads safer for everyone.

Some aspects of the Strategy will require new and challenging policy decisions, some of which may have far-reaching implications. However, I am encouraged by the support that members of Tynwald have offered during the writing of the Strategy and I look forward to this continuing as the Strategy is implemented. It is only by working together that we can make our roads safer for everyone.

**Hon William Malarkey MHK
Minister for Home Affairs**

December 2018

1. EXECUTIVE SUMMARY

This Strategy has been developed by the Road Safety Partnership. The Partnership is a cross Government group consisting of members from the Isle of Man Constabulary, the Fire & Rescue Service and Ambulance Service, the Departments of Infrastructure, Health & Social Care and Education Sport & Culture. The Partnership works together to reduce the risk of harm for everyone who uses our Island's roads.

The Vision for the Strategy is:

A future where no-one is killed or sustains serious/life changing injuries on our roads

We will work towards this vision using the **Safe System Approach**. This is an internationally accepted approach to road safety which takes into account all forms of road users. It recognises that people will always make mistakes and there will always be road traffic collisions, but if we design our 'system' correctly, then there will be fewer deaths and serious injuries from road traffic collisions over the longer term. The 'system' includes legislation, safety standards, education, enforcement and the design of our roads.

The overall aims of the Strategy are:-

- To reduce the numbers of road traffic collisions resulting in deaths and/or serious/life-changing injuries;
- To protect all vulnerable road users including cyclists, motorcyclists, pedestrians, horse riders and groups vulnerable by age or disability;
- Reduce inappropriate road-based anti-social behaviour including speeding, drink and drug driving, careless and dangerous driving, seatbelts and mobile phone use (the 'fatal four');
- To address high fatal and seriously injured casualty levels during motorcycle festival times;
- Develop a culture of respect for all road users by all road users;
- Encourage an understanding that road safety is everyone's responsibility;
- To improve our understanding of collisions on the Isle of Man to better inform this Strategy and road safety activity;
- To improve collation and analysis of data that better informs road safety activity;
- To ensure funding is targeted to support this Strategy and our ambitious Vision.

The Strategy will focus on four main areas:-

Safe Roads

Within with Safe System Approach, roads will be designed to reduce the risk of collisions occurring and the severity of injuries if a collision does occur. Safety features can be **engineered** into the road design from the outset, or when dealing with a historical road network, improvements can be made through engineering remedial measures, through the road maintenance programme and the planning process.

Safe Vehicles

As part of a Safe System Approach, general, government and commercial road users will be encouraged to choose the safest vehicles and ensure they are maintained to the highest standards.

Safe Speeds

Speed limits in a Safe System Approach are based on aiding collision avoidance and taking into account a human body's limit for physical trauma. As part of this Strategy we will use data from road traffic collisions to ensure speed limits are appropriate to individual sections of roads. **Education** of road users on the effects of speed will form part of the Strategy. Finally, **enforcement** will remain a key part of a Safe System Approach to road safety in the Isle of Man.

Safe People

The Safe System Approach encourages safer road use primarily through education, training, publicity and enforcement. We will explore opportunities to ensure our drivers are competent and fit to drive throughout their lives through our driving test and licensing processes.

Over the next ten years, our Strategy will aim to meet the following targets:-

- **40% reduction** in the annual number of people killed or seriously injured in road traffic collisions
- **15% reduction** in the annual number of road users sustaining slight injuries in road traffic collisions
- **30% reduction** in the annual number of non-motorised vulnerable road users who are injured (all severities) in road traffic collisions
- **40% reduction** in the annual number of powered-two-wheeler road users who are injured (all severities) in road traffic collisions
- **20% increase** in the number of non-motorised vulnerable road users who say they feel safe using our roads

Policy Statements

- The Road Safety Partnership will work together to focus and co-ordinate road safety initiatives.
- Our approach will be based on evidence, collecting data to inform road safety initiatives and developments as well as reporting on the true cost of road traffic collisions.
- The Council of Ministers does not plan to introduce mandatory annual vehicle checks at this time. Instead, targeted roadside check campaigns will continue.
- The Council of Ministers does not plan to change the current policy on derestricted roads at the present time. We will prioritise the use and enforcement of speed limits on roads where there is clear evidence that reduced speed will make them safer.

- This Strategy will promote specific road safety initiatives to address high injury collision levels during motorsport festival periods but ensure that motorsport events continue to be a core part of the Island's economic and cultural make-up.
- We will prioritise the protection of those road users most at risk of harm

Next Steps

Gather the data

We will work towards a greater understanding of the causation of collisions, their contributory factors and more importantly how we can reduce or eliminate such collisions. During the lifetime of this Strategy, the collection and analysis of collision data will be improved. Future data collection processes will be established to allow comparisons with similarly profiled areas within the UK and internationally, thus determining trends that give rise to concerns, and enabling attention and resources to be directed towards tackling those trends.

Produce an action plan

We will produce and publish an action plan with a statement of need which will be reviewed annually.

Develop partnerships

We will work in an inclusive way with the private and voluntary sectors and the community to explore opportunities for alternative approaches to improve road safety.

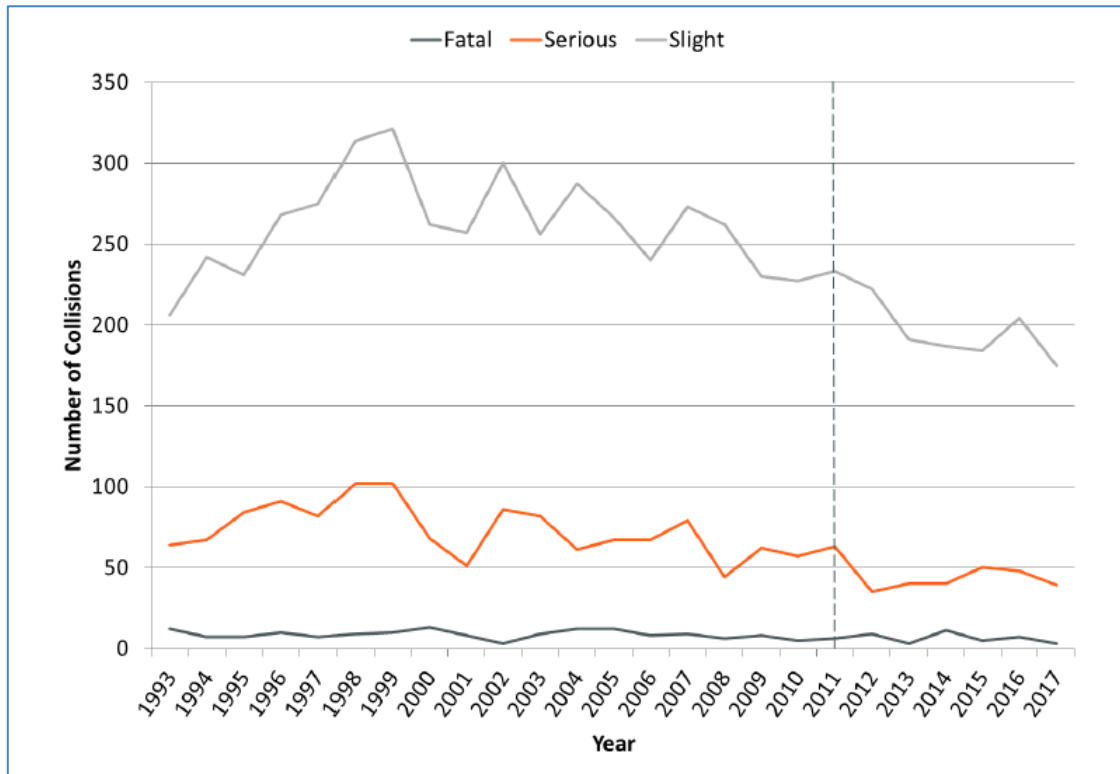
Engage and consult

We will work with the people of the Isle of Man to understand their perceptions of road safety issues on the Island. We will use surveys and focus groups to generate a snapshot of road user's views and opinions in regards to different behaviours and the relationship between road user groups. We will seek the views of interest groups and the voluntary and charitable sectors, seeking their participation as informed, interested parties. We will engage with the business community and employers to understand their needs in support of managing occupational road risk, logistics and fleet management.

2. INTRODUCTION AND CONTEXT

2.1 From January 1993 to December 2017 there were 196 recorded collisions that resulted in fatalities to road users and a further 1,631 collisions that resulted in serious injury on open public roads on the Isle of Man. There were an additional 6,113 collisions that resulted in slight injury.

Figure 1: Injury collisions by severity and year (1993 to 2017)
TRL: General report: Isle of Man Road Safety (2018)
 Dashed line represents move to electronic recording



- 2.2 The total social, emotional and economic costs of road traffic collisions (RTCs) resulting in death and/or serious injury are enormous and far reaching. In a community as small and close as the Isle of Man, almost every resident will know someone who has been seriously affected by road trauma.
- 2.3 Fatal and serious injury collisions should not be considered inevitable and measures need to be introduced to reduce these categories of collisions, with the ultimate aim of eliminating them.
- 2.4 This Road Safety Strategy outlines how we will make our roads safer over the next ten years and commits us to reducing road casualties.
- 2.5 We can only make our roads safer through partnership working. The Isle of Man Road Safety Partnership, which comprises key Government Departments and the Emergency Services, working together with the community will be responsible for co-ordinating and delivering the Strategy. It will be vital for the Partnership to engage the community, voluntary sector and businesses to be successful, and we will positively seek those contributions.

- 2.6 This Strategy will seek to ignite a cultural shift towards increasingly proactive management of road safety with the life and health of every road user at the core of what we do. Achieving our desired outcomes will also require all road users to be open to the differences that exist in respect of use of our roads and this Road Safety Strategy will seek to encourage all road users in a respectful culture of shared road use.
- 2.7 Research shows globally that lives have been saved and injuries prevented through improved safety features in vehicle design, construction and equipment. These developments have been supported with intelligence-led enforcement and improvements to our roads and roadsides through targeted engineering treatments. Education, awareness and legislation have led to cultural shifts, which have seen the routine use of safety equipment such as seatbelts, car seats and motorcycle helmets. At the time of their introduction many of these developments seemed ambitious, but they are now widely accepted as the norm and beneficial to road safety. This demonstrates that what is accepted today can be changed in the future.
- 2.8 The Council of Ministers is already committed to national indicators which are supported by this Road Safety Strategy, as follows:-
- Our Island: A Special Place to Live and Work – Programme for Government 2016-2021 commits us to being an enterprise and opportunity island and to prioritising and maintaining our strategic highway network and ensuring our streets and roads are safe.
 - Delivering the Programme for Government – April 2017 commits us to improving safety on our roads for all users and to measuring the number of collisions classified as fatal or serious.

3. VISION

- 3.1 This Strategy sets out our Vision, activities and measures for imposing road safety on the Isle of Man; including targets for reductions to be achieved during the period of the Strategy.
- 3.2 The Road Safety Partnership Vision for the Isle of Man is:-
- A future where no-one is killed or sustains serious/life changing injuries on our roads**
- 3.3 The commitment of different stakeholders is critical to the success of this Road Safety Strategy; we are committed to working towards a shared vision with a common goal. Our vision must be challenging and stretch us, but it must be credible. A vision is not a target for a set point in time, but is an aspirational approach with milestones against which progress can be measured.
- 3.4 By adopting this Vision within our Partnership, we sign up to a new level of ambition and it is a signal that we will no longer accept road death and serious injury as an inevitable outcome of using our roads.
- 3.5 The Vision will not be achieved over a short period of time. Significant behavioural, environmental, and possibly legislative change will ultimately be needed and will only

happen incrementally, with support and commitment from the community as well as the Partnership.

- 3.6 The Isle of Man has not historically set targets for casualty reduction but these have been found to be effective elsewhere if challenging enough and with the right level of commitment. As an interim step towards the ultimate vision it is suggested that for the duration of this Strategy specific but challenging casualty reduction and public perception targets are set and that resources are geared towards achieving them.
- 3.7 Our approach is consistent with a global move towards the “Safe System Approach” endorsed by the United Nations (UN¹) and the Organisation for Economic Cooperation and Development² (OECD) and this Strategy is our first committed step towards this. It also considers the strategies included in the World Health Organisation (WHO) ‘Save Lives’ a technical road safety package.³
- 3.8 The Strategy includes a number of activities to help achieve the desired outcome of reduced casualties and collisions. These activities include, but are not limited to:-
- Improved analysis of RTC data to better inform our understanding of collisions and their locations and contributory factors, including those specific to the Isle of Man, and addressing these;
 - Review, evaluation and further development of road safety education and training resources to ensure they reflect the current road safety issues and positively impact on driver/rider behaviour;
 - Targeted investigations into collision patterns at those locations with the highest injury collision numbers or rates and the identification of appropriate data-led collision remedial measures;
 - Review of legislation relating to road use to include driver training and testing provisions, vehicle testing and enforcement;
 - Scoping opportunities for National Driver/Rider Offender Schemes by way of remedial courses and extension of educational interventions to improve driver/rider awareness in respect of anti-social road use;
 - Working collaboratively with the Isle of Man Government Active Travel Strategy Group to ensure a joined up approach to road safety and wellbeing;
 - Continued consideration of best practice in highway design and development;
 - Public engagement to enable ideas to be gathered and concerns to be aired.
- 3.9 To achieve our Vision, in addition to effective partnership working there needs to be a cultural shift in the way we treat each other as road users. We are aiming towards an environment of inclusivity and tolerance. We all use the roads, most people daily, as car users, motorcyclists, cyclists, horse-riders or pedestrians and frequently our use of the roads is inter-changeable i.e. a driver becomes a cyclist or pedestrian.
- 3.10 Everyone has a part to play in reducing casualties:-
- **Tynwald**, through legislation, policy, funding and promoting change;

¹ United Nations: Global Plan for the Decade of Action for Road Safety 2011-2020

http://www.who.int/roadsafety/decade_of_action/plan/plan_english.pdf

² OECD: Zero Road Deaths and Serious Injuries. Leading a Paradigm Shift to a Safe System. 2016

<http://www.oecd.org/publications/zero-road-deaths-and-serious-injuries-9789282108055-en.htm>

³ World Health Organization: Save Lives Presentation (2018)

http://www.who.int/violence_injury_prevention/publications/road_traffic/SaveLIVESpresentation.pptx?ua=1

- **Government Departments** through education, engineering, enforcement, planning and responding to collisions;
- **The General Public** as road users; and
- **Non-Government Stakeholders** including employers, 3rd sector organisations, insurance companies and motoring and driving-related organisations all have a role in ensuring they take responsibility to positively embrace and promote road safety.

4. STRATEGIC DIRECTION & THE PARTNERSHIP

Resources and Relationships

- 4.1 The Road Safety Partnership will seek to achieve as many activities as possible within existing resources. There are clearly areas, however, within the planned activity which will require additional funding during the term of this Strategy.
- 4.2 The activities that we seek to deliver fall into four broad areas:-
- Comprehensive collision data set development and analysis;
 - Activities developed and delivered as part of business as usual for the various members of the Partnership;
 - Activities that require consultation and have inter-dependencies with other areas of Government business such as legislation;
 - New activities that are dependent on identifying a desire to do things in a different way that require additional financial investment, identification of extra resources and procurement processes.
- 4.3 We are keen to actively engage and harness the ideas and views of interested parties, stakeholders, third sector organisations and the general public. The Partnership is further committed to meaningful evaluation of activity undertaken to fully understand its impact as well as learning lessons locally and from elsewhere; we are focused on improving road safety outcomes through evidence.
- 4.4 The targets outlined in this Strategy will be achieved through continuous improvement and there is a great deal of work to be done. Our work must support a cultural shift in road safety around personal respect for all road users alongside the work of Government Departments and Non-Government Stakeholders. The reductions sought through this Strategy are by no means pre-determined and it will require a concerted effort by everyone.
- 4.5 This Strategy seeks to co-ordinate all road safety activity so there is a more consistent approach with an increased number of joint initiatives. Most members of the Partnership already carry out road safety activity as part of their 'usual business'. The challenge will be identifying where activities can be carried out jointly and commissioning them between two or more agencies.

Approach

- 4.6 This Strategy and the associated activities will be informed by public and stakeholder engagement, which the road safety partners are committed to. The action plan will be a living document, which will develop with improved understanding of the issues specific to the Isle of Man and with consideration to the concerns of road users.
- 4.7 The Partnership is keen to identify best practice from elsewhere and where it fits the context of the Isle of Man adopt it in an appropriate way. We will remain informed of road safety developments including through our membership of Road Safety GB and links with other Road Safety Partnerships.
- 4.8 Partnership working is widely acknowledged as essential for effective road safety management and will be critical to the successful implementation of this Strategy and the Safe System Approach. Road traffic collisions invariably do not have a single cause and no single organisation or sector can reverse the problem or solve the issue alone.
- 4.9 The United Nations Resolution 64/255⁴ 'Improving Global Road Safety' states "*The solution to the global road safety crisis can only be implemented through multi-sectorial collaboration and partnerships.*"
- 4.10 Members of the Partnership will develop effective management arrangements within their respective organisations for the planning and implementation of activities for the purpose of road casualty harm reduction in line with the Safe System Approach and this Road Safety Strategy.
- 4.11 A review of collision data to date and discussions within the Partnership indicate the following key aspects to be addressed during the ten years of this Strategy:
- Reduce the numbers of road deaths and injuries;
 - Protect all vulnerable road users including cyclists, motorcyclists, pedestrians, horse riders and groups vulnerable by age or disability;
 - Reduce inappropriate road-based anti-social behaviour including speeding, drink and drug driving, careless and dangerous driving, seatbelts and mobile phone use (fatal four);
 - Address significantly high fatal and seriously injured casualty levels during motorcycle festival periods;
 - Deliver a cultural change to develop respect for all road users by all road users;
 - Encourage an understanding that road safety is everyone's responsibility;
 - Improve our understanding of collisions on the Isle of Man to better inform this Strategy and road safety activity;
 - Ensure funding is targeted to support this Strategy and our ambitious Vision;
 - Improve collation and analysis of data that better informs road safety activity.

⁴ United Nations General Assembly: Resolution Adopted by the General Assembly 64/255. Improving global road safety (A/RES/64/255), 2010
http://www.who.int/violence_injury_prevention/publications/road_traffic/UN_GA_resolution-54-255-en.pdf

The Safe System Approach

- 4.12 It has already been stated that we need to make our roads, speeds, vehicles and road users safer and the Safe System Approach views human life and health as paramount. It prioritises the safety of people in all aspects of our road system and recognises that the elements above interact. This delivers an additional aspect of safety whereby in the event of human misjudgement it provides a safer environment – that is safer roads, safer vehicles.
- 4.13 The Safe System Approach is accepted internationally as an effective approach to support road safety. Originating from Sweden’s 1997 Vision Zero philosophy and the Netherland’s Sustainably Safe Model, the Safe System is an evidence-based approach that builds upon existing best practice in results-focused road safety management. The Safe System Approach targets all elements of road traffic system design, operation and use, to better accommodate common human error and known human tolerance to injury⁵.
- 4.14 The Office for Economic Co-operation and Development (OECD) considers the Safe System Approach as appropriate for countries at all levels of road safety performance, even if the specific interventions, strategies and pace of progress differ from country to country.
- 4.15 The Safe System Approach can be flexibly applied to different road environments across the world and is not ‘one size fits all’. In order to be effectively implemented, it requires deep reflection on the current position and policy in an organisation, a shift away from the traditional approach, having considered innovative alternatives.
- 4.16 The Safe System Approach promotes achieving targets of zero around death and serious injury in road traffic collisions. These targets were once considered radical and unachievable; however on an international level these are now increasingly becoming the ultimate benchmark for road safety results. We acknowledge that we have some different challenges in respect of de-restricted roads and the impact that road racing festivals have on collision numbers. Our Strategy will adapt to recognise these challenges.
- 4.17 The Safe System Approach also allows better links to be made with other cross Government policy objectives. The broad reach of the Safe System Approach helps road safety to integrate with other objectives such as health and physical activity, regeneration, air quality, carbon reduction and accessibility.
- 4.18 The principles of the Safe System Approach can be found at Appendix 2

⁵ Parliamentary Advisory Council for Transport Safety: Safe System
<http://www.pacts.org.uk/safe-system/>

5. GATHERING THE DATA

We acknowledge that working with data and casualty numbers may sometimes appear insensitive and we are conscious that behind these statistics is a picture of devastation, loss and hardship to families and communities. However, statistics enable us to measure the extent and nature of problems and help us direct resources to where they will achieve the best results

- 5.1 The Road Safety Partnership acknowledges that an effective Road Safety Strategy needs to be based on a thorough evaluation of available evidence. As such we recognise that there are two main issues with our current data. Firstly, that we collect information differently to other jurisdictions and therefore meaningful comparison is not readily achievable. Secondly that our data set in terms of numbers is a small sample and therefore has its own limitations.
- 5.2 We are committed to refining our data capture to improve our understanding of collisions and to further inform this Strategy; to this end collision data collection and analysis will be a primary focus in the early years of the Strategy. To further inform the Strategy, emerging themes and best practice from other jurisdictions will be captured and reviewed to identify if they are applicable in the context of the Isle of Man and can therefore add value to this Strategy.
- 5.3 Data can refer to either the number of collisions or the number of casualties. One collision may result in several casualties; therefore, the number of casualties in any year is greater than the number of collisions.
- 5.4 Within this Strategy, where casualty data is shown rather than collision data, further work has been undertaken to manually extract and analyse the data from individual Police Road Traffic Collision Reports. For this reason, it has been necessary to show casualty data only for the most recent three year period rather than the most recent five year period, which has been used for the collision data.
- 5.5 The severity of a casualty's injuries are categorised as fatal, serious or slight⁶ from nationally standardised definitions from the Department for Transport (DfT) and adopted within the Isle of Man. The definitions are detailed in Appendix 1.
- 5.6 Collisions are categorised by the most severe casualty category. So if, for example, a collision results in 3 casualties – one fatally injured, one seriously injured and one slightly injured – the collision is categorised as a fatal collision.

⁶ Department for Transport, UK: Instructions for completion of Road Accident Reports (STATS20) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/230596/stats20-2011.pdf

Figure 2: Five year collision totals
TRL: General report: Isle of Man Road Safety (2018)

| Severity of crash | 1998-2002 | 2003-2007 | 2008-2012 | 2013-2017 |
|-------------------|-------------|-------------|-------------|-------------|
| Fatal | 43 | 50 | 34 | 29 |
| Serious | 409 | 356 | 261 | 217 |
| Slight | 1454 | 1322 | 1174 | 941 |
| Damage | 3031 | 3313 | 3460 | 3408 |
| Total | 4937 | 5041 | 4929 | 4595 |

5.7 Figure 2 shows totals for all categories of recorded collisions for five year bands by severity from 1998 to 2017. The number of injury collisions has reduced by 38% from band 1998 – 2002 to band 2013 -2017. Fatal and serious injury collisions show an even greater reduction of 46% over the same period.

Figure 3: Injury collision by severity and month (2013-2017)

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | TOTAL |
|---------------------------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|-----------|-----------|-----------|-----------|-------------|
| Fatal | 1 | 0 | 1 | 1 | 3 | 7 | 1 | 6 | 2 | 4 | 0 | 3 | 29 |
| Serious | 11 | 4 | 11 | 13 | 42 | 64 | 18 | 19 | 15 | 8 | 5 | 7 | 217 |
| KSI TOTAL | 12 | 4 | 12 | 14 | 45 | 71 | 19 | 25 | 17 | 12 | 5 | 10 | 246 |
| Slight | 52 | 69 | 59 | 65 | 112 | 145 | 90 | 82 | 56 | 84 | 60 | 67 | 941 |
| TOTAL All Injuries | 64 | 73 | 71 | 79 | 157 | 216 | 109 | 107 | 73 | 96 | 65 | 77 | 1187 |
| Severity Ratio | 0.19 | 0.05 | 0.17 | 0.18 | 0.29 | 0.33 | 0.17 | 0.23 | 0.23 | 0.13 | 0.08 | 0.13 | 0.21 |

5.8 Figure 3 shows total recorded injury collisions by month for the five year period 2013 to 2017. The severity ratio is the proportion of collisions categorised as fatal and serious compared to the total for all collisions resulting in injury of any type.

Injury collision numbers peak during the summer months with higher numbers recorded in May and June. This peak is more pronounced amongst fatal and serious collisions.

Figure 4: Powered Two Wheeled (P2W) motor vehicles versus all other modes of travel KSI Collisions, by month (2013-2017)

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | TOTAL |
|--------------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|------------|
| Other | 8 | 3 | 9 | 6 | 12 | 11 | 14 | 8 | 10 | 11 | 1 | 8 | 101 |
| P2W | 4 | 1 | 3 | 8 | 33 | 60 | 5 | 17 | 7 | 1 | 4 | 2 | 145 |
| TOTAL | 12 | 4 | 12 | 14 | 45 | 71 | 19 | 25 | 17 | 12 | 5 | 10 | 246 |

5.9 Figure 4 shows totals of fatal and serious collisions by month for the five year period 2013-2017 differentiating powered two wheeled motor vehicle collisions from all other modes of travel.

- 5.10 Both categories show a peak in collision numbers in summer months, however the peak in powered two wheeler collision numbers is far more pronounced in May, June and August, the months when the largest motorcycle festivals are held.
- 5.11 There will be further analysis in conjunction with the Active Travel Working Group to improve our understanding of collision contributory factors and how pedestrians and pedal cyclists are represented within our casualty figures compared against the mode share of our road users (volume of traffic which are pedestrians/cyclists).
- 5.12 Appendix 1 contains further tables, graphs and charts illustrating key numbers and trends from the collision data available from Police Collision Reports database.

6. CASUALTY REDUCTION - The Economic Benefits

- 6.1 Of paramount importance is the human cost involved in road traffic collisions, but there is also an economic cost that cannot be ignored. The Partnership recognises the economic value that comes from the Island's diverse range of road users including vulnerable road users such as motorcyclists, walkers, cyclists and horse riders. A decline in these groups would have a direct impact for the Isle of Man economically.
- 6.2 The tourist and hospitality sector in particular thrives on visiting bikers and motorsport events, which are synonymous with the Isle of Man and very much part our cultural identity.
- 6.3 The Isle of Man is also known for being a fantastic place to walk and cycle; producing a number of world class cyclists and attracting international standard competitors to events. All of this has a significant positive impact on the economy of the Island. Benefit to the economy is also realised with the large local horse riding fraternity who rely heavily on local suppliers for equine equipment and feed etc., additional economic value which is sometimes not recognised.
- 6.4 There are also walking, cycling and horse riding benefits, factors recognised in the Isle of Man Government Active Travel Strategy 2018-2021⁷ and the Director of Public Health – Annual Report 2018⁸.
- 6.5 The negative economic impact of road traffic collisions is obvious and the impact on our health service, emergency services and infrastructure must be recognised. Our statistics show that, based on 2015-2017 annual average data, there were a total of 238 recorded injury collisions, which equated to an annual average of 7 fatally injured casualties and 58 seriously injured casualties.
- 6.6 Each year the UK Department for Transport (DfT) assesses the economic impact relating to casualties and how avoidance of further casualties directly correlates to costs. The 2017

⁷ Isle of Man Government, Department of Infrastructure: Active Travel Strategy, 2018-2021
<http://www.tynwald.org.im/business/opqp/sittings/Tynwald%2020162018/2018-GD-0043.pdf>

⁸ <https://www.gov.im/media/1362465/ph03a-0818-dph-annual-report-2018-web-version.pdf>

figures (latest available) set the average value of prevention of road traffic casualties at £1,897,129 for a fatality, £213,184 for a serious injury and £16,434 for a slight injury⁹.

- 6.7 Whilst the true impact of a road traffic casualty can never be measured definitively and never solely in terms of money, the values provided by DfT do enable us to estimate the extent of the impact on society. The estimated financial impact of all injury collisions on the Isle of Man from 2015 -2017 is in the region of £85,500,000. This is a broad estimate and should be considered as a rough guide to the economic impact. The figure includes collisions where the casualty was not resident in the Isle of Man and so the loss of economic participation may not be accurately attributed. In spite of this, the figure demonstrates a compelling case that reducing the number of collisions on our roads has many benefits.

7. CHALLENGES AND CONSIDERATIONS

- 7.1 The work driven by this Strategy cannot be achieved by one part of Government alone. The Partnership is aware of the way this Strategy will overlap with other policy areas. These areas, although not exhaustive, include economic growth through promotion of the Isle of Man TT Races and the Festival of Motorsport (FoM). The Government's stated aim to increase active travel should also be considered in this context.
- 7.2 It is likely over the coming years that future road safety decisions will continue to be influenced by a great variety of factors, including but not limited to: the success of the Active Travel Strategy, greater visitor numbers for motorsport events and changes to vehicle manufacturing, fuels and technology. Priority in allocating public expenditure is also a variable which may affect the outcomes for this Strategy.

Changing Demographics

- 7.3 The 2016 Isle of Man Government census identified an increasingly ageing population. The over 65 population on the Island saw a 3% increase over the five year period and is now 21% of the Island's resident population¹⁰. Likewise the over 50 population increased by 11% over the same period and it is not unrealistic to expect these trends to continue.
- 7.4 Demographic changes such as an ageing population, who understandably wish to remain independent and mobile, will bring increasing challenges for road safety. Older people can suffer more significant injuries from a relatively minor incident and have a longer recovery time. The needs of young drivers in terms of road safety can also be in direct conflict with road safety planning for an older population. The Partnership will need to continually capture and review collision data to identify any correlation between these demographic changes and the types and contributory factors for collisions and tailor their activities accordingly.

⁹ Department for Transport: Average value of prevention per reported casualty and per reported road accident GB 2017 (Statistical Table RAS60001)

<https://www.gov.uk/government/statistical-data-sets/ras60-average-value-of-preventing-road-accidents#table-ras60001>

¹⁰ Isle of Man Government, Cabinet Office: 2016 Isle of Man Census Report

<https://www.gov.im/media/1355784/2016-isle-of-man-census-report.pdf>

Isle of Man Government, Cabinet Office: 2016 Isle of Man Census Detailed Census

Analysis <https://www.gov.im/media/1355783/2016-isle-of-man-census-presentation.pdf>

De-Restricted Roads

- 7.5 The Isle of Man is unique within the British Isles and Crown Dependencies because of the areas of our road network which are de-restricted in terms of speed limits. This de-restriction poses additional challenges to the Road Safety Partnership in respect of enforcement and safety. The nature of our roads, however, is part of the culture of the Isle of Man. Speed limits will not be considered on a blanket basis, rather on a case by case basis, informed by evidence.

Motorcycling Events

- 7.6 The increasing popularity of the TT, the FoM and the Southern 100 sees increasing visitor numbers and these events have a direct impact on road safety statistics. The majority of visitors to these events come on motorbikes. The nature of the Island's roads and the increasing volume of motorcyclists mean that they present a challenge, even for experienced riders. 44,367 visitors came for TT in 2018 resulting in a total expenditure of an estimated £37.1 million. This represents a contribution to Manx National Income of £26.8 million and an Exchequer Benefit of £4.8 million¹¹.
- 7.7 The negative side of these events is the significant increases in injury collisions, particularly those involving fatal or serious injury and the ensuing financial impact. May and June see very big rises in both collision numbers and severities, and August and September see lesser, but still significant, rises in numbers and severity. The vast majority of all of these rises involve motorcyclists. The collisions occur not just on the Mountain Course but Island wide.
- 7.8 As an island we have a commitment to the future of the motorcycle festivals and a further commitment to attract more visitors to the festivals. However, the rise in road traffic collision numbers and severities around them is such that we simultaneously need to address this negative aspect of the festivals. So there is a conundrum. We do not wish to reduce the appeal of the motorcycle festivals but we must address the high levels of high severity collisions associated with them. We will need to be quite bold in our approaches in doing so.

Other Considerations

- 7.9 The Isle of Man Government Active Travel Strategy encourages our communities to embrace a healthier lifestyle, promoting walking and cycling. This approach carries great benefits for our health, environment and the economy and its success is likely to result in increased numbers of vulnerable road users.
- 7.10 There is also the consideration of the impact of technology, which often has a positive impact on road safety, however some technological advances have also led to an increase in driver/rider distractions, which present further challenges to safer driver behaviour.

¹¹ Isle of Man Government, Department for Enterprise: TT Survey 2018
<https://www.gov.im/media/1362915/tt-2018-visitor-survey.pdf>

Data Considerations

- 7.11 It is recognised that an evidence-based approach is critical for effective road safety planning. The current data set is accurate however it is not counted in the same way as other jurisdictions such as the UK, EU or other Crown Dependencies, which means comparison is extremely labour intensive. To remedy this, work on a revised and more comprehensive data set is already underway. Data collection and analysis will be a priority going forward.
- 7.12 During the Strategy, the Partnership intends to collect a broader range of RTC statistics; expanding the capture of those that occur only on a road to a wider definition of where the public have lawful access. This is a greater collation of RTC statistics than currently exists elsewhere, however the Partnership will ensure that data can be extrapolated to enable benchmarking with other jurisdictions. This enlarged dataset will better inform our understanding of the nature and frequency of collisions and will allow for analysis of collisions not previously recorded. This change in recording will inevitably lead to an increase in the numbers; however it will ensure better quality, consistent information over an extended period of time reflecting accurately collision numbers and trends.
- 7.13 The Partnership will seek to introduce the Maximum Abbreviated Injury Scale (MAIS), which is a severity score for injuries assessed against probability of death. It is promoted as best practice in the E.U and when fully utilised allows accurate comparison between police held data and hospital data.¹² This new approach will enhance our understanding of injury severity to enable more detailed analysis of collisions and their outcomes for casualties. A comparison of Stats20 and MAIS definitions can be found at Appendix 3
- 7.14 Whilst accepting the limitations of our current data, what is known is the significant impact that the TT Festival and the Festival of Motorcycling have on our collision figures. The Partnership has agreed for the duration of this Strategy that this collision data needs to be analysed in detail to identify and address the specific issues occurring during these events and to monitor the impact they have on overall collision and casualty numbers.

¹² Department for Transport: Estimating clinically seriously injured (MAIS3+) road casualties in the UK (2016) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/556648/rrcgb2015-03.pdf

8. OUR COMMITMENT TO MAKING IT HAPPEN

- 8.1 We will work in an inclusive way with the private and voluntary sectors and the community to explore opportunities for alternative approaches to deliver on road safety.
- 8.2 We will work with the people of the Isle of Man to understand their perceptions of road safety issues on the Island. We will use surveys and focus groups to generate a snapshot of road user's views and opinions in regards to different behaviours and the relationship between road user groups. This can then be monitored for attitudinal and behaviour changes over time.
- 8.3 We will engage with interest groups and the voluntary and charitable sector and welcome their participation as informed interested parties.
- 8.4 We will engage with the business community and employers to understand their needs in support of managing occupational road risk, logistics and fleet management.
- 8.5 The Road Safety Partnership will be the coordinating group for all road safety messages, campaigns and initiatives; to ensure effective joined up working towards a common goal. The Partnership will review all Road Safety Campaigns before development to ensure consistency of approach and duplication of effort.
- 8.6 We will work towards a greater understanding of collisions on the Island, their contributory factors and more importantly how we can intervene.
- 8.7 During the lifetime of this Strategy, the collection and analysis of collision data will be improved. Future data collection processes will be established to allow comparisons with similarly profiled areas within the UK and internationally, thus determining trends that give rise to concerns, and enabling attention and resources to be directed towards tackling those trends.
- 8.8 We will build a more complete landscape of collisions and casualties occurring on Island roads by supplementing Police collision data with information from other available data sources.
- 8.9 We will also seek new ways of measuring safety, for example the public's perception of road danger and the impact on quality of life. This will be instrumental in understanding if there are perceived safety barriers to active and sustainable travel and whether this perception affects the mobility and independence of Island residents.
- 8.10 All work that is undertaken will be recorded on an activity log; this will be a living document detailing all road safety initiatives that the Partnership have involvement with and along with Key Performance Indicators (KPIs) and targets should be the benchmark by which the success or otherwise of the Strategy should be judged.

9. TARGETS

- 9.1 Primarily, the Road Safety Strategy targets will be focussed on seeking to reduce the number of people fatally and seriously injured on the Island's roads.
- 9.2 We have an overarching ambition to reduce the number of casualties of all severities.
- 9.3 There will also be targets in respect of a reduction in the number of casualties classed as vulnerable road users including motorcyclists, pedestrians, pedal cyclists and horse-riders.
- 9.4 In monitoring our targets, all reporting will be expressed as 3 year rolling averages, and in comparison to a 3 year baseline average calculated on casualty figures from 1st January 2015 to 31st December 2017. Rolling averages are used because in statistical terms the datasets being utilised are small, and therefore data from individual years are subject to random fluctuation, the levels of which can be quite high. The use of rolling averages (ongoing averages of the most recent three years data) smooth out the random fluctuation element and give a more reliable guide as to actual trends.
- **40% reduction** in the annual number of people killed or seriously injured in road traffic collisions
 - **15% reduction** in the annual number of road users sustaining slight injuries in road traffic collisions
 - **30% reduction** in the annual number of non-motorised vulnerable road users who are injured (all severities) in road traffic collisions
 - **40% reduction** in the annual number of powered-two-wheeler road users who are injured (all severities) in road traffic collisions
 - **20% increase** in the number of non-motorised vulnerable road users who say they feel safe using our roads
- 9.5 In order for targets to be achievable there will be a specific need to address the significantly high casualty numbers related to the motorcycle festival periods. Without this, the targets will not be met. There is a need for in depth research of the patterns and numbers of collisions, comparison with other locations with road racing festivals, communication with the authorities in those areas to see the extent of similar issues and how they are managed, and the collation and implementation of ideas to reduce the current high levels of casualties.

10. MONITORING SUCCESS

- 10.1 This Road Safety Strategy will be set for ten years from 2019 to 2029. It will be underpinned by an Annual Road Safety Report produced by the Road Safety Partnership, which will collate data on the calendar year and report in March each year (with the exception of the first year). This Report will be an assessment mechanism for detailed reflection around the suitability of priorities, targets, and performance indicators and progress against them. Where new data exists it will enable re-evaluation of the effectiveness of the Strategy to make sure it is delivering and for changes to be made to the planned activity as the evidence dictates. The Annual Report will have governance through the Road Safety Strategic Board and will be publicly available.
- 10.2 The Annual Report will include a commentary on the activity log of work and progress over the previous 12 months, milestones and projected work for the forthcoming 24 month period. It will also report on progress in the previous 12 months against the agreed casualty reduction targets.
- 10.3 The Annual Report at a minimum will detail:-
- Collision and casualty statistics and trends;
 - Enforcement data;
 - Completion status of activity log interventions for previous 12 months;
 - Evaluation of initiatives and measures undertaken including qualitative and quantitative data.
- 10.4 This Road Safety Strategy will be subject to a review in 2021 to give an opportunity to reflect on the next Joint United Nations Global Plan from 2021-2030 and the issue of the next Isle of Man Programme for Government. It will be an opportune time to take stock and if appropriate make adjustments in line with both the local and global context.
- 10.5 A further review will be scheduled at mid-term in 2024.

APPENDIX 1

ROAD TRAFFIC COLLISION CASUALTIES

A fatal injury is defined as one where a person has sustained injuries that caused death, less than 30 days after the collision. This does not include suicides.

A serious injury is defined as “An injury for which a person is detained in hospital as an ‘in-patient’, or any of the following injuries whether or not they are detained in hospital: fractures, concussion, internal injuries, crushings, burns (excluding friction burns), severe cuts, severe general shock requiring medical treatment and injuries causing death 30 or more days after the accident”.

A slight injury is “an injury of a minor character such as a sprain (including neck whiplash injury), bruise or cut which are not judged to be severe or slight shock requiring roadside attention”. This definition includes injuries not requiring medical treatment.

Figure 5: RTC Casualties – by mode of travel and severity (2015-2017)

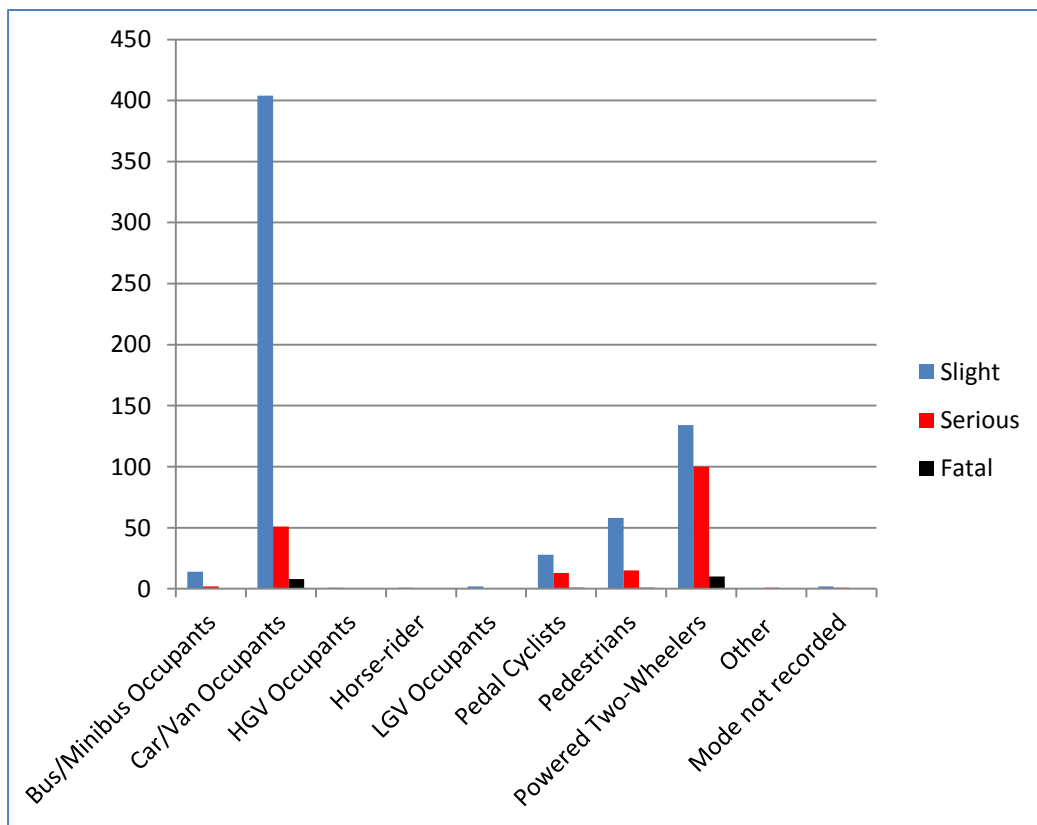


Figure 6: RTC Casualties (all injury severities) – by mode of travel (2015-2017)

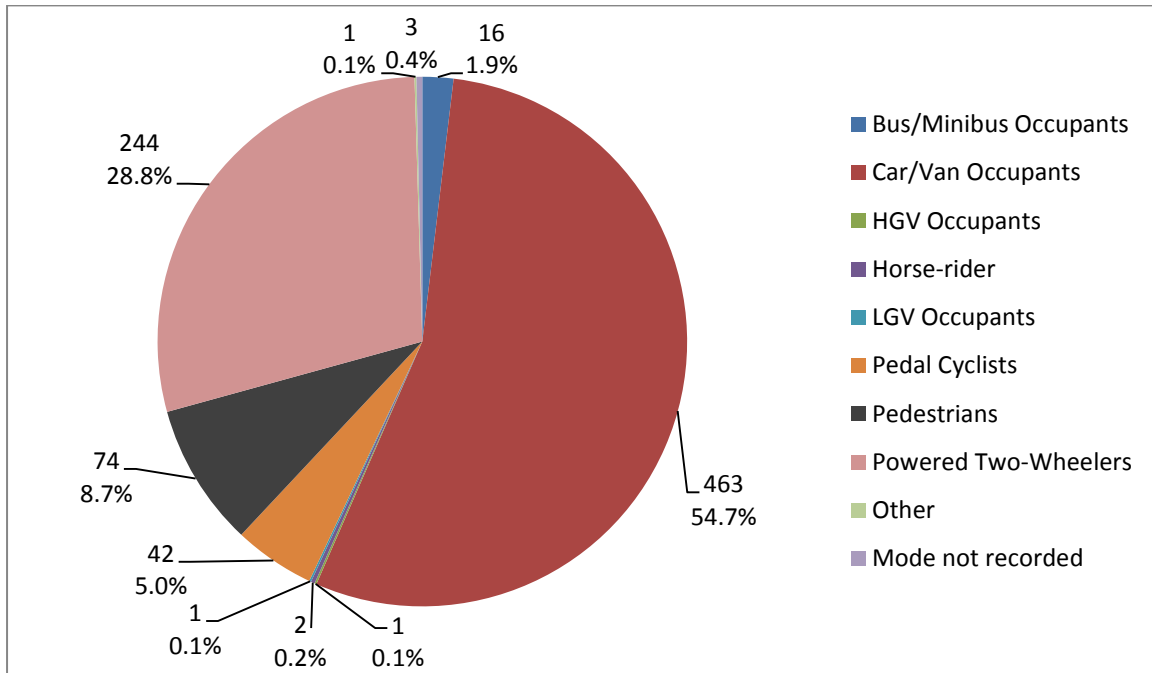


Figure 7: RTC Casualties (Killed and Seriously Injured Casualties) – by mode of travel (2015-2017)

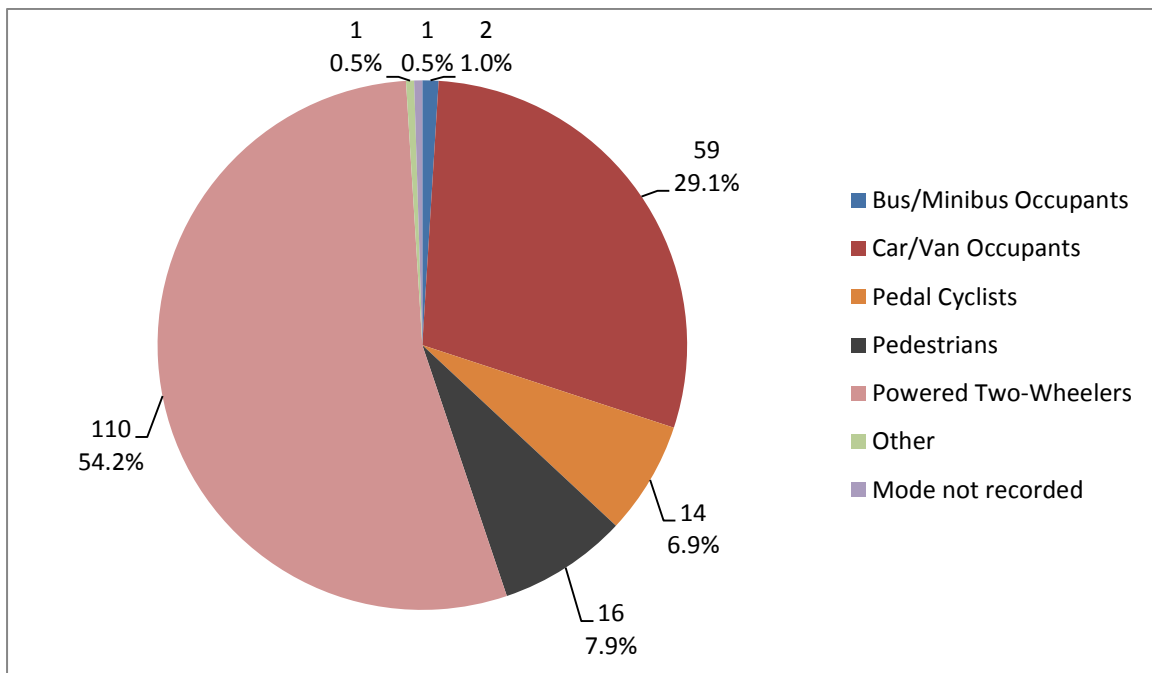


Figure 6 shows the distribution of all casualties (all injury severities) by road user type and figure 7 shows the distribution of killed and seriously injured casualties by road user type for the time period 2015 - 2017, expressed as percentages and by numbers.

Comparison of figure 6 with figure 7 shows that 29% of all casualties were on powered two wheeled vehicles, but this proportion almost doubles to 54% when looking at killed and seriously injured casualties alone.

Similarly the proportion of car and van occupant casualties drops from 55% to 29% when comparing all severities with killed and seriously injured casualties.

ROAD TRAFFIC COLLISION CASUALTIES

Figure 8: Casualties (all severities) – by age and gender (2015-2017)

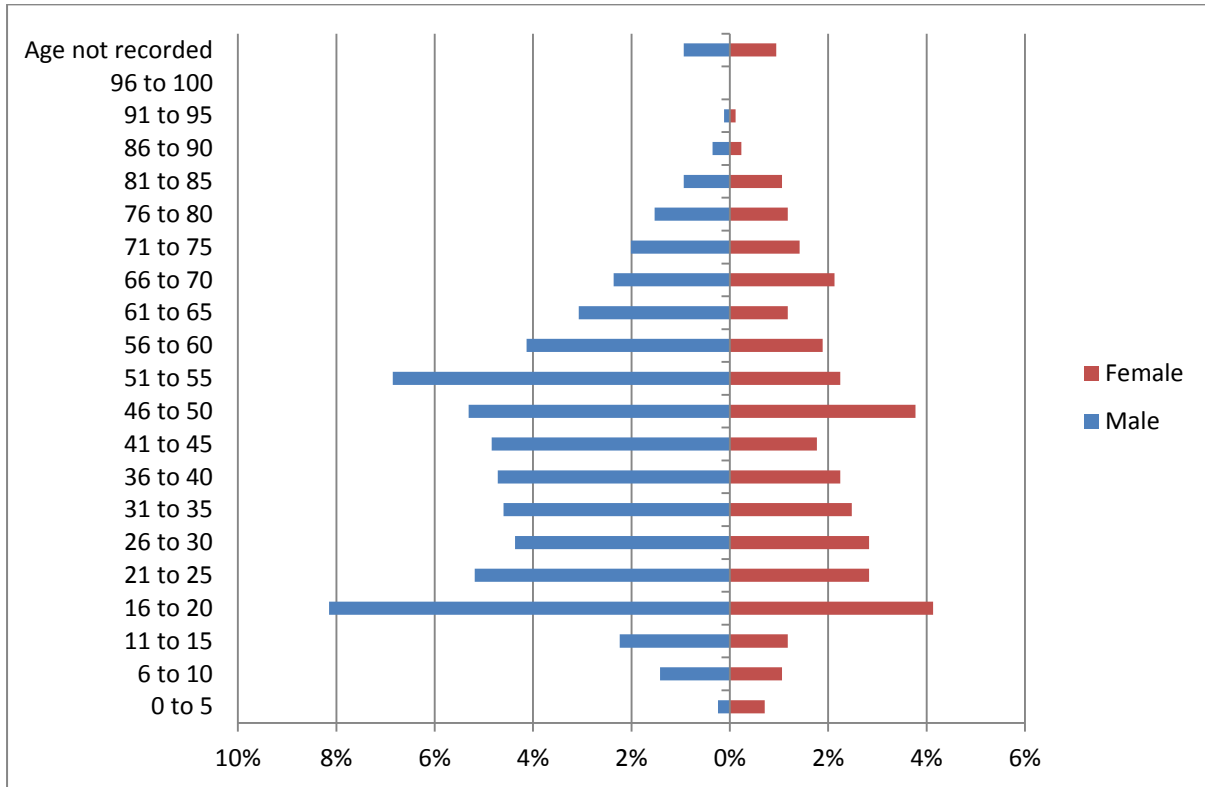


Figure 9: Local population – by age and gender (2016 census)
For baseline comparison against figure 8 (excludes visitor demographics)

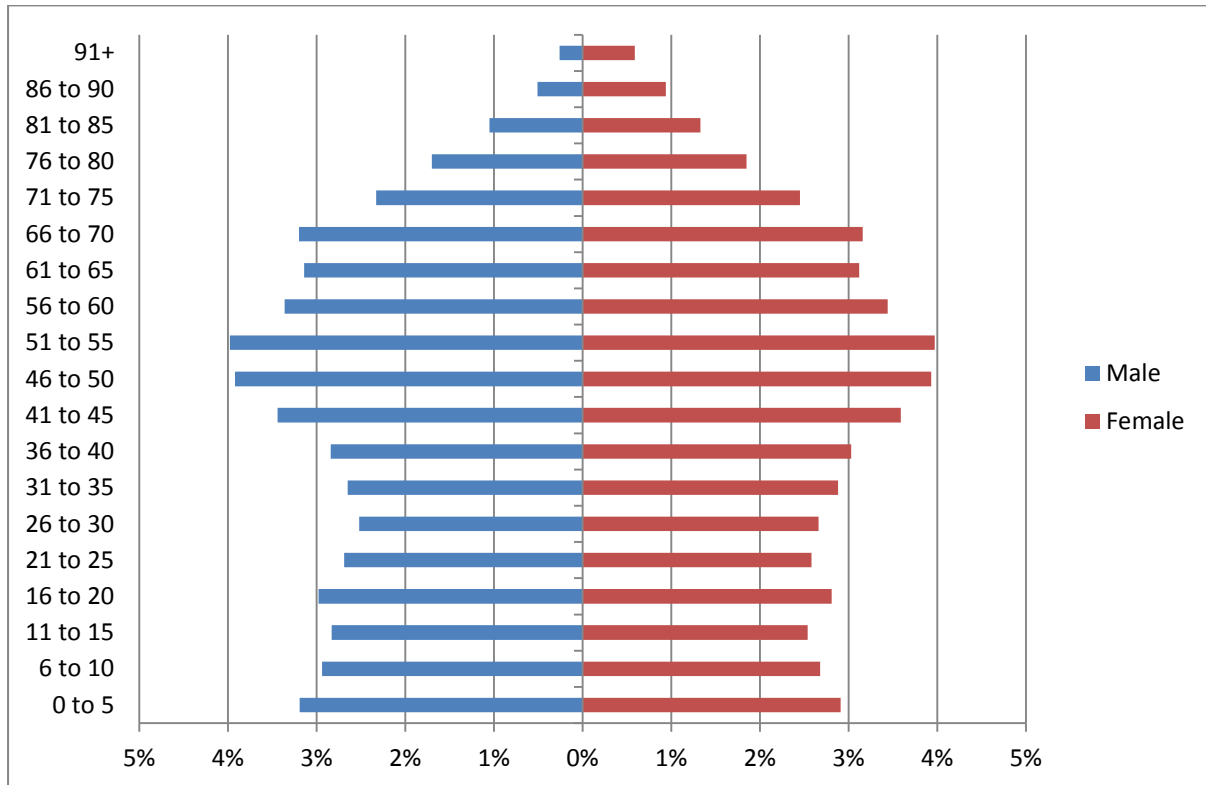


Figure 8 shows all casualties for the period 2015 - 2017 by age group and gender, expressed as percentages of the total casualties. Figure 9 shows the population distribution of the Isle of Man by age group and gender, expressed as a percentage of the total population, data taken from the 2016 census figures.

A comparison of figure 8 and 9 shows:

- That the proportion of male casualties is greater than female casualties;
- The proportion of collisions involving young drivers, especially young male drivers, is high and significant when compared to the population distribution;
- The proportion of male casualties in the 51 to 55 age group is higher than most other male age groups. They account for 4% of the population and yet 6.85% of casualties.

It is important to note that the population distribution pyramid (figure 9) is helpful in displaying the demographics of the resident population, but is not representative of all road users on the Isle of Man as visiting road users are not included. In future there will be the opportunity to scope for further comparison and analysis to better understand the demographics of our visiting road users.

POWERED-TWO WHEELER CASUALTIES

Figure 10: Motorcycle casualties by age band (all severities) (2015-2017)

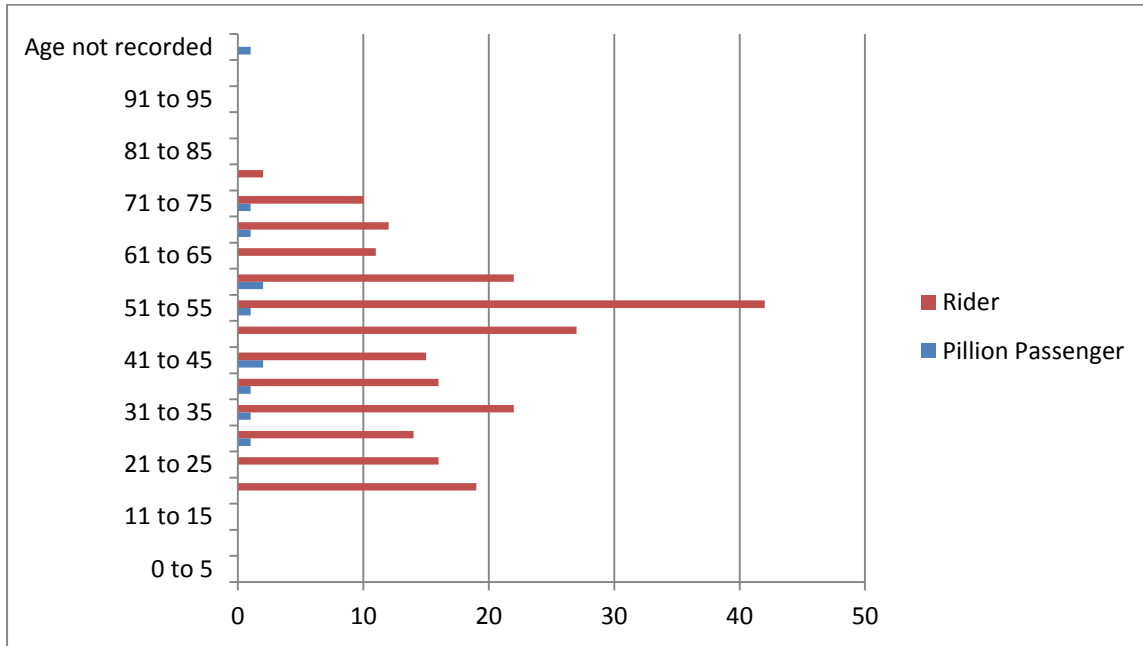


Figure 11: Motorcycle casualties by gender (all severities) (2015-2017)

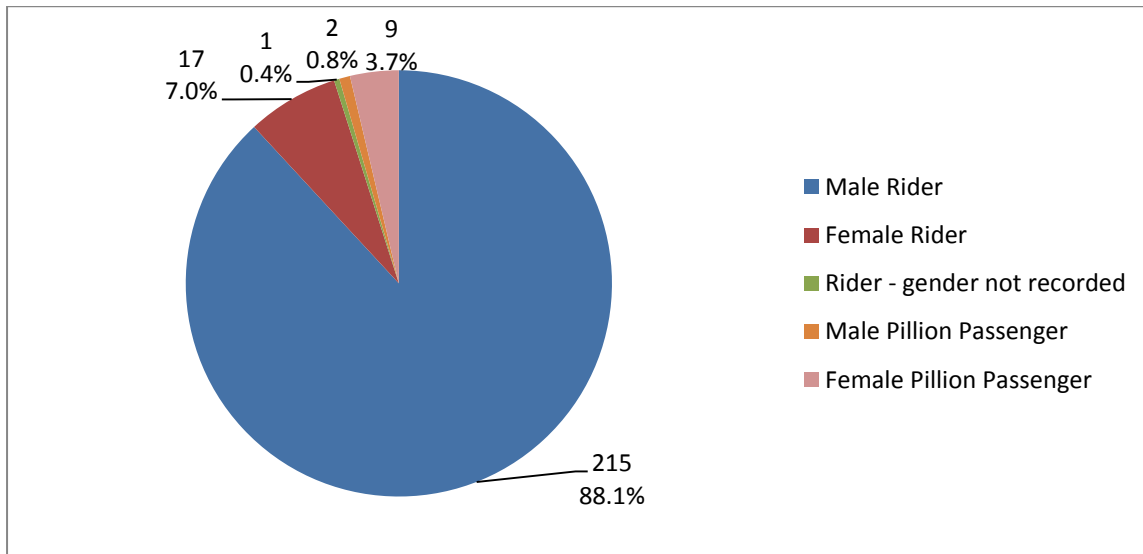


Figure 10 shows powered two wheeler casualties by age and whether rider or passenger for the three year period 2015 - 2017. Figure 11 shows powered two wheeler casualties by gender and whether they are a rider or passenger, for the time period 2015 - 2017.

- Male riders form the vast majority of casualties;
- Most motorcycle journeys are single riders unsurprisingly this is reflected in the data;
- The 46 to 60 age group forms the highest proportion of the casualties, with the 51 to 55 age group particularly represented

CAR OCCUPANT CASUALTIES

Figure 12: Car/Van occupant casualties (all severities) – by age band (2015-2017)

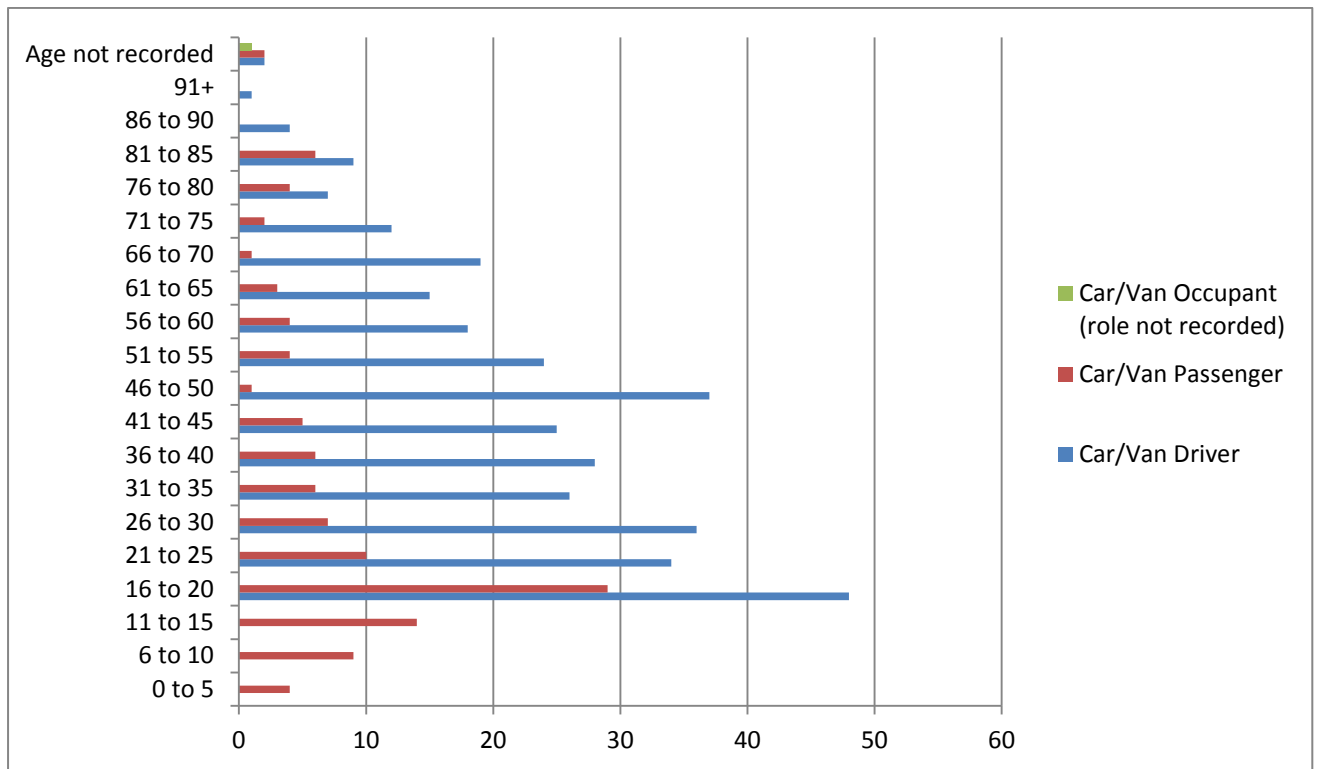


Figure 12 shows car and van casualties of all injury severities for 2015 - 2017 by age and whether driver or passenger.

- Casualties in the 16 to 30 age group are high with those in the 16 to 20 age group particularly represented;
- Passenger casualty numbers in the 16 to 20 age group form a notably higher percentage of passenger casualties when compared to other age groups;
- There is also a peak in injured drivers in the 46 to 50 age group.

PEDESTRIAN & PEDAL CYCLE CASUALTIES

Figure 13: Pedestrian casualties -by age band (2015-2017)

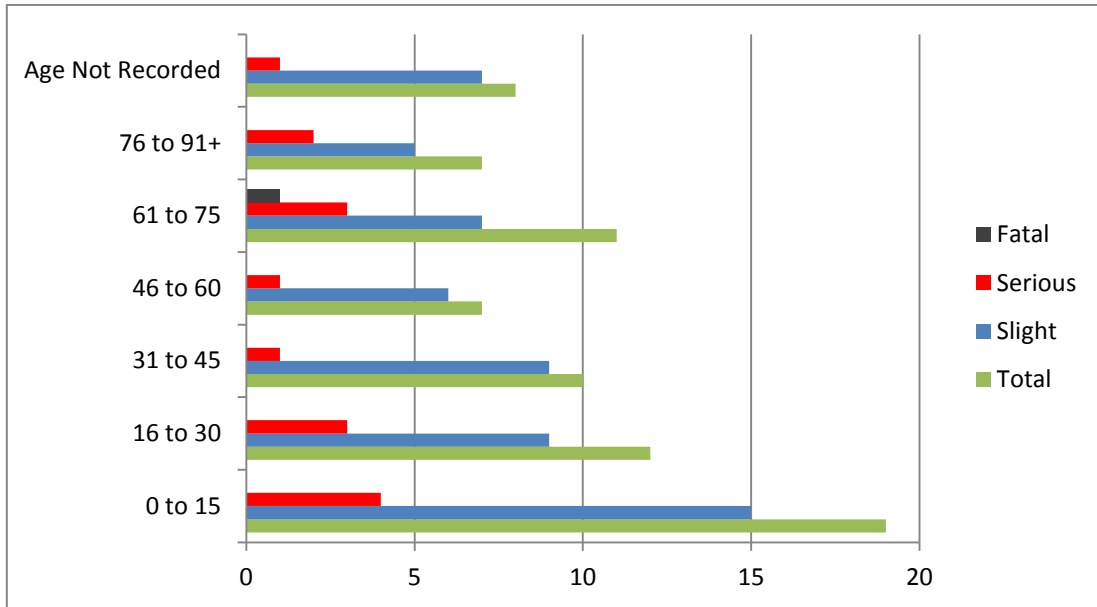


Figure 14: Pedal Cyclist casualties – by age band (2015-2017)

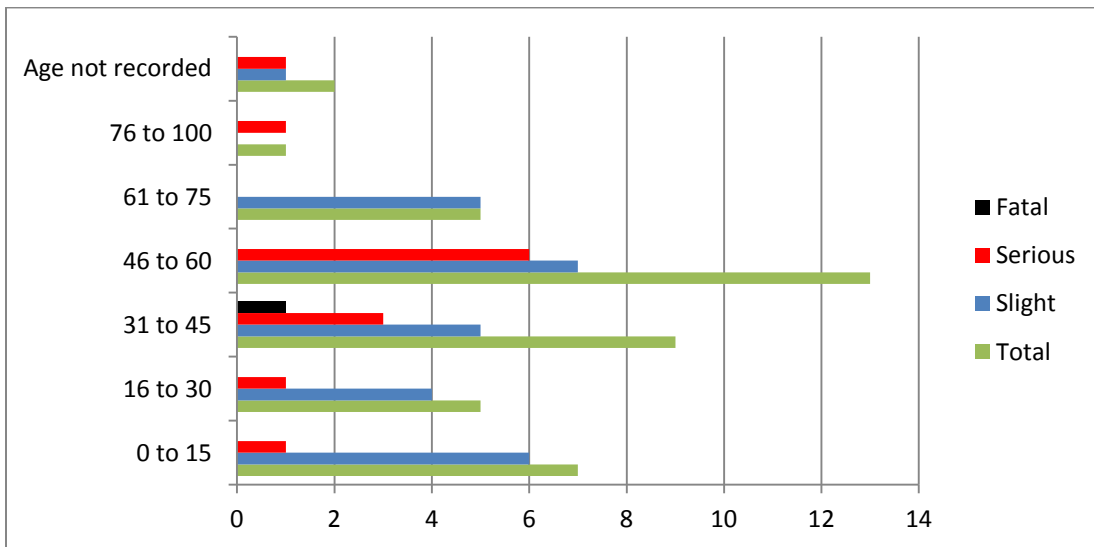


Figure 13 shows all pedestrian casualties and figure 14 shows all pedal cycle casualties by age and severity of injury for 2015 - 2017.

- Pedestrians age 0 to 15 are the most represented age group in respect of pedestrian casualties;
- By age group pedal cyclists age 46 to 60 are the most represented category.

APPENDIX 2 THE SAFE SYSTEMS APPROACH

The principles that underpin the Safe System Approach¹³ acknowledge that:



People make mistakes which can lead to crashes; however, no one should die or be seriously injured on the road as a result of these mistakes.



The human body has a limited physical ability to tolerate crash forces – any impact greater than 30km/h increases the risk of dying significantly.



Road safety is a shared responsibility amongst everyone, including those that design, build, operate and use the road system.



All parts of the road system must be strengthened in combination to multiply the protective effects and if one part fails, the others will still protect people.

The Safe System Approach takes human fallibility and vulnerability into account, and accepts that even the most conscientious person will make a mistake at some point. The goal of the Safe System Approach is to ensure that these mistakes do not lead to a collision, or, if a collision does occur, impact forces are sufficiently controlled to be survivable and not result in serious/life-changing injuries.

The Four elements of our road system that contribute to collision forces are:

- The competence and behaviour of our **road users**;
- The **speeds** at which we travel;
- Our **roads** and roadside infrastructure;
- The **vehicles** in which we travel.

¹³ The Towards Zero Foundation, What is the Safe System
<http://www.towardszerofoundation.org/thesafesystem/>

Safe People

Every road user has a responsibility for the safety of themselves and others when using the roads. Road users must be educated to use roads safely, comply with the law and to be considerate towards other road users. The Safe System Approach encourages safer road use primarily through education, training, publicity and enforcement. There are also opportunities to ensure our drivers are competent and fit to drive throughout their lives through our driving test and licensing processes.

Safe Speeds

Speed limits in a Safe System are based on aiding both collision avoidance and taking into account a human body's limit for physical trauma, for example, a pedestrian struck at over 20mph has a significantly increased risk of death or life-changing injury.

As part of a Safe System Approach we need to:

- Review RTC data to inform appropriate speed limits;
- Educate road users;
- Enforce existing limits.

Safe Roads

Within with Safe System Approach, roads are designed to reduce the risk of collisions occurring and the severity of injuries if a collision does occur. Safety features can be incorporated into the road design from the outset, or when dealing with a historical road network such as that which has evolved in the Isle of Man, improvements can be made through engineering remedial measures, through the road maintenance programme and the planning process.

This element of the Safe System Approach places emphasis on proactive measures to improve the actual risks of road safety. Collision hot spots and routes are identified and targeted engineering measures taken to remedy them, for example by improving road surfaces, removing roadside obstacles to vision etc.

Safe Vehicles

Vehicles are designed, built and regulated to minimise the occurrence and consequences of collisions, with the emphasis on collision survivability and this is supported through NCAP ratings.¹⁴ There are two main strands to safer vehicles:

- Technology;
- Road-worthiness.

As part of a Safe System Approach general, government and commercial road users should be encouraged to choose the safest vehicles and ensure they are maintained to the highest standards.

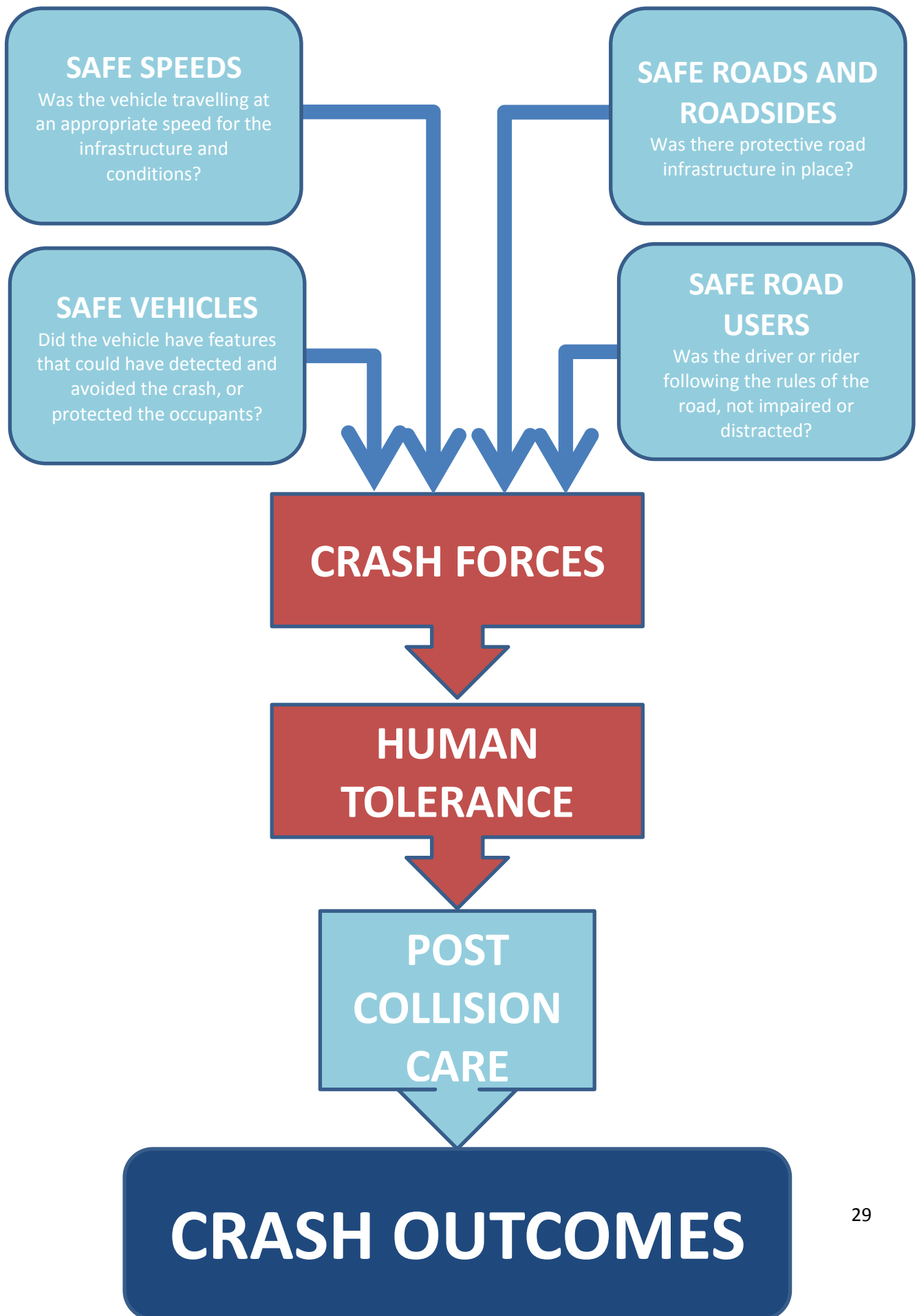
¹⁴Euro NCAP

<https://www.euroncap.com/en/about-euro-ncap/>

Ultimately by targeting interventions across all four elements of our road system we can reduce the likelihood of collisions occurring. Should an impact occur, we can hopefully reduce the amount of collision force that is occurring within the casualty's body, for example, through restraints and vehicle safety features.

Where a collision occurs, a significant factor in the outcome for the casualty is post-collision care. Effective emergency treatment and trauma care and rehabilitation can help reduce the risk of death and serious injuries. Post-collision care is an important part of a safe road system.

Safe System Factors and their impact on crash outcomes



APPENDIX 3 STATS20 v MAIS DEFINITIONS

| Comparison of Stats20 and MAIS definitions for injury severity | | | | |
|--|-----------|----------|---------------------------------|-------------------------|
| Existing Stats20 definition | MAIS Code | Injury | Example | AIS % probably of death |
| Slight* | 1 | Minor | Superficial laceration | 0 |
| Serious* | 2 | Moderate | Fractured sternum | 1 - 2 |
| | 3 | Serious | Open fracture of humerus | 8 -10 |
| | 4 | Severe | Perforated trachea | 5 – 50 |
| | 5 | Critical | Ruptured liver with tissue loss | 5 – 50 |
| Fatal | 6 | Maximum | Total severance of aorta | 100 |

** The UK Department for Transport is currently reviewing the current STATS20 definitions for slight and serious and how these correlate with MAIS codes*