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West Sussex Road Safety Strategy 2025 - 2036

Foreword

Much has changed since the last West Sussex Road Safety Framework was published: the Covid-19 pandemic introduced many more people to working from home and shifting daily travel patterns; walking, cycling and micro-mobility has increased; the "gig economy" has significantly expanded; and technology has advanced. In addition, we have published both a new Transport Plan and Active Travel Strategy with a greater emphasis on active and sustainable travel modes. Unfortunately, following a similar pattern to much of the UK, the number of people killed or seriously injured (KSIs) in collisions on West Sussex roads has remained fairly static.

Road Safety is complex. Due to the continually changing nature of society and use of our roads we need to continue to develop road safety solutions and to maximise opportunities by working with a wider range of partners, both internal and external. Essentially, we all have a role to play in delivering road safety.

At the centre of the 'Safe System' philosophy, the principle of shared responsibility between all those who design, manage, and use the road transport system, is human fallibility and the fact that a failure within the "system" can lead to unintentional death and injury. Safe System is about protecting people involved, rather than preventing the collision. A fundamental element of this is to recognise that higher speed collisions are likely to result in more severe injury due to the higher kinetic forces involved.

Evidence from Police collision data nationally indicates speed is still one of the predominant contributory factors in road traffic collisions, especially in rural areas. Effective speed management is therefore essential for reducing road traffic collisions and severity of injuries sustained. This is not just through reducing speed limits but also addressing the fundamental cause of speed – driver behaviour. Equally though, the roads and roadsides should be forgiving of mistakes drivers and other road users will make, and in-vehicle safety technology utilised to its full extent.

We publicly consulted on a draft new Road Safety Strategy through December 2024 into February 2025. Responses were received from a wide range of individuals, including West Sussex residents, parish councils, and professional organisations. We have reviewed the comments received and taken them into consideration in preparing this Strategy. My thanks to all the contributors, your opinion is valuable to us.

The ambition of this Strategy and associated documents is to further integrate Safe System in West Sussex with the aim to reduce, and ultimately eliminate, the number of KSIs on roads in West Sussex, and I urge all road users to step up and play their part in assisting us with this challenge.

Joy Dennis, Cabinet Member for Highways and Transport

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1. Our vision for road safety in West Sussex

"A highway network free from people being killed or seriously injured, to influence behaviour to support safe road use, to create a safer road environment for everyone, and to facilitate and encourage increased active and sustainable travel."

1.1 The vision of West Sussex County Council, through this Road Safety Strategy, is:

- **A highway network free from people being killed or seriously injured.** Our ultimate ambition, which extends beyond the life of this Strategy, is to achieve Vision Zero (see 2.2), i.e there will be no persons killed or seriously injured (KSIs) whilst using the public highway network by 2050.

- **To influence behaviour to support safe road use.** The manner in which people use the highway network is critical to achieving Vision Zero. With road user behaviour being a significant contributor to road traffic collisions and the severity of resultant injuries to casualties, we will undertake measures through education, training and publicity that aim to influence safe road use.

- **To create a safer road environment for everyone.** All road users are important to the wealth and wellbeing of West Sussex. Our ambition is to have a highway network (including footways, cycleways and roads) that is safe to use by everyone.

- **To facilitate and encourage increased active and sustainable travel.** This Strategy will support our Transport Plan and Active Travel Strategy to facilitate the installation and improvement of infrastructure and facilities that assist active and sustainable travel, and to encourage greater use of those facilities.

2. Context

2.1. National context

2.1.1 Road deaths and injuries impose a terrible human cost and a heavy economic burden on society. The Department for Transport estimates the average value of prevention of each reported collision (based on 2023 data) as being:

£2.7m per Fatal collision

£311k per Serious injury collision

£31k per Slight injury collision

2.1.2 The methodology for calculating this value encompasses: human costs, which reflect pain, grief and suffering (for those involved and families); the direct economic costs of lost output (the loss of productive capacity of an individual as a result of their injuries); the medical costs associated with attending the scene, hospital services, and rehabilitation care; police costs (attending the scene, investigating the causes, and reporting); costs of damage to property (including vehicles and 3rd party property); and the costs of insurance administration to handle claims.

2.1.3 There are also environmental impacts of vehicle collisions, whether these are in the immediate aftermath of the incident, or prolonged effects on the public infrastructure, property, or persons. The impact will vary between types and severity of incident, or where it occurred (urban, rural, local road, motorway etc), but will have either direct (debris, spills etc) or indirect (congestion, emergency service vehicle emissions, medical aftercare etc) consequences.

2.1.4 How safe people feel in their environment also affects the lifestyle and travel choices they make, potentially imposing a further economic, environmental, and social burden on society. The health benefits of adopting active travel options are also well documented. Movement should not be at the expense of human wellbeing or the environment, and people should feel comfortable being able to walk, wheel, ride a horse, cycle, or use public transport rather than using a car. The most vulnerable in society such as children, older people and those with disabilities can be the most adversely affected by the consequences of collisions and the fear of road danger.

"Those who can cause greatest harm, have the greatest responsibility to reduce the risk they may pose to others."

2.1.5 Whilst all road users have a responsibility for their own safety and should ensure they travel on the highway network, by whichever mode they choose, safely and in accordance with legislation and guidance in the Highway Code, there is also a shared responsibility for all road users to be mindful of how their own actions influence and impact others. The 2022 publication of the highway code introduced revisions to road user behaviour and a hierarchy of responsibility (Figure 1) with those who are most vulnerable being at the greatest risk of harm. Conversely, those who have the potential to cause the greatest harm have a higher level of responsibility towards other road users and should adjust their behaviour accordingly.

Figure 1 Hierarchy of road users (modified from an image from THINK! – Road safety)

2.1.6 Functional hierarchy relates to the way a road is being, or could potentially be, utilised by different road users. For example, roads in town centres will likely have a higher number of pedestrians, wheelers, and cyclists mixing with a high volume of both local and through traffic - generally with infrastructure provided to help segregate the different users and appropriate speed restrictions in place. A minor rural road, however, may experience lower volumes of both vulnerable road users, including equestrians, and motorised traffic, but potentially with no segregating infrastructure and with traffic moving at higher speeds posing a greater risk of more serious injury. The functional use of the road therefore plays a significant role in determining how a highway should be managed, and wherever there is potential for conflict and vulnerable road users cannot be segregated, they should have greater priority over motorised traffic and vehicle speed appropriately managed.

2.1.7 There are statutory duties imposed on local authorities regarding road safety. These include s122 of the Road Traffic Regulation Act 1984; s39 of the Road Traffic Act 1988; s16 of the Traffic Management Act 2004; the Fire and Rescue Services Act 2004; the Equalities Act 2010; and Social Care Act 2012. These cover a broad range of activities and services provided by West Sussex County Council and not limited just to how roads and pavements are managed.

2.1.8 Although there is currently no national road safety policy, the Government has committed reviewing this and how to integrate Safe System and Vision Zero (see 2.2) ambitions. In the absence of a national policy the Department for Transport (DfT) has previously published advisory road safety statements "Working Together to Build a Safer Road System", and "A Lifetime of Road Safety" which set out a national vision, values and priorities for road safety.

2.1.9 Through the Safer Roads Fund provided through the DfT safety has been improved on many strategic routes throughout England, including the £2.4m project on the A285 between Chichester and Petworth in 2019, and work continues to address other high-risk routes.

2.1.10 When it comes to understanding why a collision occurs there are many contributory factors that can influence the outcome and impact on casualties. The National Police Chiefs' Council (NPCC) has identified the "Fatal Four" motoring offences that likely result in KSIs as: speeding; driving under the influence of drink or drugs; driving while distracted (e.g mobile phone use); and not wearing seatbelts. These are behaviours that for many have become normalised. Other factors that could also influence the likelihood or outcome of a collision include road environment and condition, weather conditions, vehicle condition and defects, road user illness, or simply inexperience.

2.2 Vision Zero & Safe System

"Road deaths are not acceptable."

2.2.1 Vision Zero is a global concept to eliminate all road traffic fatalities and severe injuries by 2050, adopted internationally, as well as by many authorities and road safety partnerships across the UK. Many countries have seen positive reductions in the number of KSIs, particularly road deaths, since adoption and integration of Safe System principles.

2.2.2 Adopting Vision Zero provides the sense of direction and recognition that deaths and life changing injuries on the road are not acceptable, though it is widely acknowledged this is an ambitious challenge. Because such events are the combination of many factors including road environment, road user behaviour, vehicles, and post-crash response and medical care, addressing any one of these factors will help give those involved in a collision a better chance of survival, and addressing them all the best chance of avoiding serious, if any, injury.

2.2.3 Underlying Vision Zero is "Safe System" (Figures 2 and 3), formulated by the International Transport Forum and widely accepted as current road safety best practice. Safe System is endorsed by organisations worldwide, including the World Health Organisation for the positive impact it can have on health and wellbeing. It is rooted in the belief that humans make mistakes and are vulnerable, so can come to harm in the event of a road traffic collision. The focus is on protecting those involved in the collision, rather than preventing the collision from occurring.

Figure 2 Safe System. Source: Loughborough University Design School, 2017, with PACTS modifications, 2022

"A Safe System recognises a shared responsibility, and is about protecting people involved in a collision, rather than preventing the collision itself."

2.2.4 Safe System promotes a combination of measures that in the event of a collision the impact forces remain below the threshold likely to cause death or serious injury. Taking kinetic forces out of a collision increases the chance of survival. The principle is that all aspects interact with each other so whilst there is emphasis on road designs and highway management providing a safer roadside environment, there should also be collaboration between all stakeholders to play their part, including road users who share the responsibility for their own and others' safety.

Safe road use (behaviour)

- Roads users are regulated or educated in their use of the roads, according to their modes of transport and levels of risk.
- Drivers should receive high quality training and testing and are expected to comply with road traffic laws.
- Provision is made to support children, pedestrians, cyclists, and equestrians to travel in safety.

Safe speeds

- Road users' ability to avoid crashes and their survival in the event of a collision is directly affected by the speed and consequent energy involved in the system.
- Safe speeds recognise human frailty, either in decision making or in surviving an impact. Higher speeds should only be feasible where the environment and infrastructure, and vehicles, can support and protect vehice occupants and other road users.

Safe roads and roadsides

- Roads are designed to reduce the risk of crashes occurring and roadsides are forgiving for occasions when mistakes occur.
- Segregating traffic to protect vulnerable road users is prioritised and the treatment of roads where there is greater risk or hazards is proactive, improving both the actual and perceived risk to road users.

Post collision response

- In the event of an incident, emergency medical response should reach any injured parties quickly, transit to high quality trauma care is rapid, rehabilitation services are readily available, and victim support is on hand.
- After the incident, data on the causes of the collision feed into systems to rehabilitate roads and evaluate how the system can be strengthened.

Safe vehicles

- Vehicles offer a high level of safety to both occupants and other road users. Safety systems, such as seatbelts, are augmented by more advanced active safety measures, like autonomous emergency braking and electronic stability control.
- Routine checks for all vehicles ensure they are maintained to the highest safety standards.

Figure 3 Safe System description

2.3. Language

"It's a crash or collision – not an accident!"

2.3.1 Language matters in transport safety – not just in what is reported, but how. Language is never neutral – it reflects our values, our assumptions, and our priorities. The use of appropriate language when discussing road safety is critical in addressing road user behaviours and avoid normalising poor behaviour. Poor use of language can confuse or misdirect what actually happened, obscure potential solutions, and even engender aggression toward particular participants in an event. Changing language is vital to changing attitudes.

2.3.2 The national charity RoadPeace, supporting road crash victims in the UK, state the term "accident" exemplifies society's tolerance of road danger. To use this term does not hold drivers accountable for their actions, implying instead it was a matter of chance. By calling a road traffic collision an "accident" assumes it was unavoidable and nothing can be done about road deaths and injuries, and they are an acceptable pay off for having motor vehicles. Aeroplanes and trains do not "have accidents" – they crash.

2.3.3 When describing road traffic collisions, care should be taken to avoid focusing on one road user over another. For example, saying "a pedestrian was hit by a car" puts focus on the pedestrian and ignores that the car was being driven by a person. A more accurate description might be: "a driver crashed their car into a pedestrian". Language which suggests a vehicle as active, such as "the vehicle drove at speed" (the driver was speeding), should never be used.

2.3.4 Through this Strategy WSCC has adopted the use of "crash" or "collision" to describe incidents that occur on the public highway and commits to using appropriate language when discussing road traffic collisions.

2.4. Local context

2.4.1 The current Road Safety Framework 2016-2026 (RSF) in West Sussex no longer reflects the current road safety environment and ideals. Much has changed since its introduction, specifically the development of Safe Systems and experiences of its application worldwide. In addition, the advancement of technology to both support identification of risk and protection of road users (such as in-vehicle technology) have rapidly advanced, and the way people use the roads has changed with an increase in walking, cycling and the introduction of more personal powered transport such as e-scooters. Covid-19 also changed commuting habits with more people working from home affecting the make-up of peak hour traffic and timings.

2.4.2 Our Council Plan 2021-2026 sets out the priorities for West Sussex County Council and the outcomes we want to achieve for people who live and work in West Sussex. Road safety is intertwined with these priorities, either directly or in support of the many associated policies and strategies.

2.4.3 Specifically, the West Sussex Transport Plan 2022-2036 (WSTP) provides strategies to address key challenges in the county by maintaining, improving,

and managing the transport network. This is complemented by the Active Travel Strategy 2024-2036 which addresses integrating and encouraging active travel modes into everyday use; the Highway Infrastructure Asset Management Policy and Strategy setting out how we maintain highway assets; and the Highway Network Management Plan describing how we manage the road network.

2.4.4 Further relevant strategies include the West Sussex Community Risk Management Plan 2022-2026 detailing how West Sussex Fire and Rescue Service addresses road safety; the Climate Change Strategy 2020-2030; and the Sussex Integrated Care Strategy 2022-2027.

2.4.5 This Road Safety Strategy, and supporting documents, is complementary to these other strategies and should therefore be read and considered in conjunction with them and their supporting documents. It replaces the RSF.

3. Where are we now?

3.1.1 The previous RSF set a target to reduce the number of KSIs on West Sussex roads by 25% against the national baseline average of 2005-2009 by 2020 - a reduction from 473 to fewer than 355 KSIs per annum.

3.1.2 This target was replaced by Key Performance Indicator KPI41 in Our Council Plan (to March 2024) with a target to reduce the number of KSIs per Billion Vehicle Miles (BVM) by 33% by 2030, a reduction from 112 to less than 75 KSIs/BVM (Figure 4). This measure is also included as a road safety indicator in the WSTP. This method of measurement is heavily influenced by traffic volume and whilst it can be a good comparator to other geographic areas, it is not a true indicator of the number of actual collisions occurring, which is generally easier to interpret.

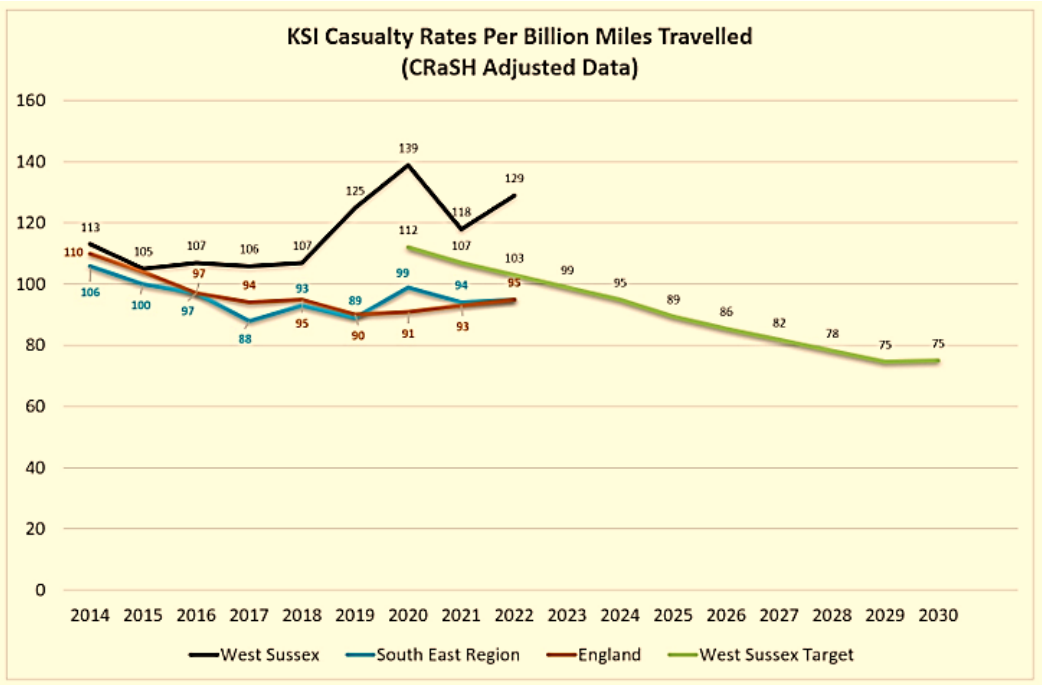

Figure 4 West Sussex KSI rates per billion miles travelled to 2022

3.1.3 To date neither of those previous targets has been achieved. In 2024 there were 526* KSIs in West Sussex, slightly lower than the most recent 3-year average

but an increase on the 5-year, and 10-year averages (Figure 5). Car drivers remain the predominant user group to suffer death or serious injury due to the higher volume of road users in this category, and motorcyclist KSIs continue to be disproportionately high due to their increased vulnerability. Pedestrian and cyclist KSIs remain a concern in our efforts to encourage increased active travel.

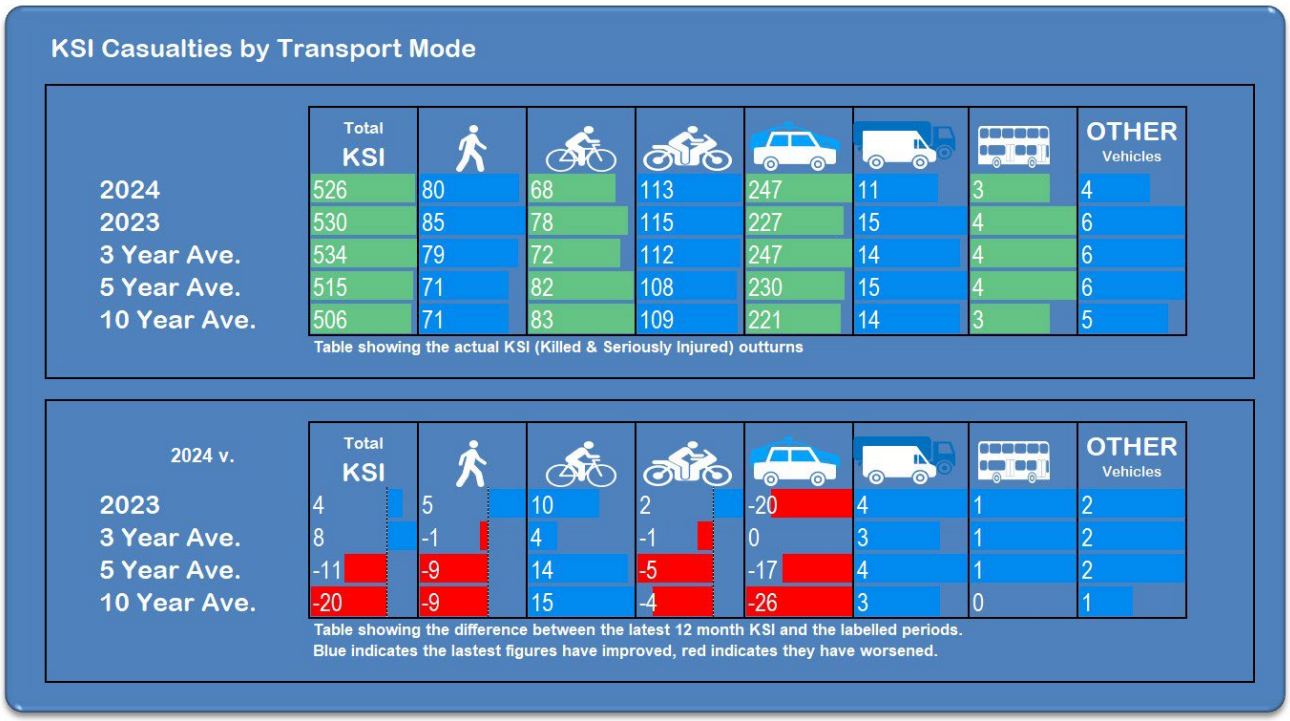

Figure 5 West Sussex KSI Casualties by Transport Mode 2024

*2024 data subject to approval by the Department for Transport and may be subject to minor amendment.

3.1.4 Numerous factors have contributed toward this KSI trend. In 2019 Sussex Police changed their database to an injury-based reporting system, called CRASH, which records injury severity more accurately. This had the effect of increasing the number of injuries reported as serious and is considered to be the main factor for a 20% increase in the number of KSIs that year.

3.1.5 Furthermore, the impact of Covid-19 restrictions in 2020 and 2021 led to a reduction in traffic and changed travel choices and behaviour of many road users, leading to an increase in walking, cycling and micro-mobility activity. Although injury related collisions dropped by 20% overall during that period, the number of KSIs remained high, with an increase in vulnerable road users coming to harm.

3.1.6 Figure 6 shows that despite a modest reduction in the number of collisions in West Sussex the overall number of KSIs has remained fairly static for the last 10 years. The number of road deaths has also remained fairly constant, and though the numbers are small compared to injuries overall, there are still too many in our efforts to achieve Vision Zero.

Figure 6 Injury collisions in West Sussex 2015-2024

3.1.7 The most at-risk age group for KSIs in West Sussex across all modes of transport is those aged 17 to 24 (figure 7). This age group contains the highest proportion of new and inexperienced drivers / riders but the data also includes those who may be a passenger or other road user. Whilst the data does not demonstrate fault / blame for causing the collision, given fault could be attributed to more than one person involved, statistically this age group are more likely to take risks when driving, walking, or cycling and therefore more likely to be involved in a collision. The likelihood of being involved in a collision in West Sussex does diminish with age, but older road users are generally more frail and more likely to suffer a serious injury.

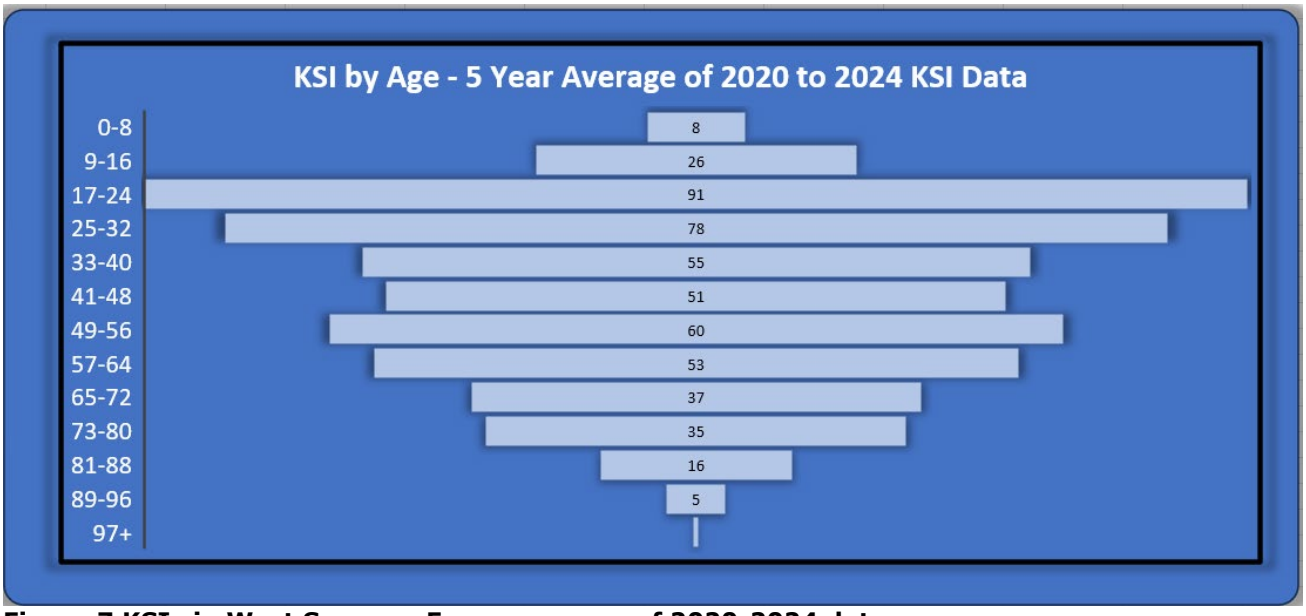

Figure 7 KSIs in West Sussex - 5 year average of 2020-2024 data

3.1.8 We have previously targeted road user behaviour through a programme of Education, Training and Publicity, including delivery with external partners. Interventions have included:

- Road safety training in schools through initiatives such as Step Up, Theatre in Education, and Safe Drive Stay Alive.
- Cycle training to the national Bikeability standard delivered to over 6,000 children in primary schools per annum.
- The National Driver Offender Retraining Scheme (NDORS) National Speed Awareness Course, as well as a range of other road user behaviour courses, delivered on behalf of Sussex Police.
- Direct engagement with motorcyclists through campaigns such as Biker Down, Bike Safe, and ICE (In Case of Emergency) stickers.
- Delivering road safety messages through social media channels and digital newsletters.
- Attendance at local events and fire station open days.

3.1.9 Recognising the influence of speed on KSIs and acknowledging the 2022 road user hierarchy changes to the Highway Code, the West Sussex Speed Limit Policy was reviewed and revised in 2022. The revised policy provides greater flexibility in the assessment and application of speed limits allowing the opportunity for lower speed limits to be introduced based on the functional use of the road, giving greater priority to vulnerable road users and to encourage more sustainable and active travel choice where appropriate. However, safe speeds does not just relate to speeding or will be achieved through speed limits alone. Effective speed management can also be achieved through road design and may require other measures to encourage people to drive at safe speeds at all times, particularly when road conditions are affected by congestion, inclement weather, or other factors.

3.1.10 We have addressed locations with higher-than-average personal injury collisions through safety engineering improvements. Sites have been determined through analysis of existing collision data, at either fixed locations or along longer routes, and where there is an identifiable pattern that can be treated. More recently we have also investigated additional data and analysis that helps identify sites where collisions have not occurred, but potentially pose a greater risk of injury should a collision occur.

3.1.11 As well as delivering safety specific engineering improvements all other highway schemes and maintenance consider road safety as part of the assessment and design process. Furthermore, communities have had the opportunity to request local highway improvements through our Community Traffic Regulation Order and Highway Scheme processes, and we have sought highway improvements through new housing developments.

3.1.12 Development of this Strategy has included consultation with various local authority and road safety partnerships and analysis of their road safety strategies, as well as research from leading road safety professionals and organisations in the UK and Europe, to ensure it considers best practice and experience.

4. The Strategy

"It can never be acceptable that people are killed or seriously injured when moving within the road transport system."

4.1 KSI Casualty Reduction Target

4.1.1 In working towards achieving our vision and recognising the complexities and shortfalls of the KSI/BVM target, in April 2024 KPI41 was amended. Our aspiration is to reduce KSIs by 30% by 2036, against a baseline average of 2015- 2019 casualties, a reduction from 497 to less than 338 KSIs. We are using 2015-19 as the baseline data as 2020 and 2021 traffic and collision data was affected by travel restrictions during the Covid-19 pandemic and are not representative of an average year.

4.1.2 Whilst this target falls short of the Vision Zero 2050 ambition, it is necessary to consider the context in which this applies and the need for all aspects of the Safe System principles to be compatible. Although we will strive to achieve Vision Zero, there are factors beyond the control of WSCC that may prevent this – such as attitudes and behaviours of road users, safety features in and levels of maintenance of motor vehicles, weather and other environmental conditions, speed of response to collisions, and treatment / aftercare of injuries sustained. Figure 8 demonstrates the proposed target which commences from a baseline of 497 KSIs to 348 by 31 December 2035. The most recent performance data against KPI41 can be viewed on the West Sussex performance website.

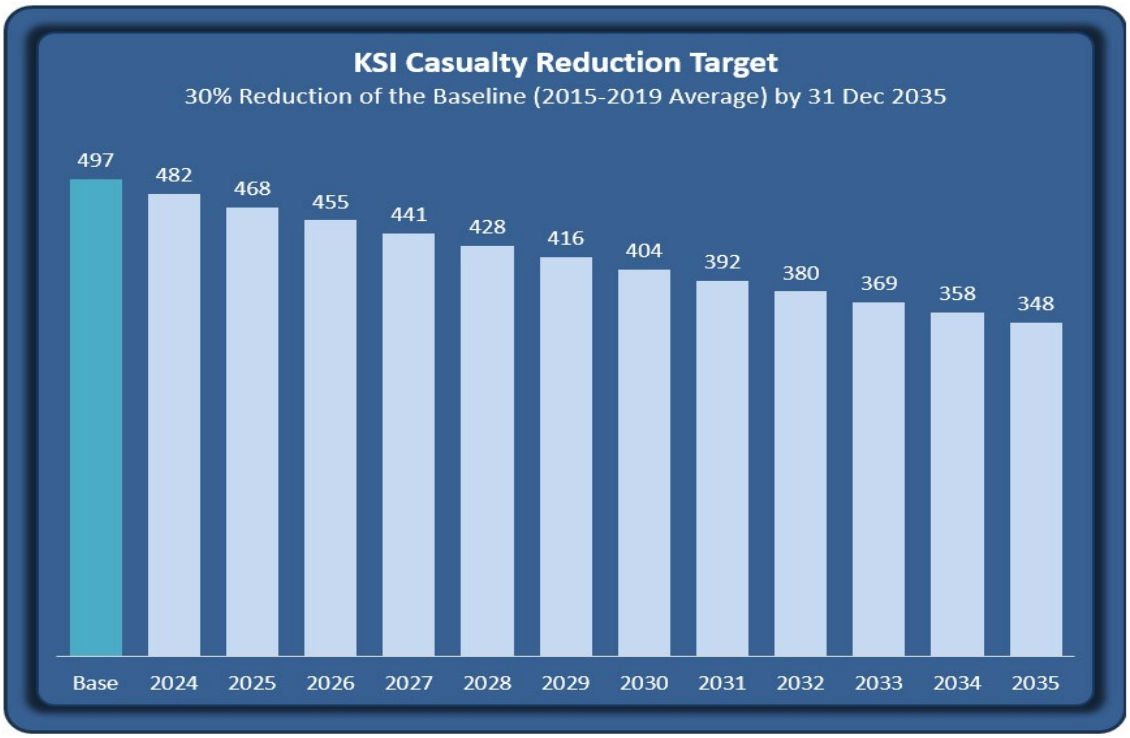

Figure 8 KPI41 target to reduce West Sussex KSIs by 30% of 2015-19 Average (Baseline) by 2036

4.2 Integrating Safe System

4.2.1 Our strategy to achieve our vision and associated target is through integration of Safe System. Relevant actions to support Safe System are identified in a Road Safety Action Plan, a working document that will be updated to reflect best practices and methods of working.

4.2.2 Analysing road traffic collisions is essential in understanding where and why collisions occur and who is involved. An evidence-led approach using road traffic collision data collected over several years continues to be the predominant method to prioritise interventions to help reduce the risk and severity of collisions. However, methodologies assessing risk, such as a "road risk assessment", analysis of "harsh braking" data, or "near miss" data provide a more holistic picture of where collision prevention interventions could be targeted, and what the solutions may be. We therefore intend to undertake a blended approach to identifying appropriate actions and interventions through both reactive and proactive methods.

4.2.3 Road safety interventions come in various forms, involve a range of stakeholders, and vary significantly in cost and effectiveness. They generally cover the main forms of education, engineering, and enforcement, though each of these can also be broken down into sub types. Safe System thinking ensures we also consider road safety in terms of crash response and after care, including considering how the risk of potential future collisions may be reduced.

4.2.4 As stated in paras 2.1.1 and 2.1.2 road traffic collisions have a significant economic effect, as well as social and environmental implications, so we will take the economy, people, and environment into account when considering appropriate road safety interventions.

4.2.5 Due to the continually changing nature of society and use of our roads we need to continue to develop improved road safety solutions and to maximise opportunities by working with a wider range of partners, internally and externally.

4.3 Safe Road Use / Behaviour

"Around 90% of all road traffic collisions are due to road user behaviour."

4.3.1 With research indicating approximately 90% of all road traffic collisions are due to road user behaviour, addressing poor behaviours and ingrained habits is a significant challenge. There are many aspects that can contribute to encouraging safe road use, Figure 9 indicates potential tools and methods available. To be truly effective to achieve Vision Zero there needs to be a cultural change in attitudes of road users and an acceptance of individual responsibility. Education, Training, and Publicity (ETP) is aimed at helping people to be aware of and to understand road safety issues and risks and providing appropriate training to improve their ability to safely use the road environment in a variety of modes.

Figure 4 Safe Road Use / Behaviour measures and interventions

4.3.2 The emphasis for ETP is increasingly about how we communicate and change those behaviours which lead to high risks or actual collisions resulting in casualties. This area of activity is aimed at informing, educating, and changing behaviour. However, the impact of ETP interventions is not easily measurable in terms of outcomes for casualty reduction. This does not mean ETP activity is any less valuable than other more easily measured interventions.

4.3.3 The best time to intervene with behavioural change techniques is when there are changes in life experience. ETP interventions that target key moments in life such as going to school for the first time, school changes, learning to drive, changing jobs, receiving a notice of intended prosecution, or retiring etc generally have the greatest impact, even if it is just short term. Road Safety is not a "once and done" exercise, continuing road safety messaging throughout life's journey is important to reinforce positive behaviours.

4.3.4 Social media and digital channels are now the most prolific options to keep people informed of road safety messaging and to advise on adverse weather and traffic conditions that may affect travel choice. The West Sussex Road Safety Facebook page is the primary social media channel for such messaging in West Sussex, though other WSCC and West Sussex Fire and Rescue Service social media channels and alternative published media will be used as appropriate. We will develop a Road Safety Communication Strategy that includes a summary and forward programme of road safety messaging.

4.3.5 Digital education resources are available to teach road safety in schools, such as through the DfT's THINK! website. Further digital road safety advice is also available through other websites. We intend to develop a portfolio of educational resources and host sites that we can share with educators and communities on demand.

4.3.6 Many shorter distance journeys in West Sussex, such as journeys to school, could be taken using more sustainable travel modes of walking, wheeling, or cycling rather than by car. Removing barriers to modal shift and increase levels of walking, wheeling, cycling and equestrianism for door-to-door journeys and leisure, requires continued investment in road safety interventions, safe active travel infrastructure networks, supporting services and travel behaviour change initiatives. The Active Travel Strategy provides focus on such initiatives and supports, and is supported by, this strategy and the WSTP.

4.3.7 The safety of cycling generates mixed opinion. Cyclists have a right to use the public highway safely and not to be intimidated or put at risk by motorised road users, but equally they must show respect to more vulnerable road users. Younger cyclists in particular often show a lack of spatial awareness and can be intimidating to pedestrians. To encourage safe cycling by children and as they move into adulthood, cycle training is delivered through the national Bikeability programme in schools, including SEND schools, that wish to participate. Further cycle training opportunity is available on demand, including child holiday courses, learn to ride, and adult 1 to 1 sessions and we will continue to develop cycle training provision. To further support individuals with additional needs, we also support the Horsham Wheels for All project, with a wide range of adapted trikes and cycles.

"As individuals, we can all help to prevent road deaths and serious injuries."

4.3.8 Enforcement is an essential tool in reinforcing educational messaging and engineering measures to support behavioural change. However, enforcement needs to be proportional and targeted. Speed enforcement is generally through camera technology at both fixed and mobile sites. Sussex Police are the lead authority for most traffic violation enforcement in West Sussex, including speed, and we will work with them to identify and prioritise sites of concern. This includes liaison over existing and opportunities for new safety camera sites.

4.3.9 Through the Traffic Management Act (TMA) Local Authorities can apply for powers to enforce certain road traffic offences. Where appropriate WSCC will consider adoption of powers for moving traffic offences particularly where it can enhance road safety.

4.3.10 Inconsiderate parking can negatively impact safety, particularly in areas where it causes obstruction, restricts sight lines, or reduces the width of footways. Pedestrians with mobility issues and parents with children in prams and pushchairs are particularly adversely affected by inconsiderate footway parking. The West Sussex Integrated Parking Strategy sets out the County Council's approach to the management and enforcement of parking in West Sussex.

4.3.11 All types of enforcement will continue to play an important part by targeting priority groups and those displaying disregard for their own safety and the safety of others. Enforcement can also identify those displaying a lack of skill or poor judgment who may then benefit from further education. After-offence behavioural change education is generally through attendance at an approved NDORS course, subject to referral from the Police.

4.4 Safe Speeds

"The faster the speed, the greater the probability of death."

4.4.1 The Safe System approach recognises the human body has a limited capacity to absorb the forces involved in a collision. The greater the speed and kinetic energy involved in a collision the more likely serious injury or death will occur. A Safe System speed is currently defined as the impact speed where the probability of death is less than 10%; these speeds are referred to as survivable impact speeds (figure 10). Note the pedestrian / cyclist curve relates to a collision with a motor vehicle, and the side and head -on impacts are collisions between motor vehicles.

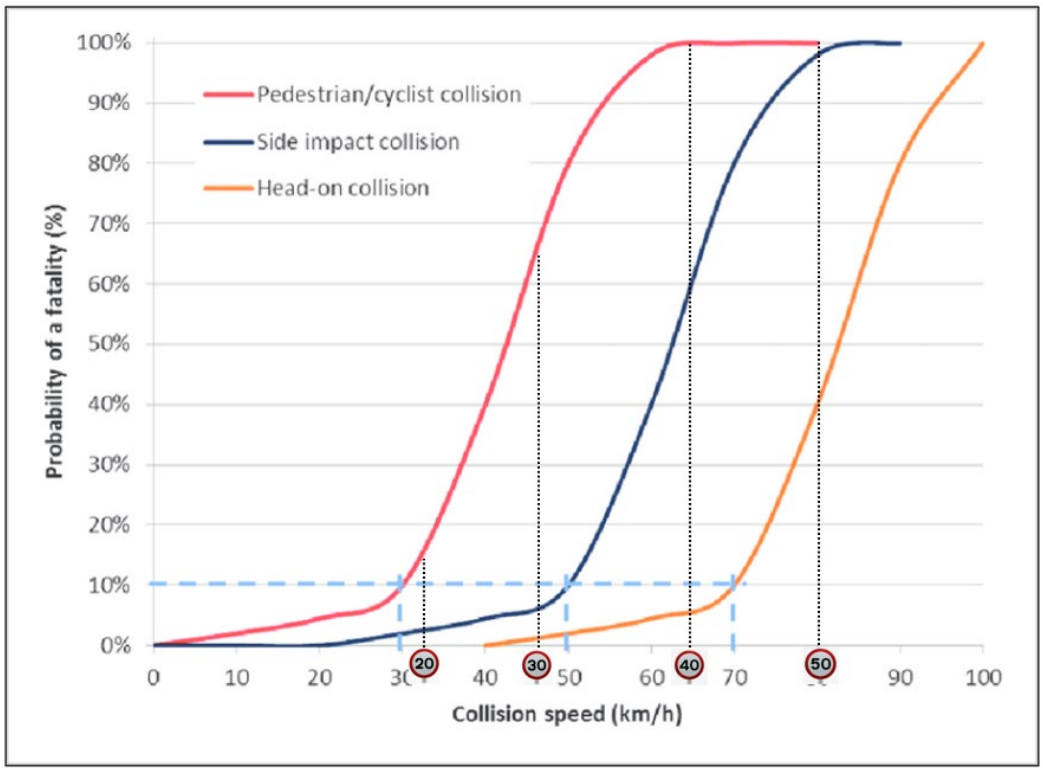

Figure 10 Probability of fatal injury by speed and crash type – based on Wramborg (2005)

4.4.2 As can be seen, the probability of death significantly increases with higher speeds – a pedestrian has less chance of survival when struck at 30mph than at 20mph. Similarly, the risk of death when 2 motor vehicles crash increases with each 10mph increment. There is overwhelming research demonstrating that driving slower reduces the likelihood and severity of collisions. However, survivable speeds may also be affected by other factors, including size and type of vehicle, age and health of the road users, and point of impact.

4.4.3 The faster a vehicle is being driven, the less time is available for decision making and reacting to a developing situation. This is for both drivers and other road users. As age increases, reaction times are also slower, as well as the cognitive ability to identify a risk or hazard. Younger road users also have a lower cognitive ability to identify risk and are subsequently more likely to take a risk than older road users. Lowering traffic speeds makes the roads less dominated by motor vehicles, so potentially increasing their suitability for walking and cycling, and reduces noise, pollution, and carbon dioxide emissions, often with minimal or no impact on travel times.

"An average speed reduction of 1mph reduces crash frequency by 5%."

4.4.4 Reducing vehicle speeds plays a pivotal role in protecting vulnerable road users. The West Sussex Speed Limit Policy is centred around appropriate speeds for the functional use of the road, providing flexibility to introduce lower speed limits to support vulnerable road users. However, speed limits are not always complied with or necessarily the correct solution so other interventions, including behavioural change techniques and traffic management measures, may be more appropriate. We will continue to work with Sussex Police and communities to identify appropriate interventions and opportunities to support safer speeds, including the use of safety camera technology.

4.4.5 Since the introduction of the revised Speed Limit Policy in 2022, more speed limits have been introduced that benefit vulnerable road users and seek to reduce the kinetic energy of a road traffic collision. We are monitoring these sites to measure the level of compliance and the impact on road risk. We will continue to review speed limits and make changes where appropriate, across individual sections of road but also as part of wider schemes.

4.4.6 To further support this Strategy and the supporting Speed Limit Policy we will produce a Speed Management Manual that sets out how to apply the Policy as well as methodologies and options to assist management of safe speeds.

4.5 Safe Roads & Roadsides

"In a Safe System, roads and roadsides are designed to reduce the risk of a collision, and to mitigate the severity of injury should a collision occur."

4.5.1 Many aspects contribute to safe roads and roadsides (Figure 11). At the forefront of this, roads should be self-explaining with their design to encourage safe travel, so they are predictable and forgiving of mistakes. In the event a collision does occur, there is lower risk of fatal or serious injury.

Figure 11 Safe Roads and Roadsides complementary measures

4.5.2 Safety engineering interventions address sites where treatable collisions or risk of serious injury have been identified by making alterations to the road environment to make it safer. This includes:

- Single cluster sites, where there is a high concentration of similar collisions in the same location, or very close to each other, within a specific, recent period of time. Priority is given to those sites with the highest concentration of KSIs, where there is an identifiable solution, and the proposal is cost effective.
- Routes where a high rate of collisions occur along a longer length, and generally over a longer period of time, particularly on the County Strategic Route Network (CSRN). The solutions are often complex and involve a range of interventions, both low and higher cost.
- Routes or individual locations where data indicates a high risk of serious injury is probable. This is a new methodology and may include simpler interventions or be included in a more complex / costly scheme.

4.5.3 Measures include those to influence driving behaviour as well as removing or mitigating roadside hazards that increase the risk of fatal or serious injury. Lower cost interventions could be reduced speed limits and traffic signs and road

marking improvements, with more costly infrastructure changes being pedestrian crossings, segregated cycle facilities, surface treatments, vehicle restraint systems, vertical or horizontal deflections, or junction improvements.

4.5.4 Collision monitoring across the network is undertaken throughout the year, with cluster site analysis undertaken on an annual basis when the previous year's data is available. The initial search period is the previous 3 years, which on average identifies in excess of 150 sites. A deeper dive into earlier data is undertaken on approximately 30 of the highest risk sites which results in a priority list of between 8 and 12 sites for inclusion in a future works programme. Routes are assessed in a similar way, with 2 or 3 priorities being taken forward for detailed investigation.

4.5.5 When new development and other infrastructure investment occurs, opportunities are taken to ensure high design standards are adopted and in accordance with national guidance and best practice. It is also important that place and transport plans ensure risk factors are minimised to support vulnerable road users and encourage active travel choices.

4.5.6 Maintenance works provide a positive contribution to road safety through skid resistance, drainage, visibility at junctions, signing, and lighting on the highway. The Well-Managed Highway Infrastructure Code of Practice (2016) makes recommendations for a risk-based approach to highway maintenance, and this is reflected in the West Sussex Highway Infrastructure Policy and Strategy and Highway Inspection Manual which set out the WSCC highway maintenance regime.

4.5.7 Any new infrastructure placed on the highway should be in accordance with Passive Safety guidelines to ensure the structure does not present an additional hazard or risk of injury to road users.

4.5.8 Road Safety Audits are intended to ensure operational road safety experience is applied during the design and construction process of all highway improvement schemes so the number and severity of any future road traffic collisions occurring are kept to a minimum. All engineering schemes which alter highway infrastructure, and the behaviour of road users, is subject to the West Sussex Road Safety Audit process.

4.5.9 On road technology can provide valuable assistance to road users to alert of roadside hazards and avoid potential collisions. Additionally, there have been significant technological advances in data available direct from vehicles (referred to as "connected vehicle data") and mobile devices used by road users that assist in identifying circumstances and behaviours before, during, and after a road traffic collision, or even a "near miss" incident. These industries and service areas are constantly evolving and developing new products so WSCC will consider use of appropriate technology whenever the opportunity arises.

4.6 Post Collision Response

4.6.1 All road traffic collisions involving personal injury occurring on the public highway in West Sussex and reported to the Police are recorded and monitored. Analysis of the entire West Sussex highway network is undertaken annually, with specific routes and higher-risk sites monitored more frequently. Sites or routes identified as a priority due to a higher-than-average collision record or deemed high risk of harm are subject to further investigation and considered for interventions (see 4.5.2 – 4.5.4).

4.6.2 Any fatal or potentially fatal collisions occurring on the adopted public highway network are investigated in conjunction with Sussex Police through a Road Death Investigation process. This includes undertaking a site inspection within 72 hours of the collision, analysis of the circumstances of the collision, and considering any alterations or improvements that may be required to prevent a further incident. Where appropriate it also includes liaison with the County Coroner.

4.6.2 After a safety scheme or reduced speed limit has been delivered, the effect of that scheme is monitored and evaluated by further data analysis and comparison to other control sites. Where further improvements may be required these will be considered and implemented.

4.6.3 West Sussex Fire and Rescue Service endeavour to attend a road traffic collision within 13 minutes and to support the other emergency services in dealing with such incidents, and through our Public Health relationships and other external services support is available to victims of road traffic collisions.

4.7 Safe Vehicles

4.7.1 Any vehicle used on the public highway must comply with appropriate legislation regarding condition and use. It is the responsibility of individual vehicle owners and fleet operators to ensure they comply including undertaking simple maintenance such as checking tyres and ensuring the windscreen is free of obstruction.

4.7.2 Most new vehicles since 2015 have been equipped with a range of safety related technology features, such as Collision Avoidance Systems; Automatic Emergency Braking (AEB); Electronic Stability Control (ESC); Traction Control; Blind Spot Monitoring; Adaptive Cruise Control; Intelligent Speed Assist (ISA): Lane Assist & Departure Warning; Adaptive Headlights; Driver Alert Systems; Tyre Pressure Monitoring etc. This is in addition to older technology such as Airbags and Seatbelts. Whilst some may be optional, or can be manually turned on or off, we advise any safety features incorporated into a vehicle design should remain active at all times, and where use of the safety feature is mandated by statute (such as seatbelts), that vehicle users ensure they comply.

4.7.3 The West Sussex vehicle fleet, and those of our contractors, comprises of well-maintained vehicles that reduce the risk of collisions and in the event of a collision reduce the harm to occupants and other road users.

4.7.4 We will use appropriate media to promote safe vehicles and their safety features through information campaigns.

5. Road Safety Action Plan

5.1.1 A Road Safety Action Plan supports the delivery of this Strategy. This is a working document that will be updated to reflect best practice and methods of working. Primary actions included in the Action Plan, and how they relate to Safe System are shown in Table 2.

Ref	Actions	Safe Road Use	Safe Speeds	Safe Roads and Roadsides	Post collision response	Safe Vehicles
1	Use collision data analysis and risk-based methodology to identify and assess high-risk sites and routes in both rural and urban settings, applying a fair and consistent prioritisation system.		✓	✓	✓	
2	Develop a works programme to deliver a range of safety engineering interventions, using economic analysis to deliver cost effective schemes.	✓	✓	✓	✓	
3	Ensure highway improvement designs are inclusive of all users, including those with disabilities, taking account of the hierarchy of users which places the most vulnerable at the top.	✓	✓	✓		
4	Ensure highway maintenance and management regimes acknowledge and apply the Safe System approach.	✓		✓		

5	Ensure all new developments and associated highway infrastructure changes acknowledge and apply the Safe System approach.	✓	✓	✓		
6	Undertake Road Safety Audits on all highway schemes in accordance with WSCC processes, national standards, and best practice.	✓		✓	✓	
7	Develop a Speed Management Manual.	✓	✓	✓		
8	Consider and apply suitable speed reductions, with supporting measures where appropriate, to support sustainable and active travel choice.	✓	✓	✓		
9	Collect and monitor data after the introduction of new schemes or restrictions to demonstrate their effectiveness, and apply any lessons learnt for future schemes.			✓	✓	
10	Use casualty data to identify road users most at risk.	✓			✓	
11	Develop and deliver behavioural change campaigns and interventions aimed specifically at high-risk groups and through a wide range of media.	✓				✓
12	Develop and support delivery of targeted educational measures and to support road safety campaigns by national and partner organisations.	✓				✓

13	Continue to develop and deliver cycle training.	✓				✓
14	Continue to deliver safety, weather and traffic conditions messaging through social media / digital channels and explore new opportunities to increase reach.	✓	✓			
15	Research, consider, and develop opportunities to introduce new innovations in moving traffic enforcement and early hazard detection technology.	✓	✓	✓		
16	Use appropriate language	✓			✓	
17	Provide training and support for staff across the County Council in the Safe System approach.	✓	✓	✓	✓	✓

Table 1 Road Safety Action Plan Primary Actions

6. Safety Performance Indicators

6.1.1 Monitoring and evaluation of any programme or intervention is essential to determine whether it is effective, to identify priority areas for improvement, to help refine programme delivery, and to provide evidence for continuing support of the programme.

6.1.2 We have identified key Safety Performance Indicators (SPIs), which will be used to monitor performance of this Strategy. These SPIs are listed in Appendix 1.

6.1.3 We will continue to develop our monitoring and evaluation processes to inform evidence-based practice to ensure future interventions are an effective and efficient use of resources.

7. Governance

7.1.1 This Road Safety Strategy, the Road Safety Action Plan, and the SPIs will be monitored by the Assistant Director Highways Transport and Planning (HTP) and HTP Senior Management Team, and performance reported to the Cabinet Member for Highways and Transport annually.

7.1.2 The WSTP Annual Monitoring Report provides an annual progress report on commitments in the WSTP, which includes road safety and the road safety performance indicator. In addition, KPI41 of Our Council Plan will continue to be

monitored and reported on as a direct performance measure for the County Council.

7.1.3 Activities progressed in collaboration with partner organisations will be subject to separate governance through those organisations to ensure they continue to deliver to their expectations.

Appendix 1 – Safety Performance Indicators

These Safety Performance Indicators (SPIs) have been identified to track progress against the Road Safety Strategy and KPI41 target to achieve a reduction in KSIs.

SPI ref	SPI Name	Details
SPI-01	KSIs	The number of people killed or suffer serious injury across all travel modes in road traffic collisions in West Sussex.
SPI-02	KSSIs	The number of casualties across all injury severities and travel modes involved in road traffic collisions in West Sussex.
SPI-03 SPI-04	Collisions by travel mode Casualties by travel mode	The number of road traffic collisions and resultant casualties in West Sussex categorised by travel mode: • Pedestrians • Personal Powered Transporter • Cyclists • Motorcyclists (all types) • Cars • Goods Vehicles • Buses • Other modes of transport.
SPI-05	Child casualties	The number of children aged 0-15 involved in a road traffic collision in West Sussex.
SPI-06	Young car drivers	The number of young car drivers aged 17-24 involved in a road traffic collision in West Sussex.
SPI-07	Older car drivers	The number of older car drivers aged 70 or over involved in a road traffic collision in West Sussex.
SPI-08	New speed limit compliance	The percentage of drivers complying with a new speed limit after 1 and 3 years of change, sub-divided by speed limit type: • 20mph • 30mph • 40mph • 50mph • 60mph (dual carriageways)
SPI-09	Speed related KSIs	The number and percentage of all road traffic collisions in West Sussex with speed cited as a contributory factor (as identified from Police STATS 19 records)
SPI-10	Road safety campaigns	The number of road safety campaigns* delivered across a range of media: • In person • Online • Social Media • Other (e.g leaflets)

		*Defined as a series of targeted activities or messages across one or more media.
SPI-11	Cycle Training	The number of people in receipt of targeted cycle training. Includes: • In school Bikeability courses • Summer child courses • Adult 1 to 1 sessions
SPI-12	Safety Engineering Schemes	The percentage reduction in KSIs and KSSIs achieved after 1 and 3 years at sites subject to a safety engineering scheme.

Glossary

Collision (a.k.a. Crash) Data: WSCC only holds traffic collision data that has been: reported to the Police (within 30 days); occurred on the adopted highway in West Sussex; and involved an injured person. This data is known as Stats 19 data, the collection of which is defined by the Department for Transport (DfT). The data can be collected by police at the scene of a collision, reported by a member of the public at a police station, or via online self-reporting to the Police. This data will differ from those collected by other organisations such as hospital admission data.

Collison: Collision severities are categorised as Fatal, Serious, or Slight. Damage-only collisions (collisions with no human casualties) or collisions on unadopted roads or car parks are not included in Stats 19.

Fatal Collision: A collision in which at least one person is killed or dies less than 30 days after the collision (note, if death occurs 30 or more days after the collision it is recorded as a serious collision). Confirmed suicides and death by natural causes are excluded.

Serious Collision: A collision in which at least one person is seriously injured. It may also include one or more persons with a slight injury but no persons who were fatally injured.

Slight Collision: A collision in which at least one person is slightly injured, but no person is killed or seriously injured.

Casualty: A person killed or injured in a road traffic collision.

KSI: The total of killed and seriously injured casualties. KSI data is typically used to measure performance reduction targets.

KSSI: The total of all killed, seriously injured and slightly injured casualties.

Fatal (Killed) Casualty: Human casualties who sustained injuries which caused death within 30 days of a collision. Confirmed suicides and death by natural causes are excluded.

Serious Casualty: A person receiving a serious injury for which they are 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, crushing, burns (excluding friction burns), severe cuts, severe general shock requiring medical treatment and injuries causing death 30 or more days after the collision.

Slight Casualty: A person receiving a slight injury of a minor character such as a sprain (including neck whiplash injury), bruises or cuts which are not judged to be severe, or slight shock requiring roadside attention. This definition includes injuries not requiring medical treatment.

Child Casualty: A person aged 0 to 15 years inclusive.

Safe System: An approach to road safety and traffic management that recognises everyone has a right to be safe on the highway network but also that humans make mistakes and provides themes to help mitigate the likelihood or effect of a collision.

Trunk Roads are major roads maintained by National Highways and form part of the national Strategic Road Network (SRN). In West Sussex these include the A27, the M23 and the section of the A23 between the M23 and Brighton.

MRN: Major Road Network. The MRN represents the county's busiest and most economically important 'A' roads (excluding Trunk Roads), sitting between the national Strategic Road Network (SRN) and the rest of the local road network.

CSRN: County Strategic Road Network. The CSRN links the ten largest urban areas in West Sussex and is intended to attract the majority of medium and long-distance travel and freight movements. The CSRN includes all roads on the MRN plus the most important of the other 'A' class roads.

WSTP: West Sussex Transport Plan. The West Sussex Transport Plan 2022-36 (LTP3) sets the strategy for guiding future investment in our highways and transport infrastructure. It also sets a framework for considering transport infrastructure requirements associated with future development across the county.

DfT: Department for Transport

Road Safety Audit: A systematic process to provide an independent review of the road safety implications of a highway improvement or new road system for all road users. It will consider aspects that could give rise to road safety problems and to suggest modifications that could improve road safety.