POST ROAD TRAFFIC COLLISION SUPPORT

Understanding the post Road Traffic Collision victim support landscape in England and Wales

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Glossary

Term	Full name/description
APCC	Association of Police and Crime Commissioners
APP	College of Policing's Authorised Professional Practice guidance
Casualty	A person killed or injured in a collision. Casualties are sub-divided into killed, seriously injured and slightly injured, as per the Department for Transport STATS19 dataset.
Criminal collision	Collisions that are recorded as crimes in relation to the following driving offences: (1) causing death or serious injury by dangerous driving, (2) causing death by careless driving under the influence of drink or drugs, (3) causing death or serious injury by careless or inconsiderate driving, (4) causing death or serious injury by driving: unlicensed, disqualified or uninsured drivers, (5) causing death by aggravated vehicle taking.
CRU	Compensation Recovery Unit
CSEW	Crime Survey for England and Wales
Culpable driver	This refers to a driver who has been convicted of a criminal collision offence. A driver at any other stage within a collision investigation is known as a 'driver under investigation'.
DfT	Department for Transport
Direct victim	Direct participants in the physical collision including casualties and uninjured passengers in vehicles involved in the collision.
Driver under investigation	A driver at any stage within a collision investigation other than those who have been convicted of a criminal collision offence who are known as 'culpable drivers'.
DWP	Department for Work and Pensions
FLO	Family liaison officer. FLOs are the conduit of information between victims, families and the police.
FSC	Fatal or serious collisions
HES	Hospital Episode Statistics
Killed	Definitions of severity are taken directly from the STATS19 reporting, which defines 'killed' as human casualties who sustained injuries which caused death less than 30 days after the collision. Confirmed suicides are excluded.

Term	Full name/description
KSI	Killed or seriously injured casualties
MoJ	Ministry of Justice
Motor RTC	A collision that involves at least one mechanically propelled vehicle.
NTS	National Travel Survey (England)
PCCs	Police and Crime Commissioners
PFCCs	Police, Fire and Crime Commissioners
PTSD	Post-traumatic stress disorder
Road Traffic Collision (RTC)	This is used to refer to any collision which occurred on a public highway involving at least one motor vehicle, horse rider or pedal cyclist and where there is at least one injured person – does not include collisions on private land or damage-only collisions. It is aligned to the definition of collision used in STATS19 reporting.
Seriously injured	Definitions of severity are taken directly from the STATS19 reporting. Injured casualties are classified as seriously or slightly injured based on the type of injury sustained, as recorded by the police on the basis of information available within a short time of the collision. This generally will not reflect the results of a medical examination but may be influenced according to whether the casualty is hospitalised or not. Injuries classed as serious include 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 collision.
Slightly injured	Definitions of severity are taken directly from the STATS19 reporting. Injured casualties are classified as seriously or slightly injured based on the type of injury sustained, as recorded by the police on the basis of information available within a short time of the collision. This generally will not reflect the results of a medical examination but may be influenced according to whether the casualty is hospitalised or not. A slightly injured casualty is defined as having 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.

Term	Full name/description
STATS19	Data collected by the police following a collision is collated by the Department for Transport and published. STATS19 is the core set of statistical data on personal injury RTCs.
Trauma centre	This is a specialist hospital responsible for the care of the most severely injured patients involved in major trauma.
Victim	For the purposes of this report, the term ‘victim’ is used to refer to anybody who is affected by a RTC (excluding people providing professional services in response to a RTC). This definition includes those involved in the collision directly (direct victims), as well as witnesses or people bereaved by the collision (indirect victims). This covers all collisions, regardless of circumstances. It is therefore different to the 'victim of crime' definition used in the Victims' Code, which sets out what victims of crime can expect through the criminal justice system (Ministry of Justice, 2024).

Executive summary

Introduction

In 2022, there were 100,766 reported motor road traffic collisions (RTCs) across England and Wales, around a quarter (24,786) of which resulted in serious injuries or fatalities (Department for Transport, 2023a).[1] The total number of RTC casualties is likely to be even higher as not all collisions are reported.

The impacts of RTCs extend beyond the immediate people involved in the collision to include family, carers, friends and witnesses. People can experience physical, psychological, emotional and financial harm which, if not addressed or attended to, can continue for years.

Most support services for people affected by RTCs beyond health and care provision are currently provided by charities such as Aftermath Support, Brake, RoadPeace and the Road Victims Trust. Funding for these services is currently from a variety of sources such as grants and public and corporate donations, but the precise mix varies across charities. The Ministry of Justice (MoJ) provides Police and Crime Commissioners (PCCs) with annual grant funding to commission local practical, emotional, and therapeutic support services for victims of all crime types. PCCs commission services for victims, which can include victims of injury road traffic collisions where a criminal offence has occurred, based on their assessment of local need.

Eligibility for RTC support varies across providers and there appears to be variance in the form of support available, how it is delivered, the geographical coverage of support providers and how those charitable providers are funded. There is also no consistent and centrally held data on who is accessing these services and the scale and nature of demand, which may not currently be met for various reasons.

The Department for Transport (DfT) therefore commissioned Frontier Economics (Frontier) and SYSTRA Ltd. (SYSTRA) to carry out an evidence review of the post-collision support landscape. Five research questions were defined for this review, as shown in Table 1. These focus on who is affected by RTCs, the scale and nature of support they may need and the scale and nature of support provided by charities or other organisations. Gaps in currently available evidence have also been identified.

The findings of this work are based on a review of published research (both academic and grey literature, including a review of RTC support providers' websites), published data (from sources such as DfT, MoJ and the NHS) and nine interviews with key stakeholders such as current support providers and road safety advocates. When interpreting the findings of this report, it is important to bear in mind the relatively small number of stakeholder groups interviewed; findings relying on stakeholder evidence alone are therefore less robust than

[1] Motor RTCs refer to collisions that involve at least one motor vehicle and therefore exclude collisions that involve only pedestrians, pedal cyclists and/or horse riders.

findings that are also supported by the literature. This research will be used to inform future policymaking.

Table 1 Research questions

Research question	Sub-questions
RQ1: Who are the types of people affected by RTCs that may require support after?	■ How many of each of these types of people are there each year? ■ How many of each of these types of people are affected by criminal RTCs?
RQ2: What type/level of support is currently available across England and Wales? And from whom?	■ How is this support provided? ■ What are the geographical and delivery structures of the organisations involved in providing the support?
RQ3: What type of support, if any, are each of the types of people affected by RTCs currently eligible to receive? And from whom?	■ How is a 'victim' defined? ■ Are only 'victims' eligible to receive support? ■ Are there people who are affected who are not seeking support, or for whom support is not available?
RQ4: What types of support or elements of the current support systems work well and for who?	■ What types of support or elements of the current support systems require improvement or further research to better our understanding of support outcomes?
RQ5: What are the outstanding evidence gaps?	

For the purposes of this review, the terms used and the focus of the work are transparently described given the wide variation of terminology used in published studies. These are defined in the box below.

When considering the people affected by a RTC, this review focuses on members of the public only. It therefore does not include the extent to which people employed in professions that are required to deal with RTCs are affected, or the support they receive. Such people include emergency responders, insurance or legal professionals, healthcare professionals and others. Support for these persons is assumed to be addressed through employment-specific programmes.

Common terms used in this report are provided below:

- **Road Traffic Collision (RTC)**. This is used to refer to any collision where at least one person is injured. It excludes damage-only collisions and collisions that result in neither injuries nor damage. It includes collisions that do not involve a motor vehicle, e.g., a collision between a pedal cyclist and a pedestrian, and is aligned to the definition of collision used in STATS19 reporting, the primary set of statistical data on personal injury road accidents published by DfT. Collision is the preferred terminology rather than 'accident' when describing a road crash.

- **Motor RTC**. This is used to refer to a RTC where at least one mechanically propelled vehicle is involved.

- **Criminal collisions**. Collisions that are recorded as crimes in relation to the following driving offences: (1) causing death or serious injury by dangerous driving, (2) causing death by careless driving under the influence of drink or drugs, (3) causing death or serious injury by careless or inconsiderate driving, (4) causing death or serious injury by driving: unlicensed, disqualified or uninsured drivers and (5) causing death by aggravated vehicle taking.

- **Direct victim**. Direct participants in the physical collision, including casualties and uninjured passengers in vehicles involved in the collision.

- **Victim**. For the purposes of this report, the term 'victim' is used to refer to anybody who is affected by a RTC (excluding people who provide professional services in response to a RTC). This definition includes those involved in the collision directly (direct victims), as well as witnesses or people bereaved by the collision (indirect victims). This covers all collisions, regardless of circumstances. It is therefore different to the 'victim of crime' definition used in the Victims' Code, which sets out what victims of crime can expect through the criminal justice system (Ministry of Justice, 2024).

- **Casualty**. This refers to a person killed or injured in a RTC. Casualties are sub-divided into killed, seriously injured and slightly injured in line with the STATS19 categorisation.

- **Culpable driver**. This refers to a driver who has been convicted of a criminal collision offence. A driver at any other stage within a collision investigation is known as a 'driver under investigation'.

Summary of key indicative findings

The following key indicative findings have been identified from this research. These are based on the findings from the literature review, secondary data analysis and from the stakeholder interviews. Due to the relatively small number of stakeholder groups interviewed, the findings presented that rely on stakeholder evidence only should be interpreted with this context in mind.

Whilst the overall number of reported RTC-related casualties has been falling over time, the reduction has been greater for people with slight injuries than for severe injuries. The number of criminal collisions has increased. Taken together, this implies continued demand for support services.

Data from STATS19[2] shows that the number of reported casualties from all reported RTCs in England and Wales has been steadily falling, from 172,179 in 2013 to 129,869 in 2022 – a 25% decrease. There was a particularly sharp drop in 2020, likely due to the COVID-19 lockdown and travel restrictions, with a subsequent rise between 2020 and 2022 as the pandemic restrictions eased. As of 2022, casualties had not returned to pre-pandemic levels, which were 145,568 in 2019.

Killed or seriously injured (KSI) casualties from reported RTCs in the STATS19 data have accounted for an increasing proportion of total casualties over recent years – their share increased from 17% in 2013 to 21% in 2022. This is due to the number of slight injury casualties decreasing by 28% in the same time period compared to only a 7% decline for KSI casualties[3]. Data on criminal collisions from the Trends in Crime Survey for England and Wales (ONS, 2024) suggests that criminal collisions in England and Wales also increased by 134% between 2012/13 and 2021/22, increasing from 345 to 809.

There is very strong published evidence to suggest that involvement in litigation, compensation or prosecution processes following a RTC can increase the risk of post-traumatic stress disorder (PTSD) and need for mental health and emotional support (Mayou and Bryant, 2001; Heron-Delaney et al., 2013). This means that victims of more serious or criminal RTCs may have greater support needs. In turn, whilst the overall number of RTCs is falling, demand for support services may not be falling at the same rate, and demand for some types of support such as support to address the psychological impacts of going through the prosecution process may be increasing.

RTCs can have impacts on those directly involved in the collision, their family, carers, friends and witnesses, but the level of overall demand for support is not clear.

Three key groups of people affected by RTCs were identified in this review: (1) people directly involved in the RTC i.e. collision participants (direct victims); (2) family, carers, and friends of

2 STATS19 under-reports the number of collisions and causalities as not all collisions are reported, either because the circumstance of the collision means that there is no legal obligation to do so or because those involved are unaware of their legal obligations to report. However, research carried out by DfT found that STATS19 data is a reliable estimate of trends at a national level. (Department for Transport, 2012). https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/995112/hes-linkage.pdf

3 This trend in STATS19 data should be interpreted cautiously as the number of emergency hospital admissions due to motor RTCs in HES has decreased over the same time period. However, the DfT STATS19 team has previously compared STATS19 and HES data from 1999 to 2009 and found that, whilst neither STATS19 nor HES provide full coverage of serious road casualties, trends in total casualties are more similar to that shown by STATS19 and HES. Therefore, STATS19 can be considered a reliable measure of trends at a national level. (Department for Transport, 2012). https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/995112/hes-linkage.pdf

those directly involved in the collision; and (3) witnesses to the RTC. The impact on people who provide professional services in response to the collision, e.g., emergency services or wider society, were out of scope for this work.

Data availability on the total number of people in each of these groups is mixed. The most comprehensive source is STATS19, a data source collated and published by DfT which reports the number of casualties of motor RTCs in England and Wales. As STATS19 is based on collisions reported to the police, it is known to under-report the number of casualties and collisions (Department for Transport, 2023c). Estimates of RTCs that result in injuries can also be derived using the National Travel Survey, but this only covers England.[4] Currently these data sources report the following statistics:

- In 2022, STATS19 reported 128,630 motor RTC casualties across England and Wales: 1,522 were fatalities, 25,764 were serious injuries and 101,336 were slight injuries (Department for Transport, 2023a).
- In 2022, 3.4% of adults and 2.5% of children in England reported being involved in a collision of any severity in the last 12 months (Department for Transport, 2023b).
- In 2022, there were 809 criminal collisions recorded by the police (ONS, 2024).

There is currently no consistently collected data available on the number of people who have witnessed a motor RTC, nor on the number of family members, carers or friends who could have been impacted by a RTC.

Post-collision support (emotional and practical) is currently provided by a number of charitable organisations across England and Wales, including Aftermath Support, Brake, RoadPeace and Road Victims Trust.

Most (non-medical) post-collision services are provided by a small number of large charitable organisations, although there are also several other providers that offer support to those affected by RTCs. The latter are smaller, localised services, and some are set up to support victims and witnesses of crime more generally.

There is strong evidence to suggest that referral for support and eligibility varies by geographical area. This is based on findings from the evidence review, website review and all stakeholder interviews. This leads to what some stakeholders/literature describe as a ‘postcode lottery’ with variance in the type/provision of support by location of the individual.

The general consensus amongst support providers interviewed and from a review of support provider websites, is that there is variation in the funding sources that providers rely on, but that it is typically a mix of grants, fundraising and donations. Providers in some locations receive funding from Police and Crime Commissioners (PCCs). PCCs are responsible for commissioning support services for victims and witnesses of crime in their area, with funding

[4] Transport for Wales is currently working with the Welsh government to develop a National Travel Survey for Wales

provided by the MoJ for this. Some PCCs allocate some of their community grant funding to fund RTC support services. A majority of PCCs fund some level of bespoke support for victims of road collisions. Some support providers also receive funding from corporate sponsors, including legal panels.

There is currently not a standardised definition of a RTC victim and eligibility criteria for support services vary by region and support provider.

The general consensus amongst stakeholders and from a review of RTC support provider websites is that eligibility for support tends to include those involved in the collision directly (direct victims), as well as witnesses, family, carers and friends of direct victims (indirect victims). There are no timeframes for receiving support, and all stakeholders interviewed emphasised the importance of not placing a time limit on accessing support. Witnesses, culpable drivers, drivers under investigation and children are sometimes not eligible for support from some providers due to the provider's own criteria. All support providers interviewed noted that if an individual is not eligible for support, they will be signposted/referred to other services.

From the evidence review and interviews with stakeholders, it is evident that there is a lack of robust, independent evaluation or evidence regarding the effectiveness of the different types of support provided, and whether one type of support is more effective than another. There may be groups of individuals who do not seek support, but these are difficult to identify because of a lack of consistently collected data on who does seek support and under-reporting of RTCs. Views expressed in several stakeholder interviews suggest that these groups may include people from ethnic minority backgrounds, males, older people and possibly other groups such as those on low incomes. However, there is a lack of readily available data to enable an understanding of the extent to which this is the case.

The general consensus amongst stakeholders interviewed as part of this research and from a review of RTC support provider websites is that translation services are available to those that require them. However, translation information is not always immediately accessible on support providers' websites, meaning that individuals who do not speak English as their first language may struggle to access support.

Currently, there is a wide and diverse range of support available from providers. However, there is strong evidence of a lack of consistency in the services available across the country, with stakeholders reporting issues around funding.

From the stakeholder interviews and evidence review, there is strong evidence to suggest a lack of consistency in the type of support available and referral processes in place across England and Wales. A small number of stakeholders suggested that this could be improved by putting the same referral and eligibility processes in place so that individuals would be entitled to the same support regardless of their geographical location. They considered this to be one way to remove the perceived 'postcode lottery' of support provision referred to in the stakeholder interviews and some of the literature.

There was some evidence amongst stakeholders that greater funding for the sector is important to enable them to improve the support provided. Stakeholders added that this could help to remove the burden of trying to raise funds elsewhere or the reliance on corporate sponsors (e.g., legal panels). Stakeholders wanted to see consistency for all victims of crime and alignment of funding for victims of fatal criminal collisions with what is received for homicides.

Gaps in the evidence base

Seven key evidence gaps that would benefit from further research were identified:

1. **The impact of RTCs on witnesses and whether their support needs are met.** No publicly available data on the number of people who witness RTCs was identified, and there is scarce available literature on the impact of witnessing a RTC or providing a witness statement. Witnesses may provide statements which are used to support criminal collision prosecutions or alternatively, provide evidence that supports non-prosecutions or may form part of a Coroner's Inquest. Data on the number of witnesses in criminal collisions may be available from other sources, for example criminal prosecutions data or police forces, but this is not readily available. Whilst a direct victim of a RTC may be automatically referred for support (due to the opt-out referral set-up in some geographical locations), witnesses may be less likely to be referred and may not be aware that they are entitled to support. Support for witnesses also varies by provider and area.
2. **Quantifying the scale of unmet demand.** This review assessed the available data on the number of people involved in a RTC and RTC casualties. A proportion of these people will receive support from existing services, but the extent to which people are affected but do not receive support is not known. Although support providers typically hold data on how many people they have supported, it is not possible to know how many people might have been affected by a RTC but did not receive support. One international paper found that one in five individuals bereaved as a result of a RTC had not used any bereavement support services even though they would have benefited from doing so (Lenferink et al., 2021).
3. **Data on the protected characteristics of people affected by RTCs is not routinely collected.** There is some research which suggests that groups with particular protected characteristics may be at greater risk of becoming RTC casualties (Cézard et al., 2020), and some stakeholders suggested that ethnic minority groups may face particular challenges when accessing support. However, data on the protected characteristics of people affected by RTCs is a material gap. Whilst STATS19 reports gender and age, other characteristics are non-mandatory for collision reporting, and support providers noted that this data can be challenging to collect.[5]
4. **Support for culpable drivers/drivers under investigation.** Through the interviews with all stakeholders and the review of support provider websites, it is apparent that culpable

[5] Some data on the number of people with protected characteristics involved in a RTC in England may be available via Secure Access of the National Travel Survey. Secure Access is subject to restrictions.

drivers and drivers under investigation are often not eligible for support. Four stakeholders interviewed noted the sensitivities around this group, but also acknowledged that these individuals may have experienced trauma too and could require support. Research by Savigaar-Shaw et al. (2022) also commented on culpable drivers not being eligible for support but noted that these individuals were likely to be impacted. Whilst this research highlighted that culpable drivers and drivers under investigation have support needs that are not always provided for, it also uncovered a gap in robust data around where support is and is not provided for culpable drivers/drivers under investigation, the experiences of these individuals and of their family and friends, and whether they are currently not accessing support.

5. **Barriers to accessing support.** All stakeholders interviewed for this study suggested there may be groups of people who do not seek support even when this may be beneficial. However, there is currently no data collection on the people involved in a RTC that do not seek support and therefore it is challenging to identify these groups or understand why this is the case.
6. **Monitoring and evaluation of current support provision.** This review found no formal and independent monitoring data or evaluations of current support programmes. Where support providers did publish reports of the impacts of their services, these were internally led and output focused, e.g., on the number of people supported or amount of literature distributed. Evidence on the quality of the services, the qualifications and expertise of the people who provide those services and on outcomes for people supported was limited to individual case studies and quotes from those who had received support.
7. **Support provided by geography and for specific subgroups, and the potential role/scope of national standards.** The majority of stakeholders interviewed referred to location variation in terms of provision of support received and processes followed. There is a lack of data by geographical area, however, on the experiences of victims and the support they receive. Some stakeholders interviewed and one policy report suggested that a national standard of service (i.e., eligibility, referral processes) could help to ensure that victims receive the same support regardless of their location. However, there is a lack of data around the potential role/scope of these standards. In addition to these evidence gaps, several stakeholders felt that the wider impacts of RTCs were not well understood amongst policy-makers and decision-makers. DfT already produces valuations of the social cost of casualties (Department for Transport, 2022), and there is academic research quantifying social impacts of RTCs (Wijnen and Stipdonk, 2016) which suggests the issue lies with awareness or aggregation of this information rather than with availability.

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The project team is grateful to the individuals and organisations for generously providing their time, information and insights to inform this report.

1 Introduction

1.1 Background

Road traffic collisions (RTCs) can have a profound effect on the people involved. In 2022, there were 100,766 reported motor RTCs across England and Wales, 24,786 of which resulted in serious injuries or fatalities (Department for Transport, 2023a). RTCs have impacts on people beyond those immediately involved in the collision, including family, carers, friends of those directly involved and members of the public who witnessed the RTC and/or provided help.

The majority of support services beyond health and care provision for people affected by RTCs are currently provided by charities such as Aftermath Support, Brake, RoadPeace and Road Victims Trust. Funding for these services comes from a variety of sources such as grants, public donations and corporate donations, but the precise mix varies across charities. The MoJ provides Police and Crime Commissioners (PCCs) with annual grant funding to commission local practical, emotional, and therapeutic support services for victims of all crime types. PCCs commission services for victims, which can include victims of injury road traffic collisions where a criminal offence has occurred, based on their assessment of local need. .

1.2 This evidence review

The Department for Transport (DfT) commissioned Frontier Economics (Frontier) and SYSTRA Ltd. (SYSTRA) to carry out an evidence review of the post-collision support landscape. Five research questions were defined for this review, as shown in Chapter 2. These focus on who is affected by RTCs and the scale and nature of support they may need, as well as on the scale and nature of support provided by charities or other organisations. Gaps in currently available evidence are also identified.

The findings of this work are based on a review of published research (both academic and grey literature, including the websites of RTC support service providers), published statistics (from sources such as DfT, MoJ and the Department of Health and Social Care) and nine interviews with key stakeholders such as safety advocates and current support providers. This research will be used to inform future policy development.

1.3 Scope of research

The Road Traffic Act 1988 (section 170) (RTA) defines the types of collisions where drivers are legally required to stop, exchange details and report the incident to the police. These collisions can have wide-ranging effects on people. However, this definition excludes some types of collision where people may still benefit from support, for example single vehicle collisions where only the driver is injured. People can also experience effects following these collisions and may benefit from support.

This review defines the types of collisions in scope to include all RTCs (1) that involve at least one motor vehicle[6] and (2) where at least one person is injured. Damage-only collisions or collisions with no damage or injury are excluded from this research. Collisions involving both professional drivers (e.g., heavy goods vehicle (HGV) drivers or taxi drivers) and personal journeys are included. Support needs for people who provide professional services in response to a RTC (e.g., police responders, providers of health services to injured parties, legal or insurance professionals) are excluded from this research. Support for these persons is assumed to be addressed through employment-specific programmes. Table 2 summarises the scope of this review.

Table 2 Scope of this report

Dimension	In scope
Types of collisions	Collisions involving at least one motor vehicle and in which at least one person is injured.
Types of criminal collisions	Collisions involving the following driving offences: ■ Causing death or serious injury by dangerous driving ■ Causing death by careless driving under the influence of drink or drugs ■ Causing death or serious injury by careless or inconsiderate driving ■ Causing death or serious injury by driving: unlicensed, disqualified or uninsured drivers ■ Causing death by aggravated vehicle taking.
Vehicle types	Motor vehicles (cars, motorcycles, light goods vehicles, HGVs, buses, coaches, e-scooters and other powered transporters).
Groups of interest	To include victims of all ages (both adults and children where relevant). Includes both professional and non-professional drivers. Excludes people who provide professional services in response to a RTC.

1.3.1 Terminology used in this report

It is important to note that many of the common terms used to discuss the provision of support and RTCs vary widely. In this report, the term ‘motor road traffic collision’ (motor RTC) refers to any collision that involves at least one mechanically propelled vehicle and in which at least one person is injured. The term ‘victim’ is used to refer to anybody who is affected by a motor RTC, excluding those who provide professional services in response to the collision. The term

6 The term ‘motor vehicle’ is defined by the Road Traffic Act as “any mechanically propelled vehicle intended or adapted for use on roads”. For practical purposes for this report, this is taken to include cars, light and heavy goods vehicles, motorcycles, coaches and other types of powered transports including e-scooters. Electrically assisted pedal cycles (also known as e-bikes) are not in scope as they are not considered to fall under the definition of ‘powered transporters’. The term ‘powered transporters’ covers a range of novel personal transport devices which are propelled by a motor and includes e-scooters, segways, hoverboards, go-peds, powered unicycles and u-wheelers. Further information on powered transporters can be found here: Powered transporters - GOV.UK (www.gov.uk)

'victim' therefore includes people directly involved in the collision (direct victims), as well as witnesses, family, carers, and friends (indirect victims).

A full glossary is provided at the start of this report.

1.3.2 Structure of this report

The remainder of this report is structured as follows:

- Chapter 2 describes the methodology undertaken for this research and includes data sources and methodological limitations.
- Chapter 3 provides a background to RTCs. It sets out common classifications of RTCs and provides an overview of recent trends in RTC frequency and severity.
- Chapter 4 summarises the different RTC victim groups.
- Chapters 5 and 6 set out the types of support that are currently available across England and Wales for victims of RTCs and shows where they are working well and less well.
- Chapter 7 discusses evidence gaps identified in this review.

This report also includes five supporting annexes. Annex A summarises the research methodology that was agreed with DfT. Annex B provides further detail on the assessment of the strength of evidence for each of the key findings in this report. Annex C includes a copy of the academic literature quality scoring. Annex D provides the topic guide used for the stakeholder interviews. Finally, Annex E records the full list of references used to inform these findings.

2 Methodology

2.1 Introduction

This chapter describes the approach taken for this evidence review, including the research questions, an overview of the research methodology and methodological or data limitations. Further detail on the methodology including the inclusion and exclusion criteria for evidence and quality assessment can be found in Annex A.

2.2 Research questions

Five research questions and sub-questions for this review were agreed with DfT at the start of the project and are provided in Table 3. The questions focus on understanding who might require support, what support is currently available, where and for whom, and how well the current system is performing. It also seeks to identify evidence gaps.

Table 3 Research questions

Research question	Sub-questions
■ RQ1: Who are the types of people affected by RTCs that may require support afterwards?	■ How many of each of these types of people are there each year? ■ How many of each of these types of people are affected by criminal RTCs?
■ RQ2: What type/level of support is currently available across England and Wales? And from whom?	■ How is this support provided? ■ What are the geographical and delivery structures of the organisations involved in providing the support?
■ RQ3: What type of support, if any, are each of the types of people affected by RTCs currently eligible to receive? And from whom?	■ How is a 'victim' defined? ■ Are only 'victims' eligible to receive support? ■ Are there people who are affected who are not seeking support, or for whom support is not available?
■ RQ4: What types of support or elements of the current support systems work well and for who?	■ What types of support or elements of the current support systems require improvement or further research to better our understanding of support outcomes?
■ RQ5: What are the outstanding evidence gaps?	

2.3 Overview of research methodology

Evidence was gathered via a rapid review of published research (both academic and grey literature including support providers' websites and publications), secondary data on collisions and casualties and stakeholder interviews. A summary of these sources is given in Table 4.

Table 4 Evidence considered for this report

Research strand	Evidence considered
Research review	Academic literature Grey literature Support providers' websites, publications and data
Secondary data review	DfT reported personal injury collisions statistics (STATS19) Hospital Episode Statistics (HES) Compensation Recovery Unit (CRU) statistics Trends in Crime Survey for England and Wales (CSEW) Other data provided by support providers and key stakeholders such as the DfT Road Traffic Collision Support Survey of Police and Crime Commissioners (PCCs), Police, Fire and Crime Commissioners (PFCCs) and Deputy Mayors (for Policing)
Primary stakeholder engagement	Nine in-depth interviews with key stakeholders including support providers, transport groups, road safety campaigners and legal/insurance representatives

2.3.1 Summary of approach to the research review

Detailed inclusion and exclusion criteria for academic literature were developed and agreed with DfT. These were used to carry out an initial sift of potential academic literature to reach a shortlist of papers. These were then assessed against a quality framework which included measures of methodological rigour, credibility of findings, generalisability and the potential risk of author bias. This was used to reach a prioritised list of academic sources which was shared with the DfT project team. Grey literature and support provider websites did not require the same quality assessment; however, they were also sifted to assess relevance to the research questions.

2.3.2 Summary of approach to the secondary data review

The secondary data review focused on understanding (1) overall trends in RTCs and casualties, and (2) the potential demand for post-collision support services across different groups of people.

The STATS19 dataset (Department for Transport, 2023a) was the primary dataset used. STATS19 covers all reported injury collisions in the UK and is collated and published by DfT. Where possible, data was analysed for England and Wales only (as Scotland is out of scope), and for collisions that included at least one motor vehicle, in keeping with the research focus on motor RTCs. This was cross-referenced against hospital admissions data attributed to motor vehicle collisions along with data on compensation recovery. Several other datasets were considered but often had the same underlying source data (typically STATS19). To understand the scale of criminal collisions specifically, data was analysed from the Trends in Crime Survey for England and Wales (CSEW) (ONS, 2024).

Findings from the DfT's Road Traffic Collision Support Survey (Department for Transport, 2023d) were also used to supplement understanding of the support provided and processes used. This survey was conducted by DfT between 2 August 2023 and 7 November 2023, and was issued to all PCCs, PFCCs and Deputy Mayors (for Policing) who have responsibility for policing across England and Wales. The electronic survey was developed by DfT but was distributed via the Association of Police and Crime Commissioners (APCC) and the APCC Roads Policing Portfolio.

2.3.3 Summary of approach to stakeholder interviews

In-depth interviews were undertaken with nine stakeholders to gain a detailed understanding of the support currently provided to those affected by RTCs, and to understand where improvements could be made. Interviews were held with a range of stakeholder groups, as follows:

- Four support providers (representing four of the largest specialist providers in England and Wales);
- Two transport bodies;
- Two road safety campaigners who had personally been affected by a RTC; and
- One legal/insurance representative.

Tailored topic guides were used for each stakeholder group and were linked to the overarching research questions for the study. Findings were recorded within a stakeholder interview analysis proforma, which enabled consistency in reporting and ensured accurate reporting against the research questions.

2.3.4 Assessing the strength of evidence

Published literature, secondary data and stakeholder evidence were synthesised to reach a set of key findings for each research question. As part of the academic literature review, potentially relevant papers were considered against inclusion criteria. These included an assessment of the study's quality and generalisability, with lower quality or generalisability papers excluded from the evidence synthesis. Therefore, academic evidence reviewed for this study met a minimum quality level. The strength of evidence ratings therefore primarily reflect differences in the type and volume of evidence available.

Where findings were informed by academic literature, strength of evidence was assessed on the quality and quantity of this research. Where findings were solely informed by the stakeholder interviews, this is transparently noted. Strength of evidence ratings are not provided for Chapter 3 (Classification and trends of RTCs) as this data is based on national datasets. The strength of evidence grades are set out in Table 5 below.

Table 5 Categories of evidence

Category	Quality, size, consistency, context
Findings that derive from academic literature alongside stakeholder interviews	
Very strong	High-quality body of evidence. Large evidence body (five or more studies). This can be satisfied by existing literature reviews that synthesise five or more studies. Consistent findings and contextually relevant. Stakeholder interview evidence may be referred to as a complement.
Strong	High-quality body of evidence. Large or medium evidence body (three or more studies). This can be satisfied by existing literature reviews that synthesise three or more studies. Consistent findings and contextually relevant. Stakeholder interview evidence may be referred to as a complement.
Medium	Moderate-quality studies. Medium-sized evidence body (three to five studies). Studies may be less contextually relevant, e.g., only based on studies outside of the UK, or generalisable, e.g., study samples limited to small subgroups or specific characteristics. Stakeholder interview evidence may be referred to as a complement.
Limited	Moderate- to low-quality studies. Low- to medium-sized evidence body (one to three studies). Low levels of consistency, potentially with conflicting findings. Studies may be less contextually relevant, e.g., only based on studies outside of the UK, or generalisable, e.g., study samples limited to small subgroups or specific characteristics. Stakeholder interview evidence may be referred to as a complement.
Findings that derive from stakeholder interviews only:	
General consensus amongst stakeholders	Feedback from the majority (seven to nine) stakeholders interviewed. This rating is also used when all four support providers interviewed put forward the same view.
Some evidence amongst stakeholders	Feedback from three to six stakeholders.
Limited evidence amongst stakeholders	Feedback from one or two stakeholder interviews.

Note: Developed based on the Department for International Development (2014), Assessing the Strength of Evidence How to Note, adapted for this review

2.4 Study limitations

2.4.1 Limitations of the research review

Given the current level of knowledge surrounding the research questions, a rapid evidence review approach was considered to be proportionate in providing initial insight and identifying immediate evidence gaps, and reflected the short timelines for this work (November 2023 to January 2024). This approach is based on the principles of a full systematic review by using a systematic and transparent method to identify, select and critically appraise data from relevant research but is less resource and time intensive (Collins et al., 2015).

An evidence synthesis protocol which defined key search terms and outcomes of interest was agreed. Common terminology in published studies has varied over time and terms such as 'accident' and 'crashes' have historically been used interchangeably with 'collisions', which was reflected in the search terms to increase the likelihood of identifying relevant evidence. Given this complexity, there is a risk that some relevant research may have been omitted compared to a full literature review, but this was mitigated by reviewing reference lists and snowballing study references.

This review found that the academic literature for some groups affected by RTCs was limited. Most of the research focused on the impact of RTCs on direct victims, e.g., casualties. Evidence on indirect victims such as people bereaved by RTCs was also limited. Only one study that looked at the impact on witnesses was identified.

Academic studies typically focused on understanding the potential impacts of RTCs but rarely explored the support available in England and Wales. This gap was addressed through a review of support providers' websites and interviews with nine support providers and other stakeholders involved in the provision of support. These evidence gaps are discussed in further detail in Chapter 7.

2.4.2 Limitations of the secondary data review

The primary dataset used in this research is the STATS19 dataset, which reports on personal injury road collision statistics. The limitations of this dataset are published as part of the statistical release (Department for Transport, 2023c). Key limitations of note are summarised below:

- STATS19 under-reports road collisions and casualties as some personal injury collisions are not reported to the police or are reported to the police but the details are not recorded. Estimates of RTCs that are not reported to the police are made using the National Travel Survey (NTS).
- Severity classification is based on the type of injury sustained as recorded by the police on the basis of information available within a short time of the collision and generally does not reflect the results of a medical examination.

- A study conducted by DfT in 2012 looking into the completeness and trends shown by the STATS19 dataset found that “overall, around a third of estimated total serious road casualties (according to the definition used by police) are likely to become known to police and included in STATS19 as serious casualties with around 40% admitted to hospital and included in HES as road traffic accidents” (Department for Transport, 2012).

2.4.3 Limitations of the stakeholder engagement

Due to the relatively small number of stakeholder groups interviewed, the findings presented throughout this report that rely only on evidence from the interviews should be interpreted with this important context in mind.

A further two stakeholders were invited to be interviewed but were unable to take part within the study timescales. These stakeholders, as well as a wider range of stakeholders, could be approached if further research in this area is commissioned.

2.4.4 Limitations on strength of findings

As discussed above, most of the academic literature identified in this review focused on the impacts of a RTC on different victim groups. This was used to answer RQ1: ‘Who are the types of people affected by RTCs that may require support afterwards?’. There was almost no academic literature on support provision in England and Wales. This means that findings for RQ2, RQ3 and RQ4 are predominantly informed by the nine primary stakeholder interviews, supplemented with evidence from the literature where relevant. This is reflected in the strength of evidence rating.

3 Classification and trends in RTCs

Summary of indicative findings

A summary of the strength of evidence is not provided for the findings in this chapter as they report trends observed in national statistics. See section 2.4.2 for a discussion on the limitations of these secondary datasets.

- The number of reported RTCs and associated casualties in England and Wales in STATS19 data (Department for Transport, 2023a) has been falling over time. However, most of this change is accounted for by a decline in slight injury casualties. Amongst all RTCs, the proportion of KSI casualties increased from 17% in 2013 to 21% in 2022. Looking specifically at motor RTCs, between 2019 and 2022, KSI casualties from motor RTCs only fell by 0.7% compared to a 13% fall in slight injury casualties.[7] As support needs may be greater for victims of more severe collisions, demand for support is therefore likely to continue.
- The number of criminal collisions reported in England and Wales in the CSEW (ONS, 2024) increased by 134% between 2012/13 and 2021/22 from 345 to 809. It is not clear what proportion of this steep increase was due to changing levels of criminal behaviour versus changes in legal and prosecution processes. However, this could still have implications for post-collision support services, for example where psychological or other types of support throughout the prosecution process are required.

3.1 Introduction

This chapter provides context to the remainder of the report by providing an overview of the different types of RTCs and recent trends in RTCs in England and Wales.

3.2 Types of RTCs

There is no single definition of a ‘road traffic collision’ and there are a variety of interpretations across people and organisations. This report focuses on motor RTCs, which for this study are defined as involving at least one mechanically propelled vehicle in which at least one person is killed or injured. However, it is still useful to provide some background information on the various aspects associated with RTCs, particularly as they may inform future demand for support services. Relevant aspects include the reportability of RTCs (from a legal standpoint), criminality and severity, each of which is discussed below.

[7] Data for all RTCs, including those that do not involve motor vehicles, is publicly available for all years from 2013 to 2022. For this work, DfT also provided data on motor RTCs by severity for the years of 2019 and 2022.

3.2.1 Reportable RTCs

The Road Traffic Act 1988 (section 170) sets out the legal duties for drivers to report a collision (1) that involves a mechanically propelled vehicle and (2) in which injury or damage is caused to anybody other than the driver of that vehicle.

3.2.2 Criminality

There are a wide range of criminal offences that may be associated with a collision. This work focuses on criminal offences associated with dangerous, careless or inconsiderate driving (including under the influence of drink or drugs), along with unlicensed, disqualified or uninsured drivers and aggravated vehicle taking. Collisions that involve a vehicle when it is deliberately used as a weapon are normally associated with different crime types such as murder, manslaughter, assault and other offences against the person. These crime types are outside the scope of this work.

Not all serious collisions are criminal, and the presence of a serious injury or fatality does not in itself mean that the collision was due to dangerous or careless driving. However, many police forces will use the severity of the collision as one factor in determining the type of investigation required alongside any allegations of driving offences. For example, in the event of a damage-only collision or a collision where injuries are assessed to be 'slight',[8] where there is no evidence of driving offences, the investigation may be completed at the scene (Merseyside Police, 2020). In the event of fatal or serious injury collisions, the College of Policing Authorised Professional Practice (APP) provides guidance on classifying the level of investigation required (Table 6).

Table 6 APP categorisation for the investigation of collisions

Category	
A+	Assessed as likely homicide investigation or where complexity requires the deployment of a nationally registered senior investigating officer (SIO)
A	Confirmed fatality – one or more vehicles failed to stop and/or drivers decamped, or other factors are present that significantly increase the complexity of the investigation
B	Confirmed fatality – all drivers/riders are known or can be immediately identified
C	Confirmed fatality – driver/rider only killed, no third-party involvement – inquest only
D	Confirmed fatality – driver/rider only killed, due to natural causes, may involve a third party – no inquest necessary

Source: College of Policing (2023).

The Code of Practice for Victims of Crime (Ministry of Justice, 2024) sets out the services and minimum standard for the services that must be provided to victims of crime by organisations

[8] Collision severities are typically defined as part of police traffic collision policies but may differ across police forces.

in England and Wales. In the case of collisions where there is an injury and a criminal offence committed, it covers both people who are directly involved in the collision along with bereaved close relatives and witnesses who have suffered harm directly caused by the criminal offence. .[9] Of particular relevance to this work is "Right 4: To be referred to services that support victims and have services and support tailored to your needs". This includes the right for victims to have their needs assessed. If eligible, victims have the right to be offered a referral to specialist support services and to be made aware of additional support available at court. If a crime is not reported to the police, victims have the right to contact support services directly.

3.2.3 Severity

The severity of a collision ranges from no impact, damage only (i.e., no injuries) to whether people involved have been slightly injured, seriously injured or killed. For any given collision, the outcome for each individual involved can vary but the severity of a collision is typically based on the severity of the most severely injured casualty (where casualty refers to a person killed or injured in a RTC).

The STATS19 dataset, which collates police data on personal injury road collisions, defines levels of casualties as follows:[10]

- Killed: human casualties who sustained injuries which caused death less than 30 days (before 1954, about two months) after the collision. Confirmed suicides are excluded.
- Seriously injured: injuries classified as serious include fractures, concussion, internal injuries, crushings, burns (excluding friction burns), severe cuts, severe general shock requiring medical treatment and injuries that cause death 30 days or more after the RTC.
- Slightly injured: an injured casualty who is not classified as seriously injured, who has 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 that do not require medical treatment.

3.3 Frequency of, and trends in, RTCs in England and Wales

This section provides background information on collisions and casualties arising from RTCs in England and Wales. Where possible, data is presented for motor RTCs but, in some cases (e.g., time series), this is not possible and data for all collisions (including those that do not involve a motor vehicle) are presented. In 2019, 99% of reported collisions in England and Wales involved at least one motor vehicle.

9 This normally refers to the spouse, the partner, the relatives in direct line, the siblings and the dependants of the victim. Other family members, including guardians and carers, may be considered close relatives at the discretion of the service provider.

10 The STATS19 definitions use the term 'accident' rather than 'collision'.

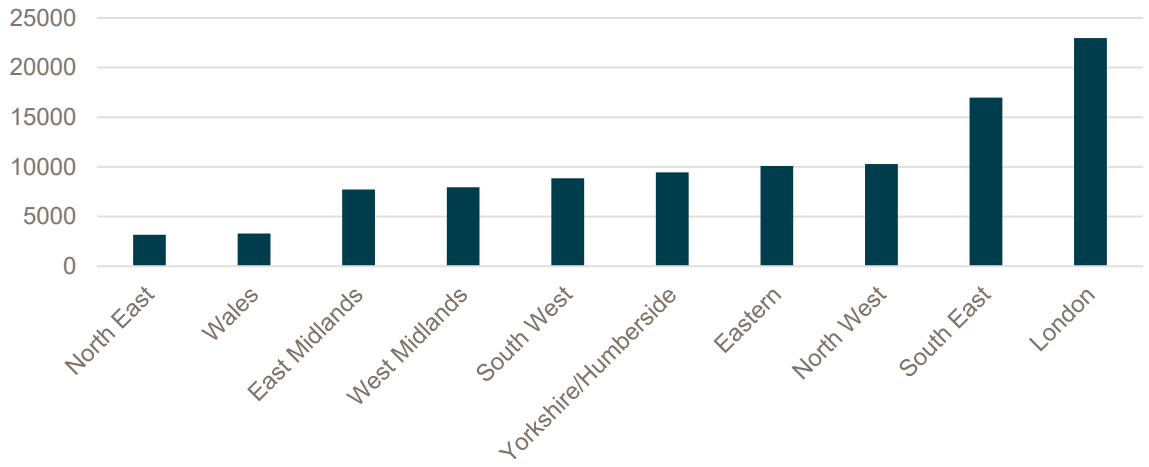
3.3.1 Data considered

The main dataset used to inform this section of the report is STATS19, which covers injury collisions. Where possible, STATS19 data has been triangulated with other datasets such as hospital admissions data from NHS Hospital Episode Statistics (HES) and Compensation Recovery Unit (CRU) data.[11] Data on self-reported criminal collisions has been sourced from the CSEW.[12]

3.3.2 RTC frequency

In 2022, there were 101,879 reported RTCs in England and Wales, 99% of which involved at least one motor vehicle (100,766 motor RTCs). London had the highest number of reported motor RTCs (22,967), followed by the South East (16,983). The North East had the fewest collisions (3,158).

Figure 1 Number of reported motor RTCs across regions of England and Wales, 2022



Source: Frontier Economics analysis of STATS19 data

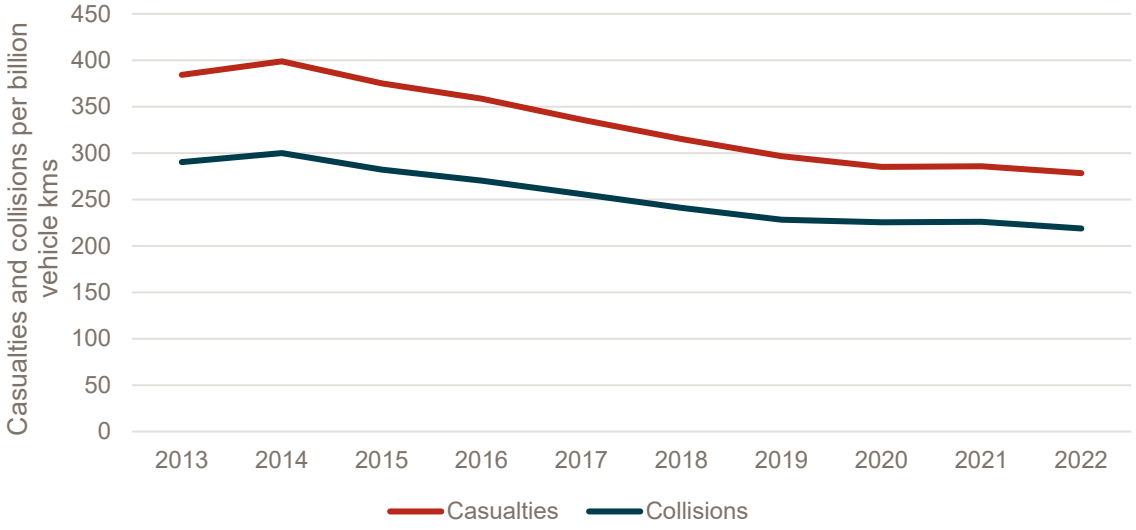
3.3.2.1 Trends over time

Prior to the COVID-19 pandemic, the number of RTCs and casualties per billion vehicle km in England and Wales was falling over time (Figure 2 and Figure 3).

[11] The CRU works with insurance companies, solicitors and the DWP to recover social security benefits paid as a result of an accident, injury or disease including RTCs.

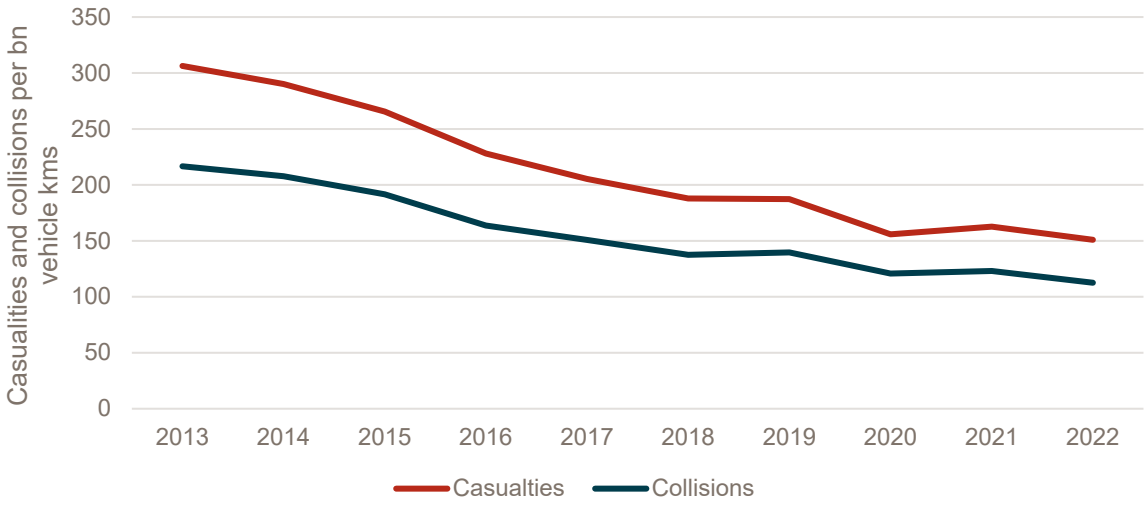
[12] The CSEW is considered to remain the best estimate of long-term trends in crimes against the household population for crimes included in the survey. However CSEW estimates has been temporarily suspended of their National Statistics status while data quality is assessed since the pandemic. For more information see here: https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/bulletins/crimeinenglandandwales/yearendingseptember2023

Figure 2 Trends in reported RTC and casualty rates per bn vehicle kms in England



Source: Frontier Economics analysis of STATS19 data

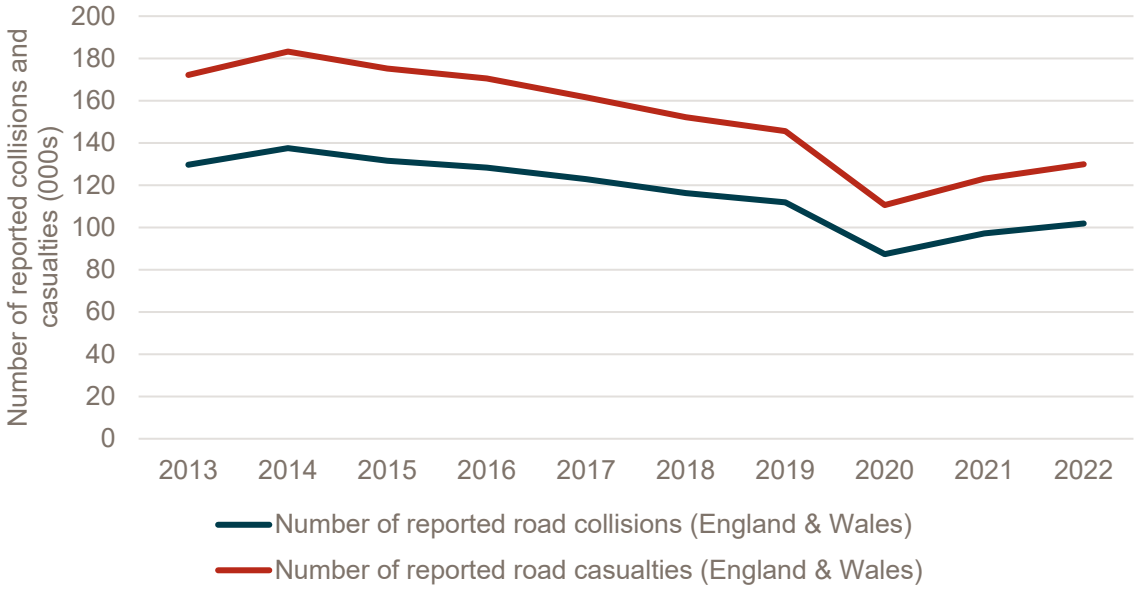
Figure 3 Trends in reported RTC and casualty rates per bn vehicle kms in Wales



Source: Frontier Economics analysis of STATS19 data

This corresponded with a fall in the absolute number of RTCs and casualties due to RTCs. The pandemic likely accelerated this reduction as journeys dropped during lockdown and there was a decrease in casualties and collisions in 2020. Since then, RTCs and associated casualties have increased on 2020 levels, although they have yet to reach pre-pandemic levels (Figure 4).

Figure 4 Trends in the number of reported RTCs in England and Wales

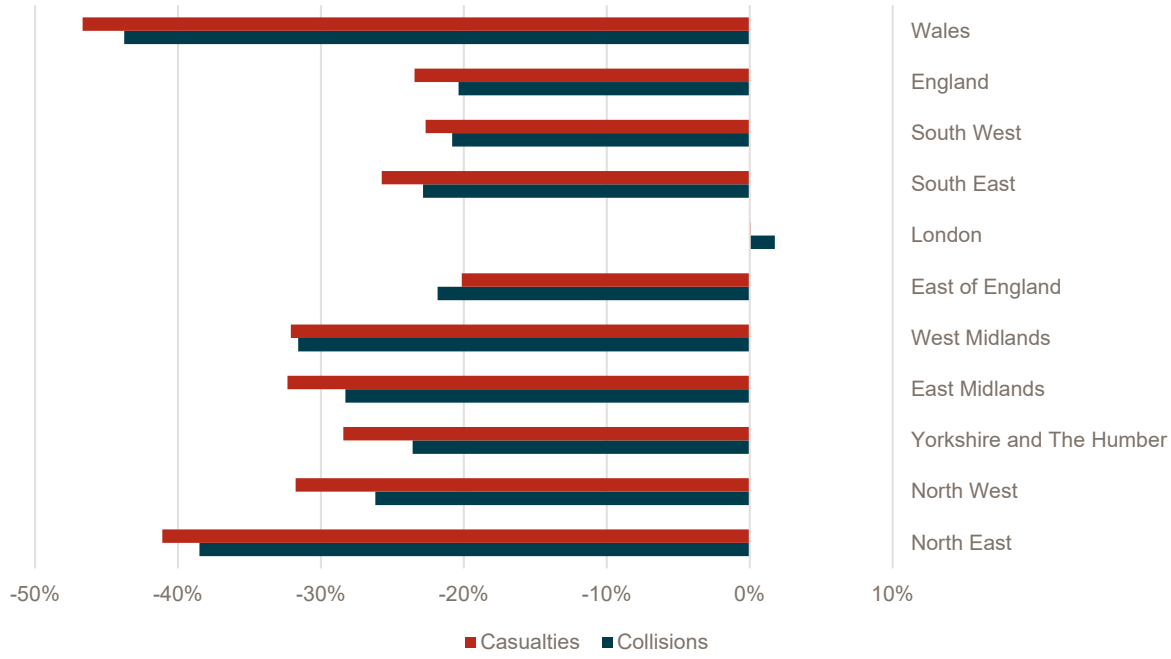


Source: STATS19 data

In England, the number of RTCs decreased by approximately 20% between 2013 and 2022, with the largest decrease being in the North East (39%). The number of RTCs increased in London (2%). Wales saw a 44% decrease in the number of reported collisions across the decade (Figure 5).

There was a corresponding reduction in the number of reported casualties from RTCs over this period, which fell by 23% between 2013 and 2022 in England and 47% in Wales. At a regional level, the exception to this fall in casualties is in London where the number of RTC casualties has remained largely unchanged from 27,238 in 2013 to 27,259 in 2022.

Figure 5 Change in RTCs and casualties between 2013 and 2022

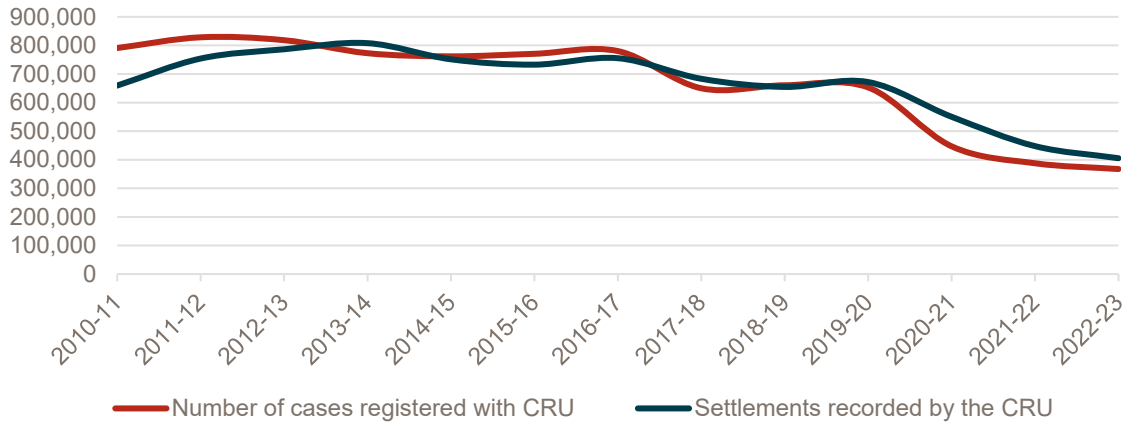


Source: Frontier Economics analysis of STATS19 dataset

Prior to COVID-19, the rate of decline in the number of reported RTC casualties was faster than that of the number of reported collisions, i.e., the average number of casualties per collision fell.[13] Whilst this may reflect improved road and vehicle safety, the STATS19 dataset limitations noted in section 2.4.2 may also impact this trend. The decline in the number of reported casualties is supported by data from the Compensation Recovery Unit (CRU) which demonstrates that the underlying trend of motor personal injury claims was also decreasing, by 55%, in the last decade (Figure 6).

[13] As the majority of casualties are slight casualties, this may be feasible if there are increased rates of under-reporting of slight casualties over time.

Figure 6 Motor-related cases registered with and settlements recorded by the CRU

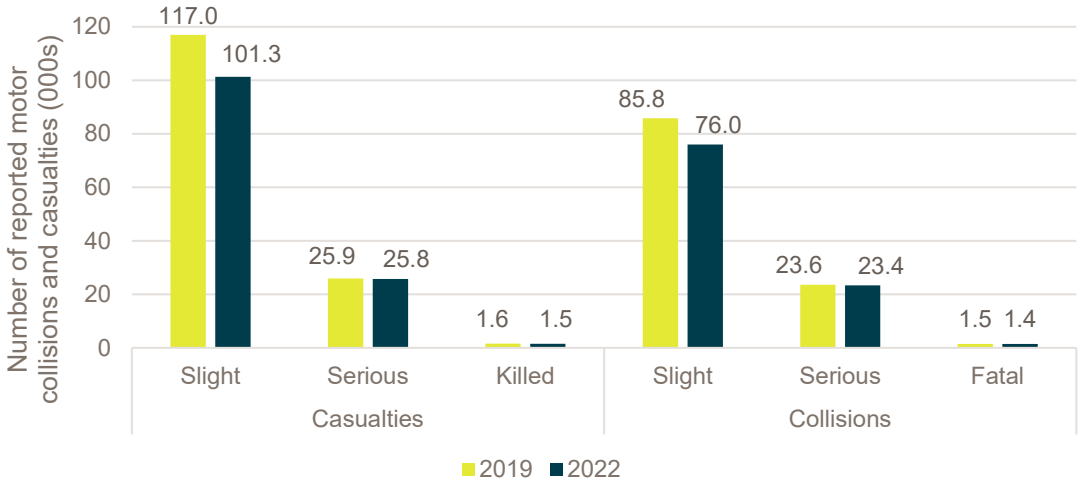


Source: Frontier Economics analysis of Compensation Recovery Unit performance data

3.3.3 Collision severity

STATS19 reports that, in 2022, a quarter of motor RTCs in England and Wales were fatal or serious collisions (FSCs). The proportion was similar in 2019 (23%) (Figure 7).

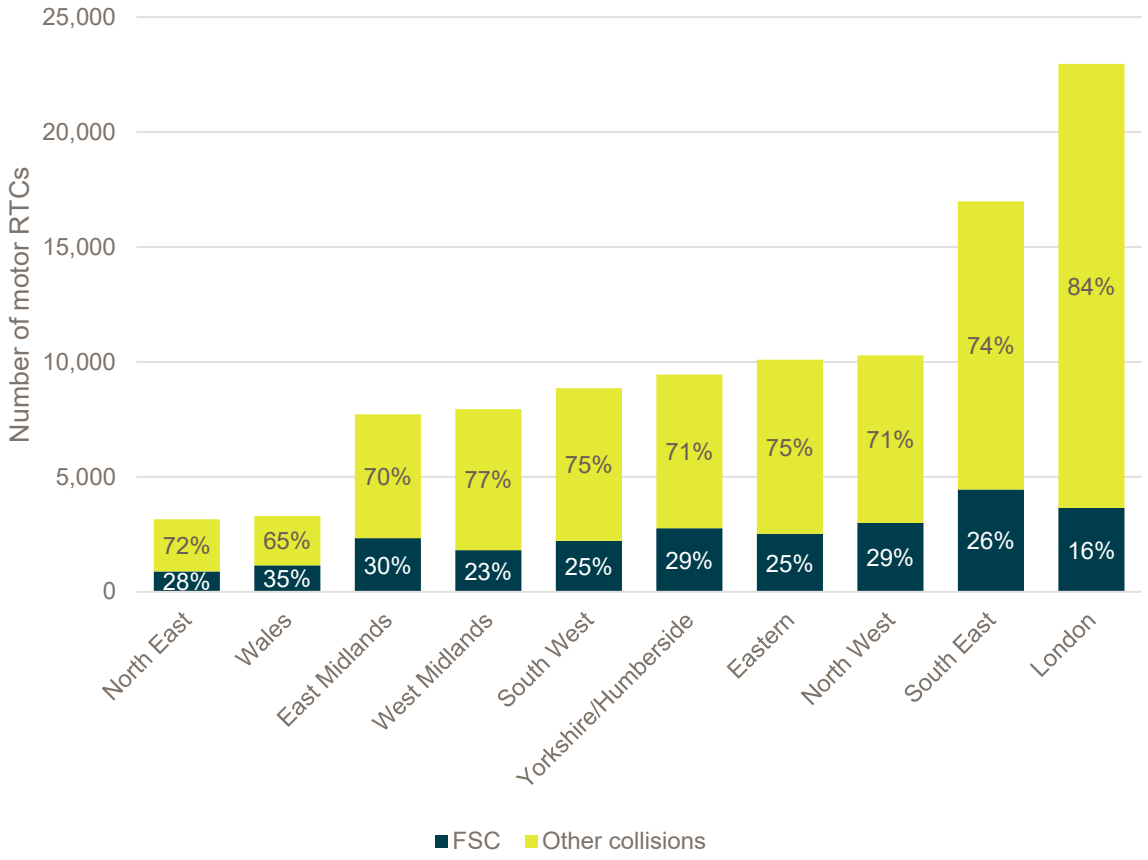
Figure 7 Number of reported motor RTCs and casualties in England and Wales by severity (2019 vs. 2022)



Source: Frontier Economics analysis of STATS19 dataset
Note: Motor RTCs only i.e., excludes collisions where the only vehicles are pedal cycles and ridden horses

STATS19 data shows that the South East, followed by London, had the highest absolute number of FSC motor RTCs[14] in 2022. The North East had the lowest number of FSC motor RTCs. However, when looking at FSC collisions as a proportion of total collisions, this was highest in Wales (35%), followed by the East Midlands (30%). In comparison, London had the lowest proportion (16%).

Figure 8 Motor RTCs by severity and region in 2022



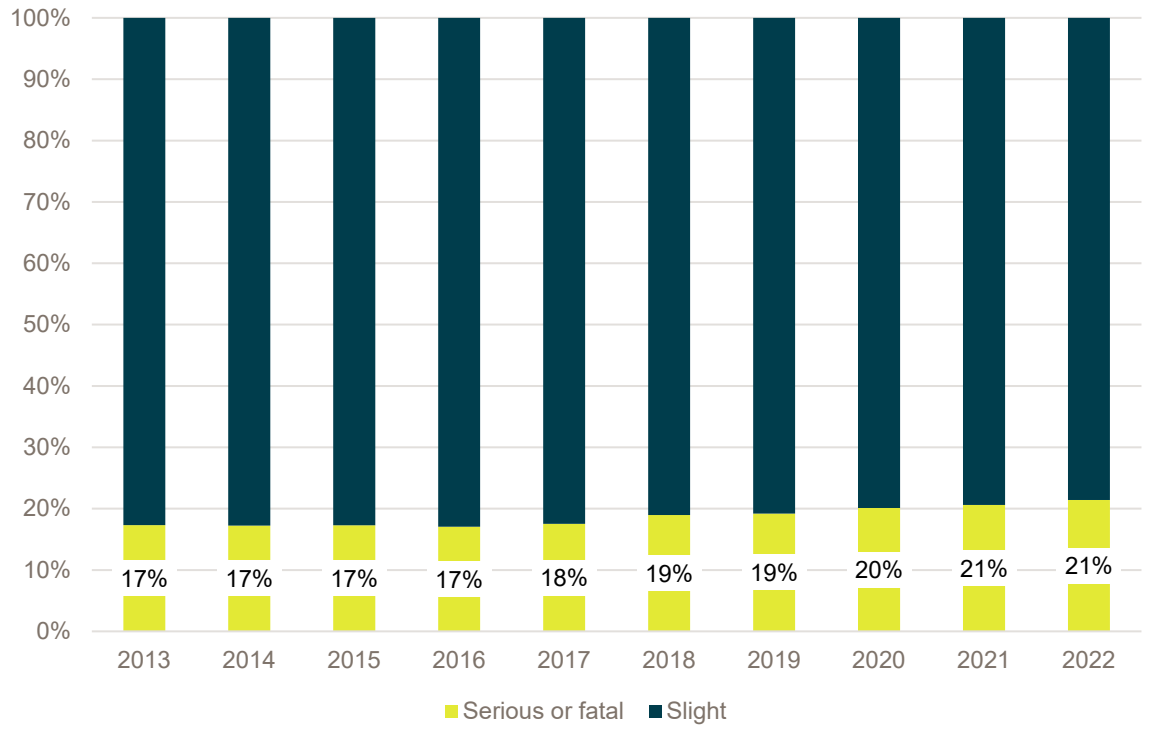
Source: Frontier Economics analysis of STATS19 dataset

3.3.3.1 Trends over time

Whilst the overall number of casualties reported in STATS19 has been falling over time, the majority of this decrease has been in slight injuries. Serious or fatal RTC casualties as a proportion of all casualties have been gradually increasing over time, increasing from 17% in 2013 to 21% by 2022 (Figure 9).

[14] FSCs refer to collisions whereas KSI is used to describe casualties.

Figure 9 Proportion of RTC casualties that were seriously injured or killed, 2013 to 2022



Source: STATS19 data

This means that the number of KSI casualties has been falling at a slower rate than overall casualties. Between 2013 and 2022, slight RTC casualties fell by 28% whereas KSIs fell by 7%. Looking at motor RTCs specifically, between 2019 and 2022, the number of slight casualties fell by 13% compared to a 2.9% reduction in fatal casualties and a 0.5% reduction in serious casualties.

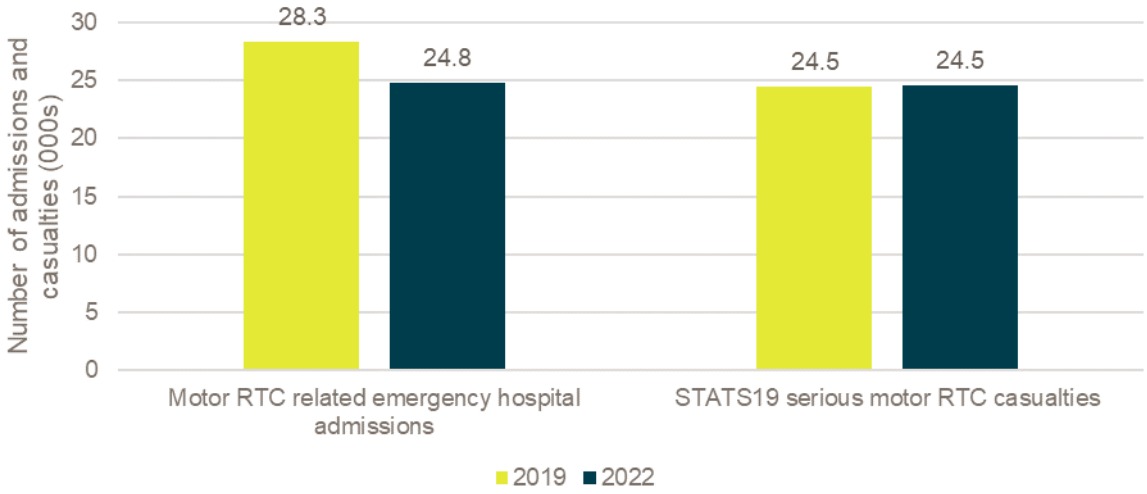
The difference in reduction rates amongst slight, serious, and fatal collisions is important when considering support needs. Whilst victims involved in all severities of RTC may require support, some types of support, e.g., bereavement support, may be more likely in the case of KSI casualties. There is very strong published evidence to suggest involvement in litigation, compensation, or prosecution processes following a RTC can increase the need for support (see section 4.3.5.5) and this means that victims of more serious or criminal RTCs can have greater support needs than those involved in less serious RTCs. As KSI casualties have not fallen as fast as slight casualties over time, this suggests that demand for these support services is likely to remain even as overall collisions and casualties fall.

The limited reduction in serious casualties in recent times should be interpreted cautiously as a similar trend is not observed in the HES data.[15] Whilst the STATS19 data shows that the

[15] The HES data records emergency hospital admissions by external causes including motor RTCs.

number of serious casualties from motor RTCs has remained broadly unchanged between 2019 and 2022 (falling 0.5%), the number of emergency hospital admissions due to collisions has fallen by 12% (Figure 10). The above notwithstanding, a DfT study which compared HES and STATS19 data from 1999 to 2009 found that neither dataset provided full coverage of serious road casualties but "the trend over time in estimated total casualties is more similar to that shown by STATS19 than HES" (Department for Transport, 2012)[16].

Figure 10 Comparison of the number of motor collision related emergency hospital admissions[17] and serious casualties due to motor RTCs in England



Source: Frontier Economics analysis of STATS19 data and NHS Hospital Episode Statistics (HES)

3.3.4 Motor RTCs by sex and age

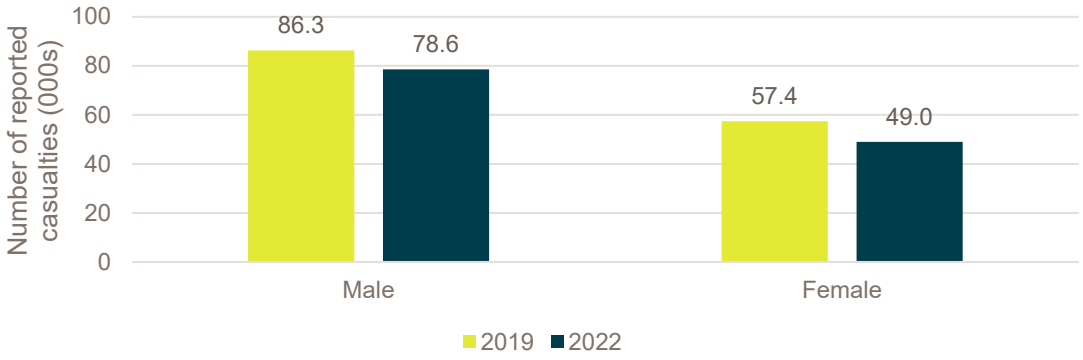
Figure 11 shows that there are disproportionately more male than female motor casualties reported in STATS19, with males making up 60% of reported motor RTC casualties in England and Wales in 2022.[18] Between 2019 and 2022, the number of male casualties fell by 9% and the number of female casualties fell by 15%.

[16] This study also provides further information on the comparability of the HES and STATS19 datasets.

[17] Hospital admissions with a cause code of "V09: Pedestrian injured in other and unspecified transport accidents" and "V19: Pedal cyclist injured in other and unspecified transport accidents" have been included.

[18] According to the 2021 Census, males make up 49% of the UK population.

Figure 11 Number of reported motor RTC casualties in England and Wales, by sex (2019 vs. 2022)

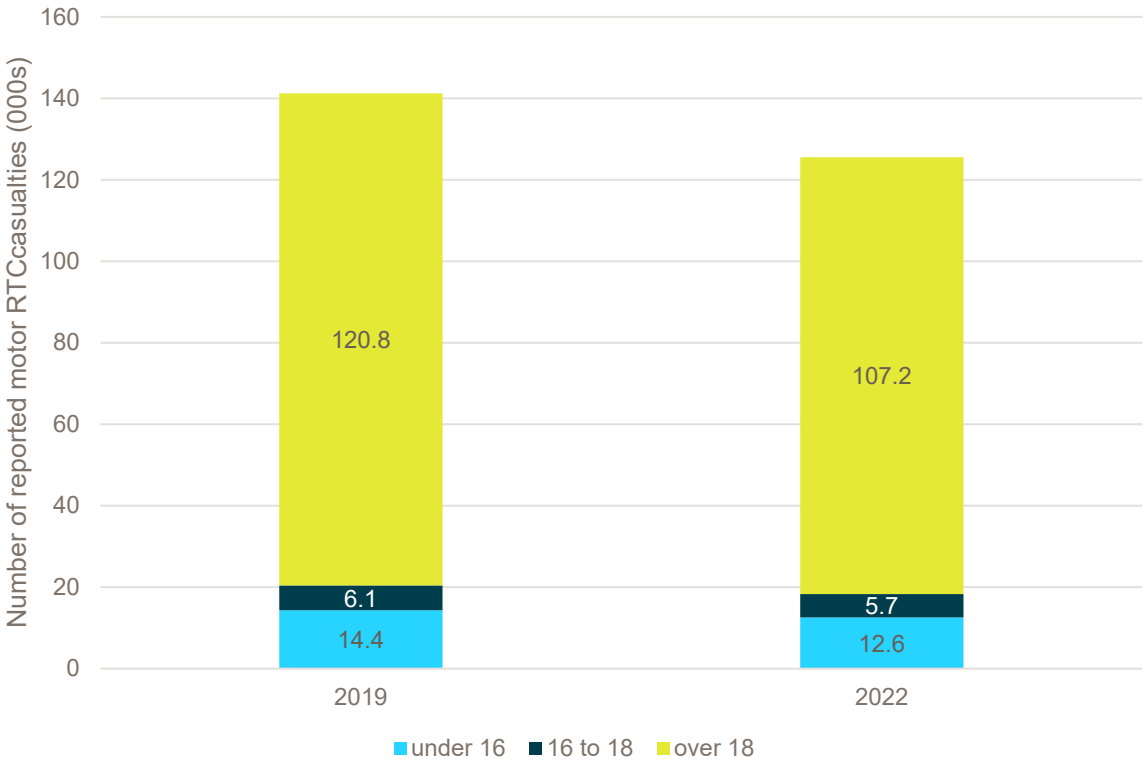


Source: Frontier Economics analysis of STATS19 dataset

Figure 12 shows that the majority of reported motor RTC casualties in both 2019 and 2022 were over the age of 18. However, 10% of reported motor RTC casualties in 2022 were under 16 years old. This is important from a support point of view as not all support providers offer support to children (see chapter 5).

For those under 16, there was a 12% decrease from roughly 14,000 in 2019 to 13,000 in 2022, which is broadly in line with the decrease in casualties over the age of 18 (11%). The decrease in the number of motor RTC casualties for those between the ages of 16 and 18 was less substantial at 6%.

Figure 12 Number of reported motor RTC casualties in England and Wales, by age group (2019 vs. 2022)

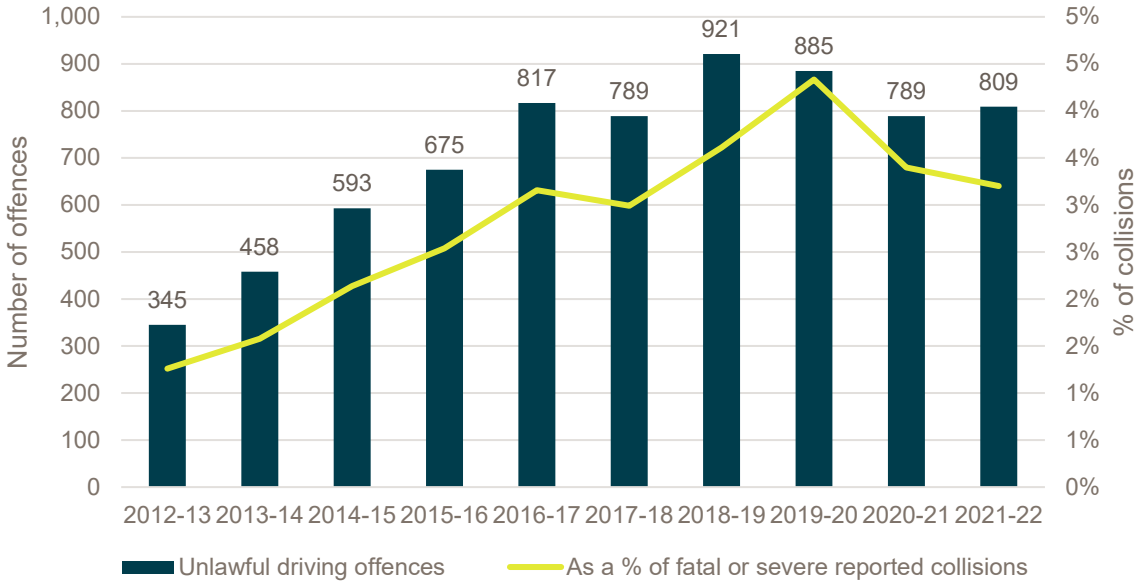


Source: Frontier Economics analysis of STATS19 dataset

3.3.5 Criminal collisions

Data on criminal collisions was sourced from the CSEW. Between 2012/13 and 2021/22 there was an increase of 134% in the number of criminal collisions in England and Wales, increasing from 345 to 809. Prior to COVID-19, this was increasing year on year until a peak of 921 in 2018-19. From then until 2022, the number of unlawful driving offences decreased to 809, which likely reflects the overall decrease in trips due to the COVID-19 lockdowns and post-COVID recovery.

Figure 13 Unlawful driving offences in England and Wales, 2012/13 to 2021/22



Source: *Frontier Economics analysis of STATS19 dataset and ONS Crime statistics (CSEW)*

Note: *Unlawful driving offences include causing death or serious injury by: (i) dangerous or careless driving; (ii) unlicensed or disqualified or uninsured drivers; (iii) aggregated vehicle taking; (iv) careless or inconsiderate driving; (v) careless driving when under the influence of drink or drugs.*

It is not clear what was responsible for this increase in criminal collisions after 2012/13 and the degree to which this was due to a change in driving behaviour or other factors such as a change in the legal process. However, this could still have implications for post-collision support provision, for example psychological and process support throughout the prosecution process.

4 People affected by road traffic collisions

Summary of indicative findings

Due to the relatively small number of stakeholder groups interviewed, the findings presented throughout this report that rely only on evidence from the stakeholder interviews should be interpreted with this important context in mind. Findings that rely only on stakeholder interview evidence are transparently noted below. Table 5 provides an explanation of the strength of evidence ratings which primarily reflect the type and volume of evidence, including ratings where findings are informed solely from stakeholder interviews.

	Strength of evidence
■ There are three key groups of people identified in the evidence as impacted by RTCs: (1) people directly involved in the collision (direct victims), (2) their family, carers and friends, and (3) witnesses.	Very strong
Demand for support	
■ Data on the potential demand for RTC support is lacking. There is publicly available data on the number of direct victims, although this is not comprehensive and under-reports RTCs. It does not include RTC victims' protected characteristics, which is a key evidence gap. There is little information on the size of other victim groups.	NA *This is an identified evidence gap*
■ The scale of support required is likely to continue if not to grow over time. In 2022, there were 128,630 reported casualties from motor RTCs across England and Wales: 1,522 were fatalities, 25,769 were serious injuries and 101,399 were slight injuries. 3.4% of adults and 2.5% of children in England reported being involved in a RTC of any severity in the past 12 months, and there were 809 criminal collisions recorded across England and Wales.	NA *Reported statistic – see discussion on statistical limitations*
Impacts of RTCs	
■ A synthesis of UK-based studies found that 7%-23% of direct victims will go on to develop PTSD. People affected by PTSD include those that were not injured or sustained minor injuries in the collision.	Very strong
■ A minority of victims are not clinically diagnosed with a psychological disorder but still experience less severe psychological distress and could benefit from support.	Medium

■ Women, older people and those with lower educational attainment have worse health outcomes and a greater risk of long-term disability following a RTC.	Strong
■ The compensation and prosecution process can increase the need for support for direct victims, both to navigate the process and address its psychological impact. It may also increase the need for support for bereaved family, carers and friends.	Very strong
■ Almost all family members of victims of fatal RTCs or where a loved one is disabled will experience some level of long-term psychological impact.	Medium
■ The majority of direct victims will have some duration of sick leave, and many will experience ongoing work and financial difficulties.	Strong

4.1 Introduction

This chapter addresses **RQ1: Who are the types of people affected by RTCs that may require support afterwards?** It summarises evidence on the potential demand for post-collision support services across different groups of people and the types of impacts and support that they may require.

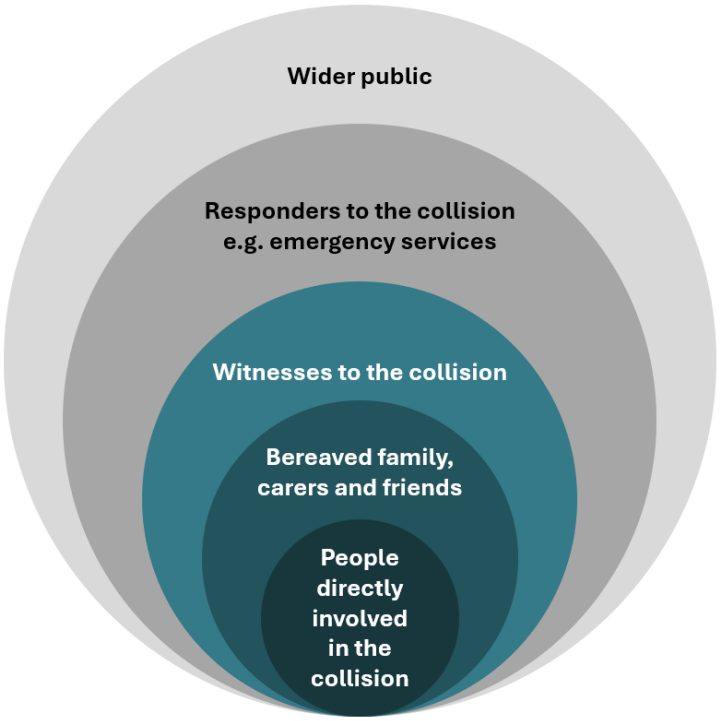
These findings draw on the STATS19 dataset of injury collisions in England and Wales to understand potential demand for support. For England, this is triangulated with HES and NTS data. Evidence on the type of impacts and corresponding support needs for individual groups is derived from the academic literature, grey literature and stakeholder interviews.

4.2 Overview of people affected by RTCs

When an individual is involved in a RTC, the repercussions extend beyond the immediate victim. The severity and scale of the RTC can have far-reaching effects on various groups, including witnesses to the collision and the family, carers and friends of the victim. This phenomenon is characterised as a 'ripple effect' and it is estimated that RTCs impact over half a million people in the UK annually, both physically and mentally (Road Safety Support, 2022).

Stakeholders noted that many groups can be impacted by RTCs. The majority of stakeholders interviewed referred to people directly involved in the collision, witnesses (both passers-by and other drivers/passengers), family members, carers and friends. Some stakeholders referred to serious and fatal RTCs as being those which would most impact the people involved. Strong evidence from both stakeholder interviews and the evidence review therefore indicates that those affected by RTCs may include the people directly involved in the collision, family, carers, friends and witnesses (Figure 14).

Figure 14 People affected by RTCs



- In 2022, 6.7% of adults in England surveyed in the National Travel Survey said they had been involved in a "road accident" of any severity in the last 3 years
- In 2022, there were 128,630 casualties in England and Wales, 27,291 of which were fatal or serious injuries

Source: *Frontier Economics, data sourced from the National Travel Survey and STATS19*

Note: *No publicly available estimates are available on the number of family and friends affected or the number of witnesses to collisions.*

As noted previously, people who provide professional support in response to a RTC (e.g., police responding to the collision or NHS workers treating injuries sustained in the RTC) are excluded from this research, as are impacts on the wider community.

As discussed later in this section, not all of the groups affected by a RTC will be eligible to receive support. This was shown in recent research which highlighted a 'postcode lottery' of victim support provision (Savigar-Shaw et al., 2022). The study noted that some police forces offer support only to direct victims, whilst others restrict eligibility to those considered victims of crime. This disparity implies that certain groups may undergo the trauma of a RTC without being referred to or deemed eligible for specialised support, and the absence of clear 'victim' categories may impact who is considered eligible for support.

4.2.1 Victim definition and language

There is not a standardised definition of the term victim. This was acknowledged during the stakeholder interviews, with one stakeholder noting that identification with the term 'victim' varies between individuals. Stakeholders emphasised that a victim extends beyond the directly affected individual, encompassing witnesses and the family, carers and friends of the person directly impacted.

Whilst sensitivities around 'victim' language were not explicitly raised by stakeholders, one stakeholder noted that "some people do not want to be labelled as a victim". Another stakeholder interviewed noted that whilst they align language with that used by the police, internally they refer to 'affected people' rather than victims. One study highlighted concerns that the term 'victim' is not appropriate as it excludes many who are impacted by RTCs who survive the experience but still experience subsequent support needs (Savigar-Shaw et al., 2022).

The same study noted the challenges in defining a road victim. Feedback from the focus groups and interviews carried out as part of the study found that people impacted by RTCs are not always victims of crime but are considered victims of harm. The term 'victim' could therefore exclude some people from receiving support where they would benefit from doing so, in particular witnesses (Savigar-Shaw et al., 2022). A synthesis of evidence on how to support victims of crime more broadly (rather than driving offences specifically) found that 'victim' is the term that is predominantly used by agencies and is the term officially used in policies and legislation (Wedlock and Tapley, 2016). The study noted that many non-statutory agencies prefer to use the word 'survivor', believing that it returns some autonomy, power and a sense of control to the person harmed. However, this term did not arise when discussing terminology with stakeholders.

The nearest to a standard definition perhaps comes from the Code of Practice for Victims of Crime in England and Wales (Victims' Code) (April 2021), which defines a victim as: (i) a person who has suffered harm, including physical, mental or emotional harm or economic loss which was directly caused by a criminal offence; or (ii) a close relative (or a nominated family spokesperson) of a person whose death was directly caused by a criminal offence..

4.3 People directly involved in the collision (direct victims)

This group of people consists of those directly involved in the physical collision, e.g., drivers and passengers in vehicles and any other road users involved in the RTC. Of the adults in the NTS (which covers England only), 3.4% reported being in a 'road accident' (includes collisions of all types of severity and mode) in the last 12 months and 1% reported being in an 'injury accident' (a collision in which the survey respondent was injured) in the past 12 months.[19]

[19] Note that the use of the term 'road accident' is a direct reference to the questions asked of the public in the NTS.

Table 7 Proportion of people directly involved in collisions in England

Metric	2019	2022
% of adults (16 and over) who were involved in a road accident in the last 12 months. England	4.6%	3.4%
% of adults (16 and over) who were involved in an injury accident in the last 12 months. England	1.0%	1.0%
% of children who were involved in a road accident in the last 12 months, aged 15 and under. England	2.1%	2.5%
% of children who were involved in an injury accident in the last 12 months, aged 15 and under. England	0.36%	0.6%

Source: National Travel Survey 2022

A large proportion of people will experience medical, psychiatric, social or legal consequences even a year after the collision (Hours et al., 2013). A literature review of evidence found that, whilst some studies suggest that injury severity is associated with recovery (Alharbi et al., 2019), long-term impacts are not limited to those with severe injuries. Some studies show that people who experience minor or no injuries in the collision can be left with long-term repercussions (Mayou and Bryant, 2001; Kenardy et al., 2015).

Literature reviews have also found that support from family, friends and other social connections supports recovery after a RTC (Heron-Delaney et al., 2013) and that a lack of support is associated with reduced or limited activities in day-to-day living following the collision and that this increases the likelihood of complications such as pain, sleeping problems, emotional issues and difficulty in taking part in normal leisure activities (Alharbi et al., 2019). Whilst these studies did not discuss carers explicitly, others have shown that family members in particular typically provide informal care to direct victims of RTCs. This is discussed further in section 4.4.

4.3.1 Physical harm

In 2022, there were 128,630 reported motor RTC casualties in England and Wales, 1,522 of which were fatalities and 25,769 were serious injuries. This is likely to be an underestimate of casualties as only around a third of estimated total serious road casualties are likely to become known to the police (Department for Transport, 2012). This is not the case for fatal collisions as almost all fatal collisions become known to the police and are reported in STATS19.

One large prospective study of accident & emergency (A&E) department attendees in a single UK hospital[20] found that just over half of RTC casualties (55%) reported being physically

[20] This was a cohort study of a one-year sample of A&E attendees in a single teaching district general hospital. It excluded patients with major head injuries. The study had a large sample size of 1,148 attendees, which was a representative sample of all A&E attendees following a RTC injury. Sampling from a single A&E may limit generalisability. This should be balanced against the sample size. The authors reported that the validity of their findings was supported by comparison with their own previous research and was consistent with previous reports from other countries.

recovered at one year. Whilst this study had a large sample size, there may be limits to its generalisability as it sampled from a single A&E. However, there is similar evidence from international studies. A study of RTC casualties in France (Hours, 2013) found that one year after the collision, 45% of casualties with less serious injuries reported being fully recovered. This was 20% amongst those who had sustained more serious injuries.

However, medium strength evidence suggests that there may be a large minority of casualties who experience chronic injuries. For example, Mayou and Bryant (2001) studied outcomes amongst over a thousand RTC casualties who attended A&E at a specific hospital and found that 7% reported major problems in physical recovery after three months, with little recovery amongst this cohort after one year. Most of these problems were serious disabling injuries or musculoskeletal issues that limited physically demanding work or leisure. A study carried out in France on direct RTC victims reported that the majority of victims still considered their health not to have recovered two years after the collision (Tournier et al., 2014).

Strong evidence from an existing literature review suggests that, whilst physical recovery rates following a RTC are associated with injury severity (Hours, 2013),[21] there are several examples where casualties who experience minor injuries still have long-term physical issues (Kenardy et al., 2015). An international systematic review of factors associated with poor outcomes following a RTC (Rayan Alharbi, 2019) found that older people, those with lower education levels and women typically had worse health outcomes and long-term disabilities following a RTC.

4.3.2 Psychological harm

There is very strong evidence on the potential proportion of direct victims who will go on to develop PTSD. A systematic review of studies in the UK found that 7%-23% of people directly involved in RTCs can go on to develop PTSD (Heron-Delaney et al., 2013). Another systematic review carried out by Guest et al. (2016) found that other psychological conditions were also common, and reported that 21%-67% of 'motor vehicle crash survivors'[22] developed depression and almost 50% developed anxiety and driving phobia.

As with physical harm, long-term psychological harm can affect casualties of all severity. Evidence on the relationship between injury severity and psychological harm is mixed, as the extent to which psychological effects are experienced following a RTC depends on a wide number of factors, not just the severity of the collision (Heron-Delaney et al., 2013). This means that a large proportion of people who experience slight or no injuries at all may still experience long-term psychological impacts following a RTC (Mayou and Bryant, 2001).

21 A prospective study of 866 injured RTC victims carried out in France.

22 The Guest et al (2016) study used the term 'motor vehicle crash survivors'. It defines the term as people who have sustained a motor vehicle crash and looked specifically at those who had lodged a compensation claim with an insurance company. The specific inclusion criteria set out in the paper was: (1) Adult (aged 18+) survivors of a motor vehicle crash who have lodged a compensation claim within 3 months of their accident, (2) English speaking.

There is also medium strength evidence to suggest that a minority of victims are not formally diagnosed with psychological disorders but still experience less severe psychological distress and could benefit from support. A study of outcomes amongst 86 children involved in RTCs and their families found that only a small proportion of those who exhibited symptoms of acute distress met the criteria for a formal diagnosis of acute stress disorder (Bryant et al., 2004). This was supported by international evidence from the Netherlands (Boelen et al., 2022) which also found that many victims who experienced moderate distress did not pass the threshold for a full disorder diagnosis but would still benefit from therapy.

4.3.3 Financial harm

Strong evidence suggests that being directly involved in a RTC can affect work and education. This can lead to economic and financial harm, and unemployment is also associated with higher levels of stress, anxiety, chronic diseases and premature mortality (Abedi et al., 2022). In the short term, the majority of people who were working at the time of the collision will require some duration of sick leave to recover (Hours et al., 2013). A cohort study of A&E attendees in a single hospital in the UK found that, whilst many people will return to work within a few months, they may still experience ongoing work and financial difficulties (Mayou and Bryant, 2001). This was supported by Gopinath et al. (2015) who studied return-to-work outcomes in Australia amongst those with minor and moderate musculoskeletal injuries.

There is strong evidence to suggest that the majority of direct victims will have some duration of sick leave and many will experience ongoing work and financial difficulties. For more severe casualties the impact of the RTC may prevent them from working permanently due to long-term sick leave, losing their job or being unable to work (Almutairi and Altamimi, 2019). A one-year follow-up study of RTC victims in France found that 32% of severely injured casualties had stopped working after the collision compared to 5% of casualties with mild to moderate injuries (Hours et al., 2013). At two years, almost 40% of people who were working at the time of the collision reported an impact on their occupation or studies, and almost half reported persistent financial difficulties (Tournier et al., 2014).

Evans et al. (2003) studied outcomes amongst 109 young casualties (aged 11-24 at the time of injury) who had survived major traumatic injury, including as a result of RTCs, and found that challenges with work was one of the most commonly reported areas of difficulty. A large minority of those who were unemployed a year after the injury said that their disability made it impossible for them to work. The study also found that, in addition to financial harms arising from unemployment, people who experience permanent physical disabilities may need to adapt their home to meet their health needs, e.g., installing ramps, stairlifts, handrails, widened doors or bathroom modifications (Evans et al., 2003). This can be both costly and challenging to install, particularly for those living in rented accommodation.

4.3.4 Other impacts on daily life

Medium strength evidence suggests that long-term physical or psychological impacts can prevent RTC victims from participating in leisure or social activities or can impact relationships

with family and friends, leading to a reduction in overall quality of life. Existing literature is limited to international studies. The ESPARR cohort is a representative cohort of RTC casualties in France. The one-year follow-up study which examined outcomes for 866 adult victims found that most casualties who had experienced severe injuries reported an impact on leisure (Hours et al., 2013). The two-year follow-up, which involved 912 victims, found that this impact could be persistent, with just under half of casualties reporting that the collision still had a negative impact on sports and leisure activities (Tournier et al., 2014).

4.3.5 Specific subgroup impacts

4.3.5.1 Children

Children are a subgroup of interest for this work because support organisations may require specific qualifications and will need safeguarding clearances to support children. In 2022, 2,548 children (under 16) and 1,326 people aged 16-18 in England and Wales were reported as experiencing a serious injury in a motor RTC (Department for Transport, 2023a).

Evidence on the specific impact of RTCs on children is limited and dated. One study of 86 children who attended A&E at John Radcliffe Hospital in Oxfordshire found that most made a good physical recovery, with 92% of children receiving no further treatment by six months (Bryant et al., 2004). However, psychological impacts were common, with 29% of children experiencing PTSD at some stage and around 18% still experiencing PTSD after six months. Whilst the majority of children in this study had minor injuries, the sample did include some children with severe injuries and the authors found that injury severity was not associated with PTSD risk. Travel problems such as phobias were another common impact identified in over a third of children (Bryant et al., 2004). These findings are supported by Stallard et al. (2006) who studied children with a range of injury severities attending A&E in Bristol and Bath. They also found no relationship between injury severity and PTSD risk, although they noted that the study cohort had relatively few children under the age of ten.

4.3.5.2 Protected characteristics

Data on collisions and casualties by protected characteristics is lacking. STATS19 does report casualties and collisions by sex and age. However, other characteristics such as ethnicity, disabilities and religious beliefs are one of the key evidence gaps identified in this work and could be important for the types of support services needed, and how they are provided.

Ethnicity is not a mandatory field in police collision reporting. However, it is a relevant factor when considering post-collision support, both because ethnic minorities may be at a greater risk of RTC injuries (Cézard et al., 2020) and because they may face particular challenges in accessing support, which was raised during the stakeholder interviews. Research on casualty rates in London suggested that annual reductions in casualties amongst car occupants was lower in Asian adults than White adults (Malhotra et al., 2008), and that children categorised as Black had higher injury rates than those categorised as White or Asian, even when the broader effect of deprivation was taken into account; there was no relationship between injury

rates and deprivation amongst Black children, whereas this was the case amongst White pedestrians and Asian child pedestrians (Steinbach et al., 2010). It should be noted that this research only looked at London and may not be representative of England and Wales as a whole.

This review did not identify any academic literature that focused on understanding differences in support needs by ethnicity for RTCs specifically. A broader study carried out in the USA which interviewed 35,653 adults following a traumatic event (child maltreatment, interpersonal violence, war-related trauma, other injury or shocking event, learning of a trauma to a close friend or relative, and learning of an unexpected death) found that PTSD risk might be higher amongst Black people and lower amongst Asian people compared to their White counterparts, and that all minority groups were less likely to seek treatment for PTSD than White individuals (Roberts et al., 2011).

There is strong evidence to suggest that women, older people and those with lower educational attainment have worse outcomes following a RTC. A systematic review of 31 studies across ten countries including England found that these characteristics were associated with poorer physical, psychological and functionality outcomes after a RTC (Alharbi et al., 2019). Stallard et al. (2006) found that, amongst children, girls displayed more post-traumatic reactions than boys.

4.3.5.3 Maternal and neonatal harm

Pregnant women involved in a RTC are exposed to a number of additional physical and psychological risks. An international evidence synthesis of studies from the USA, Sweden, Kuwait and Israel found that a RTC increased the risk of maternal death and pregnancy complications (Amezcua-Prieto et al., 2020). An Australian cohort study found that, whilst the likelihood of immediate delivery during post RTC admission was low, when this did occur outcomes were particularly poor and a third of these deliveries ended in perinatal death (Vivian-Taylor et al., 2012).

Whilst a detailed literature review of the psychological impacts of miscarriage, stillbirth and neonatal death is not within the scope of this work, it is clear that these are traumatic events that lead to additional mental health impacts for those involved. It should be noted that death or injury to babies unborn up to the time of the collision are not classified as casualties in police collision reporting (Department for Transport, 2011).

4.3.5.4 Fault and driver culpability

A driver can be deemed to be ‘at fault’ as part of the insurance process or as part of a criminal prosecution. Alharbi et al. (2019) carried out an international systematic review of existing research and found that individuals deemed not to be ‘at fault’, or who believed themselves not to be at fault (despite a police report or insurance decision), typically had poorer physical health outcomes and were more likely to experience PTSD. This was supported by the study by Mayou and Bryant (2001) of over a thousand adult A&E attendees at a single hospital in

the UK, who found that passengers were more likely to report travel anxiety compared with drivers, motorcyclists, cyclists or pedestrians. This was particularly common amongst female passengers. They also found that victims who were prosecuted for driving offences were less likely to report travel anxiety than those who were not.

4.3.5.5 Compensation and prosecution process

There is very strong evidence that the compensation and prosecution process can increase the need for support amongst direct RTC victims. The psychological impact on victims of being involved in a compensation, litigation or prosecution process as a result of a RTC is a common theme in the literature. An international synthesis of evidence found that involvement in litigation or compensation was a strong predictor for PTSD amongst direct victims (Heron-Delaney et al., 2013). This was supported by a study of post RTC A&E attendees in a single hospital in the UK which found that the compensation process was associated with worse physical, psychological and social outcomes, although it should be noted that claimants typically suffered more severe injury and loss (Mayou and Bryant, 2001). It seems reasonable to assume therefore that victims of a criminal collision may be at greater risk of mental health issues throughout the prosecution process, as well as potential financial impacts arising from the cost of the process, e.g., lawyer fees.

4.4 Family, carers and friends

Both fatal and non-fatal RTCs can have impacts on the family, carers and friends of direct victims. In the event of fatal collisions, there are clear psychological impacts on the bereaved. Serious non-fatal RTCs that result in a permanent disability can have similar psychological impacts on family and friends. Family members often provide informal care to direct victims of RTCs that have long-term health impacts (Evans et al., 2003) and interviews with ten carers of traumatic injury survivors (not RTC specific) found that the act of providing informal care can have its own psychological impacts and can alter relationship dynamics (Hudson et al., 2022).

There is no data on the number of family and friends who are impacted by RTCs although, as the Director of the Transport Safety Research Centre said in 2022, “of the 115,674 people killed or injured in 2020, each one was likely to have had family members, friendship groups and work colleagues. It is easy to extrapolate the effects at least five-fold” (Road Safety Support, 2022).

In 2021, one support provider reported that they offered support to almost 1,000 bereaved families via the National Road Victim Service and provided support literature to 3,500 family and friends (Brake, 2021).

4.4.1 Psychological harm in the event of a bereavement

There is medium evidence to suggest that almost all families of victims of FSCs will experience some degree of long-term psychological impact. An evidence review carried out by the

European Transport Safety Council reported that almost all families of victims of fatal RTCs experienced a decline in their quality of life and that the psychological impacts were often long term or in some cases permanent (European Transport Safety Council, 2007). More recent studies include Lenferink et al. (2021), who examined outcomes amongst people bereaved by a RTC in the Netherlands and found that many of them reported psychological disorders such as anxiety, depression and suicidal feelings. Bolton et al. (2014) looked specifically at bereaved parents from RTCs and found that the risk of depression amongst bereaved parents almost tripled during the two years after the death of a child, and that there was also an increase in the risk of marital break-up.

Psychological impacts are almost as common amongst families where a loved one is disabled rather than killed. The European Transport Safety Council (2007) found that 85% of families of disabled victims declared a decline in quality of life versus 90% of families of fatalities. With the exception of suicidal feelings, relatives of disabled victims exhibited similar patterns of anxiety and other psychological disorders to those who had lost a loved one.

4.4.2 Psychological impacts of criminal collisions

A series of interviews with 14 individuals explored the impact of RTCs on bereaved family members (Attwood et al., 2023). Several of the people interviewed had attended court proceedings for the culpable driver and reported that the criminal justice system had exacerbated mental health issues and often caused secondary victimisation. Many study participants reported their frustration with the justice process not being followed as expected, along with a perception of inferior treatment compared to the culpable driver and little consideration for the impact of bereavement on family members.

The same study reported that family and friends may require ongoing support throughout court proceedings, and that this should relate to expectations and procedures of court hearings, potential forms of interaction with offenders and perceptions of sentencing to reduce the risk of dissatisfaction with the criminal justice system and associated negative mental health impacts (Attwood et al., 2023). It should be noted that this study had a relatively small sample size (14 individuals).

4.4.3 Impact of providing informal care

The burden of providing ongoing care and support for people injured in RTCs, particularly where the injury is long term, often falls on close relatives.

A five-year study of disability in 109 young adults following major trauma in the UK (over half of whom were injured in RTCs) found that, amongst those who experienced severe problems with simple activities of daily life, the burden of care typically fell on close relatives. Parents provided the most assistance (53% of helpers), followed by siblings (19%). Paid help only made up 11% (Evans et al., 2003).

International evidence suggests that informal care[23] plays a large role even amongst older victims. A one-year follow-up study from France (886 injured adult RTC victims, mean age 35) found that over half of those seriously injured reported that it had affected the everyday life of their family, for example with family members reducing their working hours, taking a leave of absence or resigning from their job to care for the injured victim (Hours et al., 2013).

Providing informal care can have financial, psychological and physical impacts on carers. Taking time off work or resigning from their job altogether can lead to financial problems and informal carers such as parents may also need to pay for accessibility adaptations (e.g., installation of ramps), which is an additional financial burden. Providing informal care can also increase the risk of injury to the carer as well as psychological issues such as depression, anxiety and wider impacts on their social life (Hudson et al., 2022).

4.4.4 Changing relationship dynamics

Several studies highlight that having a strong support network (family and friends) contributes to the recovery of people directly involved in RTCs. The wider and more available the support and care network, the greater the likelihood of supporting the recovery process (Andrade et al., 2021), and informal carers were often seen as the most important people in helping young adults to cope with major trauma (Evans et al., 2003).

It is clear that family and friends play a key role in the recovery of direct RTC victims. However, RTCs can negatively impact these relationships. Evidence from a French study of adult RTC victims (Hours et al., 2013) found that, amongst people who were severely injured, around one-fifth reported issues in their intimate relationships and sexual life. Amongst those with less severe injuries, 11% reported issues within their relationships and 11% also reported issues with their friendships.

There is also some evidence from the UK that fatal motor RTCs can have impacts on the relationships of bereaved families. Attwood et al. (2023) interviewed 14 people who had lost a family member to a RTC and found that the negative mental health impacts of the bereavement often had ‘ripple effects’ on family relations. The loss of a family member was often reported to lead to its own challenges to individual and family mental health and strained these relationships. For example, one interviewee discussed how the bereavement had strained relationships with her sister: “I think the hardest thing definitely between myself and my sister is our relationship has been quite challenging over the years because of how differently we dealt with our mum’s death”.

4.5 Witnesses to the collision

Witnesses can play a wide role in RTCs. They may be responsible for calling the emergency services and may also provide aid to the people involved. This can be emotional support and comfort or, if they have first aid training, they may also offer medical aid to casualties. After

[23] Unpaid relatives or friends who live with or support the daily living.

the RTC, witnesses may be required to give evidence in a range of situations, including providing witness statements to the police and insurance companies to determine culpability, civil claims and coronial inquests. In the case of criminal collisions, witnesses may be called to court and be legally required to attend. This review did not identify any publicly available statistics on the number of RTC witnesses.

Research on other types of single, non-interpersonal trauma incidents suggests that witnessing these types of events can lead to post-traumatic stress symptoms or other trauma symptoms (Tierens et al, 2012). Hall et al. (2013) emphasised that anybody involved in or assisting at the scene of a RTC is likely to undergo an immediate and persistent sympathetic nervous system response, accompanied by physiological stress and discomfort.

However, research into the impact of RTCs on witnesses is a known evidence gap and there are few, if any, studies of long-term negative consequences (Hall et al., 2013). The only study identified (Tierens et al., 2012) focused on the post-traumatic stress reactions in young witnesses (median age 15). It found that young witnesses were at risk of developing post-traumatic stress reactions, although this risk was lower than for direct victims of RTCs. As with direct victims, having a strong social support network was associated with a lower risk of post-traumatic stress symptoms, depression and anger.

5 Types of support currently available for victims of RTCs

Summary of indicative findings

Due to the relatively small number of stakeholder groups interviewed, the findings presented throughout this report that rely only on evidence from the stakeholder interviews should be interpreted with this important context in mind. Findings that rely only on stakeholder interview evidence are transparently noted below. Table 5 provides an explanation of the strength of evidence ratings which primarily reflect the type and volume of evidence, including ratings where findings are informed solely from stakeholder interviews.

	Strength of evidence
■ Through interviews with stakeholders and a review of support provider websites, it is understood that post-collision support (emotional and practical) is primarily provided by a small number of charitable organisations, including Aftermath Support, Brake, RoadPeace and Road Victims Trust. There are also several other providers that provide support to those affected by RTCs. These are smaller, localised services, and some are set up to support victims and witnesses of crime more generally.	General consensus amongst stakeholders
■ Referrals for support and eligibility vary greatly by geographical area. Some literature reviewed and all stakeholders described the variance in support received by geographical location.	Very strong
Whilst providers in some areas receive funding from PCCs, support providers are generally reliant on fundraising and donations. Some receive funding from corporate sponsors, including legal panels. In recent years, DfT provided funding to one national organisation after MoJ ceased funding it. This funding was to enable the central national service to be maintained up to September 2023.	General consensus amongst stakeholders
■ There are no timeframes for receiving support, and stakeholders emphasised the importance of not placing a time limit on accessing support. Witnesses, culpable drivers, drivers under investigation and children are sometimes not eligible to receive support. In this case, stakeholders noted that they would likely be referred for or signposted to support elsewhere.	General consensus amongst stakeholders
■ There may be groups of individuals who do not seek support, but these are difficult to identify. Evidence based on personal	NA

observations by all stakeholder groups interviewed suggests that these groups may include ethnic minorities, males, older people and other groups such as those on low incomes. However, there is a lack of data to understand the extent to which this is the case.	*This is an identified evidence gap*
■ Translation services are available but, on some support websites, this information is not always immediately accessible and may be difficult for individuals whose first language is not English.	Some evidence amongst stakeholders but gaps in data/knowledge

5.1 Introduction

This chapter addresses **RQ2: What type/level of support is currently available across England and Wales? And from whom?** and **RQ3: What type of support, if any, are each of the types of people affected by RTCs currently eligible to receive? And from whom?**

These findings mostly draw upon feedback from the stakeholder interviews, alongside evidence reviewed, including academic literature, grey literature and support provider websites.

5.2 Overview of support requirements

As discussed in Chapter 4, the impacts of a RTC can be broadly categorised into three groups: physical, psychological and financial impacts.

Interviews conducted by Savigar-Shaw et al. (2022), found that those impacted by road death/serious injury benefited from informational and practical assistance, especially in the immediate aftermath of the RTC. This study also found that information was one of the most frequently stated needs, alongside choice of type of service and choice in the timing of engagement, as this provided individuals with a sense of control over their situation and empowered them to take an active role in their recovery. Recognising the individuality of each case, Brake (2020, 2022) stressed the need to treat each victim's situation as a unique incident with its own specific criteria. The *2021/22 Annual Report* of the Victims' Commissioner which covers all victims of crime, underscores the critical importance of providing victims with support and information. It emphasises that there can be a myriad of unfamiliar and unpleasant procedures that individuals may have to confront, with little preparation or guidance (Dame Vera Baird QC Victims' Commissioner for England and Wales, 2022).

5.3 Support providers

5.3.1 Key support providers

Most post-collision support is currently provided by a small number of charitable organisations. Summaries of the largest providers of post-collision support are provided in Table 8.

Table 8 Four largest post-collision support providers

	Aftermath Support	Brake	RoadPeace	Road Victims Trust
OVERVIEW	A charitable organisation that provides support to anyone affected by road traffic collision in and around the North West of England.	Delivers a case-managed model of support and provides a printed support pack to every person who contacts its National Road Victim Service. It also coordinates national road safety campaigns and conducts work to raise awareness of road safety in the community.	Supports victims predominantly through a victim-led, peer-to-peer model of support. Provides information and support services to people bereaved or seriously injured in road crashes and engages in evidence-based policy and campaigning work to fight for justice for victims and reduce road danger.	Provides emotional and practical support for the bereaved and people otherwise affected by road death or life-changing injuries.
TYPE OF SUPPORT	Caseworker, practical help, emotional support, one-to-one support, information on other services.	Caseworker, emotional and practical support by phone/email, information/advice, advocacy, road safety awareness in communities, national safety campaigns, support for professionals working with RTC victims.	Emotional support via helpline, email help, befriender service, resilience building programme (eight-week sessions in small groups), online support groups, local support groups, legal panel, criminal justice advocacy. Campaign work around justice for those killed in RTCs.	Weekly one-hour counselling sessions (in person, online or on the phone), support worker, practical advice, support at an inquest or criminal court.
LOCATION	North West of England	UK wide	UK wide	Bedfordshire, Cambridgeshire, Hertfordshire, Norfolk, Suffolk.

ELIGIBILITY	Anyone injured, physically or mentally in the collision. Families and carers of the injured. Bereaved families and friends of the victim. Includes drivers and witnesses. Also includes culpable drivers.	The bereaved, seriously injured or those who helped a road crash victim.	Those who are bereaved or seriously injured as a result of a road crash.	Anyone affected by a fatal collision (bereaved families, those involved in the collision and witnesses). People affected by life-changing injuries/trauma as part of a serious collision. Also supports culpable drivers.
REFERRAL	Either via family liaison officer (FLO) or self-referral	Either via FLO or self-referral	Either via FLO or self-referral	All fatal collisions in the area are referred directly by the Police Forensic Collision Investigation Unit (unless they opt out).

The review also identified a number of other services that provide support to those affected by RTCs, as shown in Table 9. However, the majority of these provide support to victims and witnesses of crime in general rather than specifically to victims of RTCs, and RTC victims supported must have been involved in a RTC with a criminal element.

Table 9 Other support services

Organisation	Description	Location
Catch22	Supports victims through three areas: Beacon Victim Care, Greater Manchester Victims' Services, Victim First under the Catch22 brand.	Hertfordshire, Greater Manchester and Leicester, Leicestershire, Rutland
Day One Trauma Support	Works alongside NHS colleagues within major trauma centres. The charity has caseworkers on the ward to support patients and their loved ones.	Major trauma centres in the north of England
Families Fighting for Justice	Offers support to families who have lost a loved one through homicide and culpable road death.	Liverpool
Lighthouse	Team of staff from the police and victim support organisations working together to guide, advise and support victims and witnesses.	Bristol, South Gloucs, Bath & NE Somerset, Somerset
Norfolk and Suffolk Victim Care	Support service specifically designed to help victims and witnesses of crime.	Norfolk and Suffolk
Nottinghamshire Victim Care	Supports victims of crime and anti-social behaviour.	Nottinghamshire
Remedi	Support for victims of crime.	Derbyshire
Sarah Hope Line	Practical and emotional support for individuals who have been involved/family member of someone involved in a life-changing incident, and witnesses to incidents on Transport for London (TfL) modes of transport.	London
SCARD	Support for families and friends of those lost in road-related collisions.	Ossett
South Wales Victim Focus	Local service run by Victim Support for anyone affected by crime.	South Wales
Staffordshire Victim Gateway	Advice services for victims of crime.	Staffordshire
Victim Care and Advice Service	Supports victims of crime.	County Durham and Darlington
Victim Care Services	Supports victims of crime.	Hampshire and the Isle of Wight
Victim Support	Provides specialist practical and emotional support to victims and witnesses of crime.	England and Wales

Voice Road Harm	Helps people who have been affected by any kind of road incident.	Northamptonshire
West Midlands Police Victim Support	Provides victim support services for the local area.	West Midlands

There is very strong evidence to suggest that the availability of support and the referral process vary greatly by geographical area. All stakeholders noted that this means that where an individual lives can affect the support they receive, with some describing this as a 'postcode lottery'.

All PCCs commission support services for victims of crime. A majority of PCCs also provide bespoke provision in their respective policing areas for road collision support services, which may be provided by one of the large charities or by a smaller local service (such as those shown in Table 9). In 2023, DfT conducted a survey of all PCCs, PFCCs and Deputy Mayors (for Policing) who have responsibility for policing across England and Wales to understand the current support provided to those involved in or affected by fatal and serious (life-changing) injury RTCs (Department for Transport, 2023d). Of the 31 PCCs that provide support (out of 43 police forces), just over half (55%) said that Brake was the service provider that they used. This was followed by Victim Support (16%), Road Victims Trust (16%) and RoadPeace (10%). Some PCCs used more than one organisation/individual to provide support.

It should also be noted that, whilst an individual may initially be referred to one specific organisation, there is sometimes an onward referral to another organisation which is deemed to better suit the needs of the individual.

5.3.2 Support offered

A range of support is available from organisations after a RTC. Support can include:

- Emotional support (telephone support line, counselling in person and online, befriending service, support programmes); and
- Practical support (providing written and verbal information and advice on legal/finance matters, FAQs).

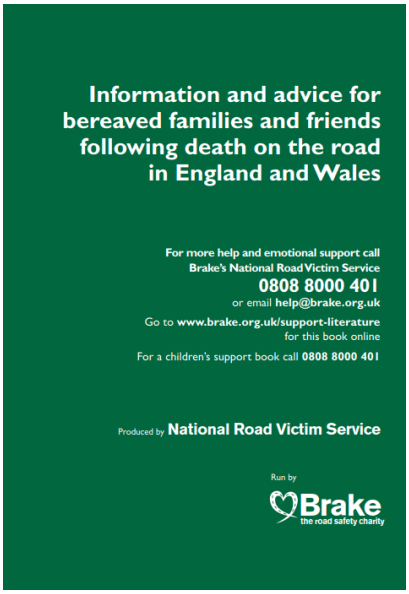
A survey conducted by DfT of PCCs, PFCCs and Deputy Mayors (for Policing) in England and Wales (Department for Transport, 2023d), found that 31 PCCs (out of 43 in total) currently provide support to those affected by fatal and serious injury RTCs (in addition to deploying a family liaison officer (FLO)). Of these, 87% provide emotional support to individuals, 68% said that practical support was available and 26% facilitate access to organisations that provide counselling services.

In terms of support delivery, 55% of the PCCs that currently provide support do so by phone, 48% provide support in person and 36% provide support online.

In some areas, there are dedicated FLO teams who are deployed, following a collision that leads to fatal or life-changing injuries, to the family of the deceased or injured person within 24 hours of a collision. If a police force does not have a dedicated FLO team, there will be a FLO with a dual role, for instance a traffic officer, who is fully trained to conduct the role of a FLO as part of their normal duties.

Several stakeholders emphasised the unique nature of each case, and the diverse ways in which individuals respond. They noted the importance of ensuring that a range of types of support is available. As such, many organisations are led by the needs of the individual.

Example of information provided: Brake support pack



All bereaved and seriously injured road victims can access the National Road Victim Service (NRVS) through printed NRVS information packs (Brake support packs) which are distributed by all police FLOs. The Authorised Professional Practice (APP) guidance on investigation of fatal and serious injury collisions states that FLOs should ensure that family members are provided with the Brake support pack by hand within 24 hours, and preferably at the time the family is informed of the death.

The pack provides information on the next steps following the collision, practical information, details on the criminal investigation and compensation, and links to other organisations. It is created by Brake and branded as such but signposts to other organisations, including RoadPeace, Victim Support, Road Victims Trust and Aftermath Support.

Approximately 3,500 bereaved families and friends received the NRVS information pack during 2021 (Brake, 2021).One stakeholder suggested it could be helpful to follow up with individuals to check they have received the pack. Another stakeholder suggested that the pack could be branded more broadly to represent the support available from all providers.

5.3.3 Accessing support

Support is accessed in several ways. Depending on the police force and processes in place, some forces refer with the individual's permission, whilst some individuals may access support by self-referring. According to data from a survey of PCCs, PFCCs and Deputy Mayors (for Policing), 97% of PCCs make referrals directly to the providers, while 63% PCCs said individuals also self-refer (Department for Transport, 2023d). Stakeholders acknowledged the positive aspect of police referrals given their presence in the critical hours/days following the collision, enabling individuals to receive timely support.

One report (Savigar-Shaw et al., 2022) noted the pivotal role of the FLO in shaping the victim experience. It reported that effective delivery of this role can ensure effective access to other services, reduce anxiety through the provision of information and provide victims with the confidence to return to normal life. However, their research found that clarity in the self-referral process was imperative to ensure that those impacted were able to access available support. One stakeholder had previously given feedback directly to DfT suggesting that the support provider is in the optimum position to explain to individuals what support they could offer and believed that an opt-out process could be more beneficial.

Some stakeholders felt that access to support could be improved. There was a feeling that an opt-out system should be in place, with individuals automatically being referred for support. At present, there is a mix of opt-in/opt-out access depending on geographical location. A pilot is currently in place in London whereby Brake and RoadPeace work together to provide support for those affected by RTCs. Under the pilot, victims of fatalities and the most serious collisions have their details passed onto Brake and then to RoadPeace (with the victim's consent). In the interviews, stakeholders felt that this would take the onus off the individual to source help and initiate contact.

5.3.4 Geographical structures and delivery mechanisms

As noted previously, some of the large and most of the smaller current support providers operate across different geographical areas. The referral process also varies depending on location. The majority of stakeholders interviewed noted that they would like to see a national approach, as the current approach feels inconsistent in terms of how an individual is referred and what support they receive. Savigar-Shaw et al. (2022) also referred to this 'postcode lottery' of victim support provision, with some force areas offering no specific road victim support but others providing funding for dedicated services.

One stakeholder said that having local knowledge can be a strength of a support provider in helping to support those affected by RTCs. Another stakeholder felt it was important that there should be a balance between having a nationally consistent process and having local knowledge to reflect local priorities.

5.3.5 Funding

Victim support services are funded and commissioned by a variety of agencies, including government departments nationally, and commissioners such as Police and Crime Commissioners (PCCs) locally. Where funding comes from the MoJ, this is targeted at victims of crime.

In 2014, the MoJ changed its funding model for supporting victims of crime. Since this change, the majority of MoJ funding to support victims of crime has been provided to Police and Crime Commissioners (PCCs). This funding (which is provided through annual grants) is used to

commission local practical, emotional, and therapeutic support services for victims of all crime types. PCCs will commission services for victims, which can include eligible victims of road traffic collisions, based on their assessment of local need. In recent years, DfT also provided funding to one national organisation following the changes to MoJ funding. The aim of this funding was to enable the core central national service to be maintained up to September 2023. The research report *Forgotten Victims* by Brake (2020) noted that the basic cost of running the NRVS, for the whole UK, was £440,000 a year, equating to a cost of £250 per death. Similar figures were reported in *Safe Roads for All*, a report by UK Road Safety and Mobility Experts (2021), which suggested that further funding was needed. The report compared the funding, at the time, of £3.4m a year to the England and Wales Homicide Service to help homicide victims. This report stated that both services worked similarly.

The general consensus amongst stakeholders was that funding was one of the main challenges. More specifically, the following issues were raised:

- Stakeholders want funding for road victims of fatal criminal collisions to be aligned with funding that is received for homicide victims.
- Stakeholders would like more clarity from DfT on what funding to support providers is likely to be available, which would allow them to plan for the future more effectively.
- It was the perception of some stakeholders that the process of obtaining government funding for support providers felt competitive and could result in charities having to work against one another rather than collaboratively.
- One stakeholder was concerned about future procurement for funding, in particular that it may only be offered to large providers who may not offer the same specialist RTC victim support knowledge or local understanding.

From the stakeholder interviews and the review of support provider websites, it is clear that many support providers rely on fundraising and donations. Some stakeholders explained some support providers receive funding from corporate sponsors, including legal panels (a small number of solicitors). .

5.3.6 Collaboration

During the stakeholder interviews, participants praised the engagement that they had with other stakeholders, particularly collaboration between support providers. Many expressed their commitment to referring individuals to other charities if their organisation could not provide the necessary support. The recent pilot initiative involving RoadPeace and Brake illustrates such collaboration where stakeholders can complement each other's strengths and skills.

Some stakeholders noted that the engagement they had with DfT was positive. One stakeholder referred to a working group that had been set up with DfT and said this has been effective.

Stakeholders conveyed an eagerness to foster collaborative efforts, particularly amongst support providers, recognising the diverse strengths each brings to the table. Despite acknowledging a historical backdrop of competitiveness, they emphasised a desire to shift away from this in the future. They voiced concerns around making funding a competitive process, as this can lead to charities competing against one another rather than taking a collaborative approach.

5.4 Eligibility and exclusions

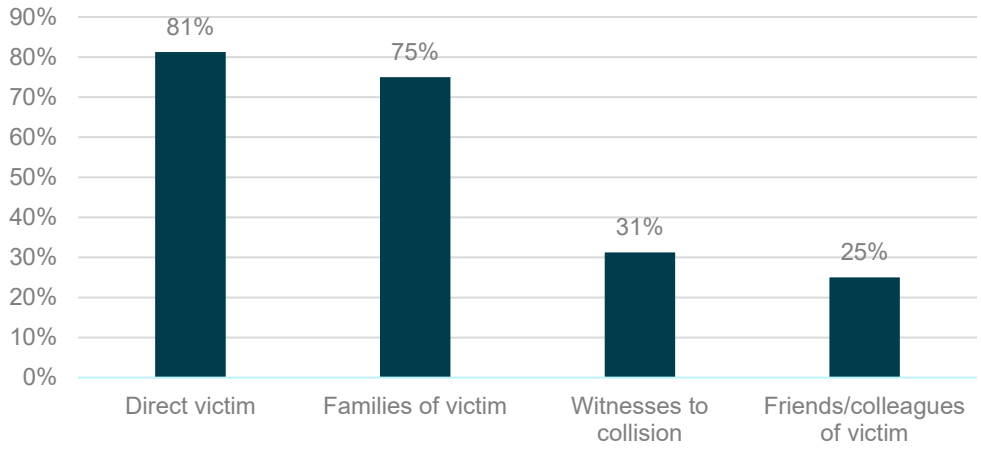
5.4.1 Eligibility criteria for accessing support

As with provision of support and referrals, eligibility to receive support can also vary by region and by support provider. Support tends to be for fatal and serious collisions, however some stakeholders interviewed said they would “never turn people away”.

Eligibility for support varies by provider but tends to include support for direct victims, as well as family, carers and friends of the victim, and witnesses. However, different categories of victims may be eligible for different types of support. For example, a witness may be signposted for support elsewhere if they are not eligible for direct support by the provider.

Figure 15 shows the results of a DfT survey of PCCs, PFCCs and Deputy Mayors (for Policing) (Department for Transport, 2023d). It found that, of those who offer support, 81% of PCCs offer support to direct victims of collisions, whilst 75% said the families of the victim are eligible. Just under a third (31%) responded that witnesses to a collision would be eligible for support, whilst 25% said friends/colleagues of a victim would be eligible. Note that no definition of the term ‘victim’ was provided, and it may therefore have been interpreted differently by the respondents.

Figure 15 Eligibility for support offered by PCCs



Source: SYSTRA analysis of PCC survey data conducted by DfT, 2023. Based on the responses of 32 PCCs that offer support

Two studies (Savigar-Shaw et al., 2022; Snow, 2022) reported that some police forces only offered support to those who they considered to be victims of fatal collisions, although support requirements could be long lasting and often permanent. The research conducted by Savigar-Shaw et al. (2022) which involved 34 stakeholders (including support providers, FLOs and police officers), emphasised the need for support for those with serious injuries. Participants commented that these individuals were often unable to care for themselves for the rest of their lives.

In terms of eligibility for support by age, feedback was mixed as to whether support was provided to those aged under 18. This again depended on area and provider. Some do provide direct support, whilst others refer to other services for under 18s. Those who do not provide support for under 18s refer people to alternative services such as local children's services or GPs for further support.

5.4.2 Timeframes for accessing support

The general consensus amongst stakeholders interviewed was that there are no time limits for accessing support. Similarly, a review of other support websites did not find any timeframes placed on accessing support. Stakeholders stressed that it is important not to have timeframes for individuals to reach out. It was acknowledged that people deal with trauma in different ways; one stakeholder commented that some individuals may contact a support provider within 24 hours of the collision whilst others may approach a provider months later. Another stakeholder felt that it is essential not to set time limits for accessing support as individuals deal with grief differently. They provided an example of Hindu custom whereby there is an extended period of mourning during which the bereaved may not be open to receiving support.

5.4.3 Exclusions from accessing support

Some individuals may not be eligible to receive support due to exclusions by age, the severity of the collision, their relationship with the collision or the region in which they live. Stakeholders noted that if an individual is not eligible, they will be signposted to other services.

Some support providers do not provide support to a driver under investigation, which is discussed in more detail in the next section. There are also differing levels of culpability; for example, some providers will support a driver who had a momentary lapse in concentration but will not support a driver who was under the influence of drink/drugs.

Some support providers only support victims who have been affected by a fatal and/or serious collision. For example, these providers have staff who are trained to refer individuals elsewhere for support if they do not meet the criteria to receive support from them. Support providers who have exclusions based on age refer children to other organisations.

One stakeholder noted that some support providers are unable to support all witnesses and may only support witnesses who physically interacted in some way with a RTC. In some cases,

providers have specific criteria to determine whether a witness is eligible, e.g., if they performed cardiopulmonary resuscitation (CPR).

Regional support providers tend not to support residents outside of their area but sometimes offer support remotely or refer to other providers. Exclusions tend to be because the organisation only has limited capacity to provide support. PCC-funded roles typically do not support people who live outside the force area.

5.4.4 Culpable drivers

Many support providers do not provide ongoing support to a culpable driver or a driver under investigation. One stakeholder explained that this can be because some victims may feel uncomfortable being amongst individuals who are under investigation, which is particularly relevant to providers that give support in a group setting. Whilst some support providers do not provide ongoing support to a culpable driver/driver under investigation, they assess their needs at the point of triage and ensure that any risks are stabilised before referring them to the appropriate service (e.g., to their GP, mental health team).

A small number of support providers do support culpable drivers/drivers under investigation, depending on the level of offence. It was felt that these drivers might be traumatised too, and providers take steps to ensure they are supported separately to other victims to ensure that any sensitivities are managed.

One study (Savigar-Shaw et al., 2022) also commented on culpable drivers not being eligible for support despite being likely to be impacted (alongside their families and witnesses who might be present in the vehicle). It noted that this raised questions about the purpose of support and tensions between civil or criminal findings of innocence and guilt within RTCs.

5.4.5 Challenges and support needs with criminal RTCs

Stakeholders interviewed were asked whether there were any unique challenges and support needs with criminal RTCs. Four stakeholders noted that providers that support culpable drivers can find there to be a potential conflict of interest between victims who do not want to be within a support group with an individual who may have killed or seriously injured someone.

Two stakeholders felt that the investigation process can be lengthy. The uncertainty during this period means greater trauma for the individual and they may require support for longer. The length of time for an investigation to be completed can also make it difficult for support providers to estimate the proportion of RTCs that they support which are criminal, but stakeholders estimated this to be in the region of 25% and 30%.

The view of one stakeholder was that the police only release a very limited amount of information prior to the conclusion of the investigation, which can prove difficult in enabling injured people to access support. This is because the legal/insurance team has to prove to the defendant's insurance company that the injured person needs compensation or an interim

payment to pay for their rehabilitation, whereas the insurer on the other side will still be waiting for evidence of the collision and refuse to do anything until the conclusion of the criminal process.

Another stakeholder felt that, whilst the Victims' Code is a good resource, their perception was that only a small number of victims are entitled to receive support under the Victims' Code compared to the numbers actually affected.

5.5 Awareness and reach

5.5.1 Raising awareness

Several stakeholders raised the issue of ensuring that support is fully promoted. Some mentioned that it relies on support providers having a good relationship with police FLO teams, and on FLO teams making individuals aware. The evidence review also noted the importance of the police FLOs and their awareness of available services at a local and national level. This was seen as being essential for effective service provision and a 'warm referral' (i.e., a request to pass on the victim's personal details) to any specialist road victim service in that police force area or to a national road victim helpline. The perception of 44 stakeholders (support providers, RTC investigators, road safety experts, victims/survivors) interviewed as part of a study by Savigar-Shaw et al. (2022) was that the self-referral process needed to be made clear to ensure that those impacted were able to access available support.

Where individuals are referred automatically for support (opt-out process), the majority of stakeholders interviewed considered this to be preferable to an 'opt-in' referral (which is the case in some areas). This relies on the individual being aware of the support in the first place. One stakeholder felt that lack of promotion was an issue in some areas and noted that witnesses were one group who might not be aware that support was available as they might not have interacted with the police or attended a major trauma centre.

5.5.2 Current reach

All support providers interviewed noted that they had supported a large number of individuals over time. However, they all felt that they could be helping more people. From data provided by the four support providers interviewed as part of this study, it is estimated that between them they support approximately 2,500 individuals affected by RTCs each year. It should be noted that there may be an element of double counting where individuals are supported by more than one provider or referred from one provider to another.

5.5.3 Untapped support and non-seekers of support

5.5.3.1 Groups that do not seek support

All stakeholders felt that there may be groups of individuals who do not seek support. Stakeholders did not know, based on data or evidence, who these groups are or why they do not seek support, and therefore these views were based on their own perceptions.

One stakeholder commented that, historically, males were less likely to seek support than females, but the last year had seen more males accessing support. Another stakeholder felt that males were less likely to seek support and younger people were often harder to reach. The *Road Victims Trust Annual Report and Impact Statement* (Road Victims Trust, 2023) contains some data around the demographic groups that have accepted/declined support. This shows that a higher proportion of females accept support, whilst a higher proportion of males decline support. However, it should be noted that this data contains a large proportion of individuals where the demographic details are unknown.

Two stakeholders felt that ethnic minority groups may be less likely to seek support. One stakeholder mentioned that they had conducted outreach work in these communities to help address this.

Two stakeholders commented that language can be a barrier to access (see next section).

Another stakeholder acknowledged that some groups may not go to the police, and therefore may not come to them for support.

Some stakeholders observed that older people may be less likely to seek support, whilst they considered the younger generation to be more likely to talk about mental health and reach out for support. Data sent by support providers does not appear to show a clear decline in seeking support by age, but fewer individuals from the 65-74 and 75+ age groups seem to seek support.

Data from the *Road Victims Trust Annual Report and Impact Statement* (Road Victims Trust, 2023) suggests that White British people are more likely to accept support compared to those from ethnic minorities. The report states that 131 White British individuals accepted support whilst 90 declined, compared to nine Asian individuals who accepted support whilst 15 declined. However, the data also includes a further 67 individuals who accepted support and 129 who declined who did not state their ethnicity. It should be noted that this data is only from one support provider and therefore gives us a very limited view of the actual numbers of individuals from different ethnic groups who accept/decline support.

A similar lack of data was also noted across other support providers. In the demographic data collected, there are some groups of individuals for whom the demographic data is ‘unknown’ i.e., they do not share their ethnicity, age or gender. This results in a lack of clarity as to who is accepting or declining support.

One study of people bereaved by RTCs in the Netherlands found that the most commonly reported reason for not accepting bereavement care was: “I believe I do not have emotional problems that I need help with”, followed by “I think my problems will naturally disappear”, “I find it difficult to find adequate support”, “I think no one can help me” and “I think it is too painful to talk about the loss” (Lenferink et al., 2021). It found that one in five individuals bereaved as a result of a RTC had not used any bereavement support services even though they might have benefited from doing so.

5.5.3.2 Meeting demand for support

The general consensus amongst stakeholders interviewed was that demand is growing for support. However, some had concerns that numbers of police FLOs had reduced.

5.5.4 Language and translation of services

Analysis of a DfT survey of 31 PCCs, PFCCs and Deputy Mayors (for Policing) that provide support to victims of a RTC showed that 67% of PCCs noted the service provider offered an interpreter service for those whose first language was not English, whilst 50% provided translated text. Welsh and Polish were the most commonly noted languages (Department for Transport, 2023d).

During the stakeholder interviews, all four support providers explained that they translate their services and information into other languages and arrange interpreter services, and some train their counsellors to work with interpreters. One support provider noted that they try to ensure their service team is diverse to reflect the communities they serve. However, other stakeholders interviewed campaigners) felt that more could be done, but noted that this requires investment.

Whilst this was the view of the stakeholders interviewed, a review of websites that provide support to victims found that few offer information upfront to non-English speaking individuals. Often, translation information is difficult to find, or not provided at all, so self-help may be difficult for an individual who does not have English as a first language.

Some websites offering support to all victims of crime rather than just those involved in RTCs (e.g., Victim Support) provide a direct link to ‘help in other languages’ on the main homepage, which may help individuals who do not have English as a first language to find support more easily in other languages. From the stakeholder discussions, it is clear that individuals involved in RTCs are informed that services are available in other languages, but this may not be so clear for individuals who self-refer and seek out information online.

6 Types of support that are working well or less well

Summary of indicative findings

Due to the relatively small number of stakeholder groups interviewed, the findings presented throughout this report that rely on evidence from the stakeholder interviews only should be interpreted with this important context in mind. Findings that rely only on stakeholder interview evidence are transparently noted below. Table 5 provides an explanation of the strength of evidence ratings which primarily reflect the type and volume of evidence, including ratings where findings are informed solely from stakeholder interviews.

	Strength of evidence
■ Stakeholders consider the current range and diversity of support available to be extensive, and reported that they receive positive feedback from the individuals that they support.	General consensus amongst stakeholders
■ Support providers interviewed believe that they collaborate well with one another and are keen for this to continue. They felt this was an important consideration should any future funding competition opportunities arise.	General consensus amongst stakeholders
■ Different support providers provide different services and consider themselves to have different strengths. There is insufficient robust evidence to understand the effectiveness of different types of support. The only type of support referred to as especially effective in the literature reviewed and the stakeholder interviews was a caseworker support model. However, this evidence is not based on robust evaluations and some of the evidence is not specific to victims of RTCs.	NA *This is an identified evidence gap*
■ The current range and diversity of support available is extensive. However, there is strong evidence of a lack of consistency in services available across the country, with stakeholders reporting challenges with access to funding.	General consensus amongst stakeholders
■ Some stakeholders also considered that greater funding for the sector was important to improve the support provided, and felt that it could remove the burden of trying to raise funds elsewhere or the reliance on corporate sponsors (e.g., legal panels). There were calls for consistency to be provided for all victims of crime and aligning funding for road victims of fatal criminal collisions with what is received for homicides.	Some evidence amongst stakeholders

■ Stakeholders felt that support could be improved by understanding which victims do not access support, and why they do not do so. Some stakeholders felt that the referral process for support could be made more consistent, and that further work could be done to promote/raise awareness of support available, and to make eligibility criteria clearer. There is potentially a wider discussion to be had around eligibility, inclusion of culpable drivers and definition of witnesses.	NA *This is an identified evidence gap*

6.1 Introduction

This chapter addresses **RQ4: What types of support or elements of the current support systems work well and for who?** It explores what types of support or elements of the current support systems are working well and which ones require improvement or further research to understand support outcomes.

6.2 Areas that are working well

From the evidence review and interviews with stakeholders, it is apparent that there is a lack of robust, independent evaluation or evidence on the effectiveness of the different types of support provided, and on whether one type of support is more effective than another. Stakeholders did, however, indicate what areas of the support system they considered were working well, based on their own perceptions, as well as feedback they had received from those they supported.

Areas that stakeholders considered to be working well are as follows:

- **The service provided by organisations to those affected by RTCs:** Support providers spoke with pride about the services that they offer to those affected by RTCs. They commented that the verbal feedback they receive from individuals is positive, and they commented that a person-centred approach, and tailoring support to the individual, is important.
- **Relationships with stakeholders:** Stakeholders interviewed noted that they have good relationships with local authorities and the police. The general consensus amongst the support providers interviewed was that they work well with other providers and they expressed the importance of collaboration.
- **Casework support model:** The casework support model is one where an individual is assigned a dedicated case contact. Interviewed support providers who operate a caseworker support model felt that this was an effective approach. This view was based on their own opinion and feedback received from those they support. The casework support model is the only type of support that was referred to within the literature and in stakeholder interviews when discussing effectiveness, but this view was not based on robust evaluations and the literature was not specific to victims of RTCs. One internal report (rather than independent evaluation) (Sudden/Brake, 2020) commented that "[case

management from a named worker] is thought by many to be a 'gold standard' aspect of support for people bereaved in challenging ways". A rapid evidence review (looking at victims of crime in general, rather than RTCs specifically) by Wedlock and Tapley (2016) highlighted that a single point of contact or advocate can be an effective way to provide victims with the combination of both the information and support required to help them regain a sense of autonomy. Research conducted with ten 'victims and survivors' of RTCs by Savigar-Shaw et al. (2022) also found that, for those affected by RTCs, having an individual to "walk beside" them throughout and provide information/guidance at different stages of the process was the "preferred service model". That said, overall there appears to be a lack of sufficiently robust evidence around the effectiveness of different types of support and what types of support work well and for whom.

- **Localised knowledge:** Two stakeholders interviewed considered local knowledge to be a strength of a support provider's service offering.
- **Wider benefits and social value of victim support:** The view from an expert report by UK Road Safety and Mobility Experts (2021) was that support for road victims may lead to a reduction of the risk of poor mental health and other poor outcomes such as unemployment and suicide. One of the stakeholders interviewed shared this view but considered that there was a gap in research undertaken around the wider benefits of support provided (beyond the direct benefit to the individual). This includes the economic impact on the NHS, potential time off work and that these impacts should be quantified to demonstrate to funders the impact of the work carried out on the individual and the potential wider impact on the economy.

6.3 Areas for improvement

This section outlines potential areas for improvement that were suggested by stakeholders and emerged from the evidence review. The key areas for improvement are summarised as follows, and are explained in more detail throughout this section:

- Promotion and awareness
- Funding
- Consistency in delivery
- Improved processes for victims
- Support for all
- Support for bereaved individuals.

6.3.1 Promotion and awareness

Stakeholders interviewed all expressed a desire for support services to be made available to as many people as possible and expressed a desire for support provider's to be able to promote their services and the referral process to their services, and to raise awareness of services more widely. Barriers to this include lack of time and funding.

Some evidence (Victim Support and North Yorkshire Police, Fire & Crime Commissioner, 2023) suggests that awareness should be raised around the range and type of support that is available, and that knowledge and understanding of access routes into services for both victims and professionals, including how to access services quickly and efficiently at the point of need, should be increased. One stakeholder felt this required a greater number of police FLO teams as they play an important role in making individuals aware of the resources available.

Stakeholders also referred to the importance of collaboration as a way of increasing awareness and were keen to increase this between different support providers and other professionals. One stakeholder said that awareness about the services that are available should be raised amongst health professionals.

Brake's NRVS Brochure (Brake, 2022) noted that police forces were starting to move towards/consider more automated referral methodologies to NRVS.

One stakeholder felt that support providers' websites should fully explain what services are available and work more collaboratively with trauma centres.

6.3.2 Funding

There was some evidence amongst stakeholders that more funding could improve services to support those affected by RTCs. One stakeholder felt that greater funding would allow support providers to deliver more consistent support across England and Wales. Another stakeholder also added that, whilst support providers are capable of raising a large proportion of their own funding, even funding for a small element of their service (such as for those who are bereaved) would make a difference to the service that providers can operate and deliver.

Five stakeholders commented that they felt funding for road victims of fatal criminal collisions should be aligned with what is received for homicides. Two stakeholders wanted to see increased funding for police FLOs, as they considered their role to be an essential part of the process in referring victims for support.

Four stakeholders interviewed were aware of considerations being given by DfT to potential future support and were keen to see certainty and greater clarity in relation to this. Some stakeholders felt that accessing government funding for RTC victim support required leadership from the top of government, but there were concerns that the upcoming election might slow down decisions. Another stakeholder suggested that RTC support could be cross-departmental and looked at as a public health issue rather than just a MoJ or DfT issue.

6.3.3 Consistent delivery

The general consensus amongst all stakeholders interviewed was that there is a 'postcode lottery' regarding the level and type of support a person may receive, or indeed whether they will be referred for support. This was also referenced in the literature reviewed.

A systematic literature review of 49 papers to understand the predictors of PTSD in RTC survivors (Heron-Delaney et al., 2013) found that, whilst most people received treatment for physical injuries sustained in a RTC, only a minority received treatment for mental health problems.

One of the recommendations from a policy/recommendations paper (UK Road Safety and Mobility Experts, 2021) was for a nationally commissioned, standards-driven national road victims service which would be immediately accessible to victims through the police. It should be noted that this is a policy/recommendations paper based on a review of academic and practitioner evidence, with contributions from specialists in safety and mobility. All stakeholders noted that they felt there is a need to ensure that all victims of RTCs are entitled to the same level of service and consistency across England and Wales. One stakeholder commented that they felt the "postcode lottery" needed to be removed and that "uniform support" needed to be provided across the UK.

6.3.4 Improved processes for victims

Some stakeholders suggested that improvements could be made for victims of RTCs around the legal process.

One stakeholder interviewed noted that they wanted to see options explored for extending the Victims' Commissioner for London's brief to include victims of road crimes and victims of collisions where no crime has been committed.

Several stakeholders interviewed wanted to see collision victims treated as victims of crime until the contrary is proven to allow them to obtain the same support that is offered to other victims of crime. This included wanting to see the Victims' Code extended to include all collision victims, keeping them better informed of the investigation progress and signposting them to support services.

Two stakeholders wanted to see legislative change around power of attorney being fast tracked so that, when people are impacted by bereavement, they can access support quickly (e.g., private healthcare) and so that waiting for power of attorney does not add to their stress. Another stakeholder also agreed that the criminal process can slow down progression of support due to the inability to release information until the investigation has concluded.

6.3.5 Support for all

The majority of stakeholders interviewed noted that there may be groups of people who do not access support, but they were unclear about who these groups might be. A desire to understand this further was expressed, to help ensure that services are available to all who need them. One study carried out in the Netherlands found that one in five bereaved individuals did not use any bereavement services, despite reporting elevated pathological grief levels or a need to use one (Lenferink et al., 2021).

As well as understanding which groups may not come forward for support, stakeholders also emphasised the importance of being clear about who is eligible for support and ensuring that eligibility criteria are consistent across England and Wales. Several studies reviewed, including Savigar-Shaw et al. (2022), discuss the 'ripple effect' of RTCs and recommend that support is available to all, including both direct and indirect victims. The Savigar-Shaw et al. (2022) research, in particular, also recommends that culpable drivers and their passengers are included within support eligibility. They note that the model of provision already exists in some areas (and is provided by some of the support providers interviewed as part of this study), which offers the opportunity for learning.

6.3.6 Support for the bereaved

One study (Attwood et al., 2023) found that individuals bereaved by a RTC reported challenges when attempting to gain support and suggested that one possible explanation for this was that healthcare professionals were unsure about how to deal with bereavement, particularly in relation to bereaved children. The same study found that some bereaved individuals reported that they were not offered any support and, in a few cases, felt that they were subject to mistreatment from staff within different organisations including hospitals, schools and support providers. Opt-in processes were also identified as an issue and some individuals felt that they did not have sufficient signposting.

7 Evidence gaps and potential further research

Summary of indicative findings

This review identified seven key evidence areas that would benefit from further research:

Demand for support services:

- The impact of RTCs on witnesses and whether their support needs are met;
- Quantifying the scale of unmet demand amongst all victim groups;
- Data on the protected characteristics of people affected by RTCs which is not currently routinely collected, and their specific support needs;

Current support provision:

- Support for culpable drivers and drivers under investigation;
- Barriers to accessing support;
- Monitoring and evaluation of current support provision; and
- Support provided by geography and for specific subgroups, and the potential role and scope of national standards.

In addition to these evidence gaps, stakeholders also felt that the wider societal impacts of RTCs such as loss of output and cost to the NHS were poorly understood. DfT already produces valuations of the societal cost of casualties, and there is academic research quantifying societal impacts of RTCs which suggests that the issue lies with awareness rather than availability of this information.

7.1 Introduction

This chapter addresses **RQ5: What are the outstanding evidence gaps?**

Several studies assessed as part of the evidence review made recommendations for further research in this field to address knowledge and data gaps. Stakeholders interviewed were also asked whether there was a lack of data and understanding around certain topic areas that could be understood through further research. These findings, along with the evidence gaps that were identified in the overall literature review, are summarised below.

7.2 Evidence gaps

Seven key evidence gaps were identified through this review. Four of these gaps relate to understanding the demand for support services, including identifying specific groups for which support needs are poorly understood. The remaining three evidence gaps relate to understanding current provision of support.

7.2.1 Evidence gaps in demand for support services

7.2.1.1 The impact of RTCs on witnesses and their support needs

Witnessing a traumatic event can lead to psychological impacts such as PTSD or anxiety. In the case of criminal collision, witnesses may also be required to provide evidence in court, coronial inquests and civil court, which may require specific types of support. However, there appears to be very little research into the impacts of witnessing motor RTCs specifically, and there is no publicly available data that quantifies the number of people who witness a RTC. Without this information it is not possible to understand whether current support for witnesses is sufficient.

7.2.1.2 Demand and unmet demand amongst all victim groups

Table 10 summarises the publicly available data that is available on the number of people involved in RTCs, whether as direct victims, family, carers, friends or witnesses.

Table 10 Data availability

Group	Subgroup	Data availability	Source
Direct victims	Involved in any collision	England only	NTS (England)[24]
	Casualties in motor RTCs	England and Wales	STATS19 HES NTS (England only)
Family and friends of direct victims	-	None identified	NA
Witnesses	-	None identified	NA

Source: Frontier Economics analysis of data availability

The STATS19 data provides an estimate for the number of people who are injured or killed in a motor RTC in England and Wales. This data could be triangulated against hospital admissions data and the NTS (for England) to address the fact that STATS19 under-reports

[24] Transport for Wales is currently working with the Welsh government to develop a National Travel Survey for Wales.

casualties[25] and could make an overall estimate for demand for direct victims of motor RTCs. This could then be compared against data held by current support providers to understand the scale of unmet demand. However, there is a data gap for exploring demand and unmet demand for specific subgroups, e.g., children or those with protected characteristics.

Data availability is much poorer for bereaved family, carers, friends and witnesses. Further research is required to estimate victim numbers for these groups. Once established, this could again be compared against data held by current support providers to understand whether there is any unmet demand. One international paper found that one in five individuals bereaved as a result of a RTC had not used any bereavement support services even though they could have benefited from doing so (Lenferink et al., 2021).

Publicly available data on criminal collisions is only available for the total number of police recorded criminal collisions in England and Wales. Further geographical disaggregation is not available, nor is data on the number of casualties associated with these collisions.

7.2.1.3 Demand for support amongst people with protected characteristics and their specific support needs

This review found that some groups with protected characteristics may be particularly vulnerable either because they are at a greater risk of being injured in a RTC or, as stakeholders suggested, because they may face specific barriers to accessing support.

However, data on collisions and casualties by protected characteristics was one of the key evidence gaps identified in this work. Whilst the STATS19 data records casualties by sex and age, it does not record other characteristics. For example, ethnicity is not recorded as part of the STATS19 database.

One database that could address this gap for England is the National Travel Survey (NTS) data held in the UK Data Archive's Secure Data Service (SDS). NTS data reports the proportion of people who self-report being involved in a collision in the past 12 months. Whilst the publicly available data does not categorise this by protected characteristics, the SDS holds more disaggregated data from the NTS, which may include personal data such as ethnicity. This data has already been used by researchers in this field to understand inequalities in road injury risk (Aldred, 2018).

7.2.1.4 Support provided to culpable drivers/drivers under investigation

This review also identified that culpable drivers and drivers under investigation are often not eligible for support. Stakeholders noted the sensitivities around this group, but also acknowledged that these individuals may have experienced trauma too and could require support. Research by Savigar-Shaw et al. (2022) also commented on culpable drivers not being eligible for support but suggested that these individuals were likely to be impacted.

[25] STATS19 under-reports road collisions and casualties as some personal injury collisions are not reported to the police or are reported to the police but the details are not recorded. Section 2.4 Study Limitations provides further information.

Whilst this research highlighted that culpable drivers/drivers under investigation have support needs that are not always provided for, it also uncovered a gap in robust data around where support is and is not provided for culpable drivers/drivers under investigation, the experiences of these individuals and their family and friends, and whether they are currently not accessing support.

7.2.2 Evidence gaps in the current provision of support services

7.2.2.1 Understanding barriers to accessing support

There is a lack of understanding/data collection around those who may be affected by RTCs but who do not seek support – this includes specific sociodemographic groups as well as types of groups affected (e.g., witnesses).

This view was also shared by Savigar-Shaw et al. (2022) who recommended that further research be undertaken to identify and engage with those affected by RTCs who do not access any support. They felt that until the experiences and needs of those who do not access support are known, the full extent of service provision cannot be known.

Two stakeholders felt that research should be undertaken with individual FLOs in different areas, as this would give a better understanding of how support offered varies across the country.

7.2.2.2 Effectiveness of current support provision

Through the evidence review, a gap was identified in terms of a formal, independent process, impact and value for money evaluation of existing support provision. Many support providers do collect some data to analyse the impact of their services, but there are limitations in this:

- Some data, such as data on protected characteristics, is not collected by all providers. Some stakeholders noted that it can be difficult or problematic to collect this data from a person when they are currently going through a traumatic experience.
- Published impact assessments typically focus on reporting output metrics, for example the number of people supported, the amount of literature distributed and the number of hours of training provided. Outcomes are typically reported via quotes and interviews with those who receive support, although qualitative data from these interviews is rarely aggregated and evaluated to draw out key learnings, and potential participation bias is rarely taken into account.
- Evaluation of services tends to be conducted internally. Best practice guidance including the Magenta Book (HM Treasury, 2020) and NESTA's standards of evidence (Puttick and Ludlow, 2013) emphasises the value of independent evaluators along with peer review of the evaluation design and outputs throughout the process to ensure that results are credible.

- There is a lack of data and understanding around the value for money of services currently provided. Evaluation of services should also consider the wider value for money impact, such as on the NHS, the economy and employment levels.

More robust evaluation of current support provision would provide valuable learning opportunities and inform future decision-making. Process evaluation can help with understanding whether current services are being implemented effectively and as intended, and the degree of futureproofing built in to ensure that services evolve with the justice systems, in order to help maximise the change of successful delivery of any future support services. Impact evaluation can help with understanding the type of interventions that have the greatest impact on different victim groups, and in which circumstances, and can help to improve targeting of new, expanded or altered support services. Value for money evaluation can help with understanding which services provide greatest value for the service they offer and will be an important tool for the accountability of any public spending.

7.2.2.3 Further understanding of differences in service provision by area and specific subgroups and the potential role and scope of national standards

There are several evidence sources which consider the impact of support provided as a whole across England and Wales but very little data around the impact of services by region. The majority of stakeholders felt there is inconsistency in the referral process and eligibility for support, but there is a lack of evidence and understanding around how support has been received and experienced by geographical area.

Similarly, there is limited data on service provision by specific subgroups including witnesses, drivers under investigation, those with English as a second language and children, and how they are treated differently by area.

Some stakeholders and a policy report (UK Road Safety and Mobility Experts, 2021) suggested that a national approach or minimum standard of service could help to address this. Current evidence in this area does not provide further detail around what a minimal standard of service would look like.

7.3 Wider societal impacts of RTCs

In addition to the evidence gaps described above, the stakeholder interviews and research also noted the wider societal impacts of RTCs.

There is already a body of research on the wider societal impacts of RTCs. For example, Wijnen and Stipdonk (2016) estimated that in high-income countries included in the study, the average societal cost of RTCs was 2.7% of gross domestic product. Moreover, DfT produces valuations of both fatal and non-fatal casualties as part of its Transport Analysis Guidance (TAG), which tries to account for the whole range of societal impacts, including human costs, loss of output due to injury and medical treatment costs (Department for Transport, 2022).

However, one recurring theme amongst stakeholders was that the wider societal impacts of RTCs are poorly understood by policy-makers and decision-makers. Another stakeholder cited the World Health Organization and the United Nations calling RTCs a pandemic but believed that the UK government had not signed up to this view. The Road Policing Review (Department for Transport, 2021) also highlighted a gap in support, but one stakeholder felt that no action had been taken. The same stakeholder felt that RTCs and the support provided need a cultural change and a spirit of co-creation to impact on policy- and decision-makers. This should be conducted by looking at the economic burden and the cost of doing nothing.

Annex A Method note

This method note details the scope and parameters used for undertaking the evidence review and stakeholder engagement.

A.1 Analysis of secondary research

A.1.1 Inclusion and exclusion criteria

The parameters of the evidence review are as follows:

Table 11 Review parameters

Parameter	Scope for inclusion
Language	Studies written in English only. Search terms will be in English only.
Publication status	Include published academic literature in addition to published grey literature and unpublished grey literature if any is found.
Date of publication	Include studies published in the last ten years, from 2013 onwards. However, guidance/publications/studies that have not been updated for more than ten years, but which are still relevant/important to the study, will be included where appropriate.
Countries and geography of evidence	RQ1 and RQ4 will focus on UK evidence, but there is the potential to expand to cover EU, USA and Australia if the UK literature is limited. RQ2 and RQ3 will focus on evidence from England and Wales.
Collision type	Collisions where at least one motor vehicle is involved (including e-scooters) **and** at least one person is injured. Damage-only collisions are out of scope.
Vehicle types	Motor vehicles (cars, motorcycles, light goods vehicles, heavy goods vehicles, buses, coaches, e-scooters and other powered transporters).
Groups of interest	To include victims of all ages (both adults and children where relevant). Includes both professional and non-professional drivers. Excludes people who provide professional services in response to a RTC.

Search strategy

The following search sources were used for the evidence review:

- JSTOR
- Google Scholar
- Contacts with experts (including DfT)

The following search terms were used to identify potentially relevant studies across these sources.

Table 12 Search terms

Research questions	Search terms
RQ1	Victims of road traffic collisions/crashes/accidents; health and social consequences of road traffic collisions/crashes/accidents; understanding the effects of road traffic collisions/crashes/accidents; psychological effects of road traffic collisions/crashes/accidents; legal issues following road traffic collisions/crashes/accidents; criminal consequences of road traffic collisions/crashes/accidents; lived experience of road traffic collisions/crashes/accidents; surviving road traffic collisions/crashes/accidents; trauma after road traffic collisions/crashes/accidents; legal process after road traffic collisions/crashes/accidents; insurance process after road traffic collisions/crashes/accidents; vehicle recovery process after road traffic collisions/crashes/accidents
RQ2	Support for post road traffic collisions/crashes/accidents; road traffic [victim support groups/health support/ legal support/social support]; rehabilitation after road traffic collisions/crashes/accidents; early interventions after road traffic collisions/crashes/accidents; role of support networks for victims of road traffic collisions/crashes/accidents; health services for road traffic collisions/crashes/accidents; social support for bereaved road traffic collisions/crashes/accidents; experiences of support road traffic collisions/crashes/accidents; recovery trajectories following road traffic collisions/crashes/accidents; psychological support for road traffic collisions/crashes/accidents
RQ3	Road traffic collisions/crashes/accidents support eligibility; road traffic collisions/crashes/accidents insurance criteria; benefits for victims of road traffic collisions/crashes/accidents road traffic collisions/crashes/accidents; insurance claimants of road traffic collisions/crashes/accidents; government support road traffic collisions/crashes/accidents; legal support road traffic collisions/crashes/accidents; criminal road traffic collisions/crashes/accidents
RQ4	Road traffic collisions/crashes/accidents [quality of care/provision gaps/ works well doesn't work well]; lack of support for road traffic collisions/crashes/accidents victims; missing support for road traffic collisions/crashes/accidents; experience of road traffic collisions/crashes/accidents; surviving road traffic collisions/crashes/accidents; road traffic collisions/crashes/accidents advantages and disadvantages

A 'snowballing' approach was also used, i.e., screening studies that cited or were cited by articles identified using the search terms above. In addition, a number of studies were suggested for inclusion through the proposal and inception stage, as follows:

- Staffordshire University, Warwickshire Road Victims Needs Assessment, June 2022
- DfT, Road Traffic Collision Support Survey Responses, August 2023
- Road Victims Trust, Presentation to DfT Working Group, May 2023.

A.1.2 Screening and prioritisation

The following process was used to sift and prioritise sources for review:

- **Sift:** Review titles and abstracts of potential papers and review against inclusion/exclusion criteria (see below). Those that do not meet the inclusion criteria should be excluded. Any doubts about inclusion should be discussed with the wider project team and, for these, the decision to include/exclude will be logged along with the reason.
- **Quality assessment:** For papers that meet the threshold for inclusion in terms of topic, relevance and date range but may pose quality risk in terms of methodological rigour, author bias or other considerations, carry out a quality assessment and note in the data collation table.
- **Prioritisation:** From the list developed in steps 1 and 2, a prioritised list of up to 30 sources will be produced using the quality assessment as a guide for prioritisation. The final 30 sources will be sent to DfT for approval.
- **Summarise the main findings** from the paper/source, being clear about the strength of evidence and limitations, nuances around for whom the evidence relates to and factors relevant to understand the findings.

The quality assessment assigned a score across four areas: methodology, analysis, ethics and peer review. These scores were taken into account when synthesising evidence. Papers that had a high risk of publication bias or sampling bias were excluded altogether. Ethical considerations were excluded for literature reviews or other types of synthesis.

Table 13 Quality assessment of academic literature

Area	Low	Medium	High
Methodology			
Clarity of purpose	No clear research question set out up front. No recognition of limitations.	Sets out a question but boundaries not clearly defined. Does not explicitly call out questions out of scope or limitations.	Clear statement of study aims and objectives, findings clearly linked to the purposes of the study. Summary or conclusions directed towards aims of study. Discussion of limitations.
Research design	No discussion.	Methodology clearly set out with some justification but no discussion of limitations.	Discussion of how overall research strategy was designed to meet aims of study. Discussion of rationale for study design. Convincing argument for different features of research design. Discussion of limitations.
Sampling (internal validity)	No discussion.	Study location/areas/population of interest and how the sample relates to it clearly discussed. Limited justification of sample size and approach taken. No discussion of potential biases.	Study location/areas/population of interest and how the sample relates to it clearly discussed. Detailed profile of achieved sample/case coverage. Clear discussion of and justification for sample size and approach taken, discussion of potential for bias. Documentation of non-participation reasons, discussion of how methodology may have influenced participation.
Data collection	No discussion.	Some discussion of data collection procedures but lacks detail and/or discussion of limitations. Limited consideration of context in data collection and interpretation.	Discussion of (1) who conducted data collection, (2) procedures for data collection. Description of conventions for taking fieldnotes (if relevant). Discussion of how fieldwork methods or settings may have influenced data collection (if relevant). Consideration of background or historical developments
Analysis			

Area	Low	Medium	High
Credibility of findings	Findings/conclusions not clearly supported by evidence/data presented.	Findings/conclusions supported by data/study evidence but some lines of logic unclear or of no use for corroborating evidence to justify conclusions.	Findings/conclusions are supported by data/study evidence – reader can see how the researcher has arrived at the conclusions. Building blocks of analysis are evident and description of how evaluative judgements have been reached. Study has used corroborating evidence to support or refine findings. Display of negative cases and how they lie outside the main theory/hypothesis/conclusion.
Reflexivity and neutrality	No discussion.	Assumptions clearly set out but limited justification or consideration of biases.	Discussion of main assumptions that have been applied and how these have been derived and justified. Discussion of how error or bias may have arisen through assumptions.
Scope for drawing wider interference	No discussion.	Discussion of what can be generalised to wider population but no explicit consideration of where this may not be the case.	Discussion of what can be generalised to wider population from the sample. Detailed description of context in which the study was carried out to consider applicability to other settings. Consideration of rival explanations and limitations of wider inference, e.g., re-examination of sample on missing populations.
Ethics (not relevant for literature reviews/evidence syntheses)			
Ethics	No discussion.	Some discussion but limited.	Evidence of sensitivity about research contexts and participants. Documentation of how research was presented in study settings and documentation of consent procedures, confidentiality procedures and anonymity procedures of participants. Discussion of potential harms of participation and how this was mitigated. OR Approved by ethics board/committee.
Peer review			
Peer review	Journal not peer reviewed/unclear.	NA	Peer-reviewed journal.

A.1.3 Data extraction, quality assessment and synthesis

An evidence review template was created in Excel to collect the following information from the evidence**.** This collates data on:

- Title, abstract, author, year, link, database, search query used;
- Research questions met;
- Location;
- Method overview: type of approach used, sample composition/quotas, sample size, comparisons with control/other groups, credibility of findings; and
- Key relevant findings.

A.2 Secondary data analysis

A preliminary assessment of available data sources suggests that several are available (although some rely on the same underlying data):

- STATS19 (Department for Transport, 2023a);
- National Travel Survey (Department for Transport, 2023b) – this asks respondents if they have been involved in a collision on public roads, whether they sustained injuries, what type and whether the police attended or they reported the collision later;
- Local authority data, e.g., TfL road safety data (Transport for London, 2023);
- Hospital Episode Statistics – for admitted patients, HES provides information on whether a casualty was involved in a RTC as well as the seriousness of a casualty's injuries via diagnostic codes (NHS, 2023);
- Compensation Recovery Unit performance data. The CRU recovers social security benefits in certain compensation cases and NHS costs in certain injury cases if a compensation payment has been made. This includes costs incurred by NHSS hospitals and Ambulance Trusts for the treatment of injuries from RTCs and personal injury claims. The CRU performance data is an administrative dataset published by the CRU that records cases registered, settlements recorded, and recoveries made.
- Annual assessment of National Highways safety performance (Office of Rail and Road, 2022); and
- Accident level data in Wales (StatsWales, 2022).

This data was primarily used to inform RQ1 (potential demand for post RTC support) and to understand the trends in collisions and casualties.

The published STATS19 data includes all injury collisions, including those that did not involve any motor vehicles. A cut of the STATS19 collisions and casualties data that excludes these

collisions for 2019 and 2022 was provided by the DfT STATS19 team to align with the scope of this study. This data was used to quantify the number of reported collisions and casualties.

As the STATS19 database both under-reports collisions and casualties and does not report the number of people directly involved in a collision that are not injured, this data was cross-referenced against (1) Hospital Episode Statistics data for casualties, and (2) the National Travel Survey data for England. Compensation Recovery Unit data was also used to triangulate trends on casualties and collisions in the STATS19 data.

A.3 Stakeholder engagement

In-depth interviews were held virtually (via Teams) with nine stakeholders during December 2023 to understand what is currently known relevant to the research questions, any gaps/issues requiring further exploration and any available evidence/data that could be shared.

A mix of stakeholders were interviewed to capture a wide range of perspectives, with the list of stakeholders developed with DfT.

A topic guide was developed for the stakeholder interviews (Annex D). The questions within the topic guide linked back to the study research questions to aid analysis and reporting of the findings and allow comparison against analysis from the literature review and secondary data analysis. Different versions of the topic guide that were specific to the different stakeholder groups were developed. Findings were recorded within a stakeholder interview analysis proforma, which enabled consistency in reporting and ensured that all of the research questions were covered.

An email invitation for stakeholder interviews was drafted to briefly explain the project's background and objectives, provide a link to the privacy notice and request consent to participate. The interviews were scheduled for 45 minutes (although in some cases the interview time was extended at the stakeholder's request). The transcript of the interview was recorded (with the stakeholder's permission) to assist with writing up the findings.

Annex B Strength of evidence for key indicative findings

Due to the relatively small number of stakeholder groups interviewed, the findings presented throughout this report should be taken as indicative only. Please see Table 5 for an explanation of strength of evidence ratings.

Finding	Research question	Strength of evidence	Justification
Three key groups of people are identified in the evidence as being impacted by RTCs: (1) people directly involved in the collision (direct victims), (2) their family, carers and friends, and (3) witnesses.	RQ1	Very strong	All academic papers (30+) identified for this review focused on one of these three groups. Feedback from stakeholders, both in the primary stakeholder interviews and support provider literature, defined these three groups as those affected by RTCs.
Data on the potential demand for RTC support is lacking. There is publicly available data on the number of direct victims, although this is not comprehensive and under-reports RTCs. The protected characteristics of direct RTC victims is a key evidence gap and there is little information on the size of other victim groups.	RQ1	NA	This was one of the key evidence gaps identified in this review.
The scale of support required is likely to continue, if not grow over time. In 2022 there were 128,630 reported casualties from motor RTCs across England and Wales: 1,522 were fatalities, 25,769 were serious injuries, and 101,399 were slight injuries. 3.4% of adults and 2.5% of children in England reported being involved in a RTC of any severity in the past 12 months, and there were 809 criminal collisions recorded across England and Wales.	RQ1	NA	This is a summary of government published statistics. See discussion on limitations around STATS19 and HES data, in particular under-reporting of collisions and casualties. Research carried out by DfT in 2012 found that a third of serious road casualties were likely to become known to the police and appear in STATS19 reporting, and around 40% were admitted to hospital (Department for Transport, 2012).
A synthesis of UK-based studies found that 7%-23% of direct victims will go on to develop PTSD. People affected by PTSD include those that were not injured or sustained minor injuries in the collision.	RQ1	Very strong	Heron-Delaney et al. (2013) carried out a systematic review of published studies on PTSD amongst adult RTC survivors. They reviewed 7 studies carried out in the UK to reach a UK prevalence estimate of 7%-23%. 7%-23% may be a conservative estimate as older studies reported prevalence of 17%-32% in the UK. Bryant et al. (2004) reported that 29% of children had PTSD

Finding	Research question	Strength of evidence	Justification
			at some stage, which is around the same range. (Guest, 2016) discussed the relationship between physical injury and psychological distress. The study cited 3 papers that looked specifically at RTCs and compared rates of psychological distress between catastrophic and non-catastrophic injuries (not RTC specific) from 6 papers.
A minority of victims are not clinically diagnosed with a psychological disorder but still experience less severe psychological distress and could benefit from support.	RQ1	Medium	Supported by Bryant et al. (2004), who looked at children involved in RTCs and their mothers in the UK. Corroborated by international evidence from the Netherlands (Boelen et al., 2022), which found that many RTC victims who experienced moderate distress did not pass the threshold for a full-blown disorder but would still benefit from therapy, and by (Heron-Delaney, 2013), who carried out an international evidence synthesis (including evidence from the UK) and found that identification of people with PTSD was a barrier to care.
Women, older people, and those with lower educational attainment have worse health outcomes and a greater risk of long-term disability following a RTC.	RQ1	Strong	Alharbi et al. (2019) carried out a systematic review of evidence on factors associated with physical, psychological and functional outcomes from RTCs. The study synthesised findings from 31 studies across 10 countries including England and concluded that being older, female and having lower educational attainment were factors linked to worse outcomes. Stallard et al. (2006) looked at child RTC victims and found that girls displayed more post-traumatic reactions than boys.
The compensation and prosecution process can increase the need for support for direct victims, both to navigate the process and address its psychological impact. It may also	RQ1	Very strong	For direct victims, Heron-Delaney et al. (2013) carried out a systematic review of 31 papers, including 7 studies carried out in the UK. The study concluded that being involved in a compensation scheme negatively

Finding	Research question	Strength of evidence	Justification
increase the need for support for bereaved family, carers and friends.			impacted post RTC outcomes including stress, depression and anxiety. This was supported by Mayou and Bryant (2001) and Alharbi et al. (2019). Attwood et al. (2023), who explored the experiences of 14 people who had been bereaved due to a RTC involving a family member, found that people often reported negative mental health impacts of the court process.
Almost all families of victims of fatal RTCs or where a loved one is disabled will experience long-term psychological impacts.	RQ1	Medium	The majority of this evidence is based on international studies. The European Transport Safety Council (2007) (which does include the UK) and Bolton et al. (2014) both discussed the psychological impacts of bereavement due to RTCs. This is corroborated by the small sample study by Attwood et al. (2023), which explored the experiences of bereaved individuals due to RTCs in the UK.
The majority of direct victims will have some duration of sick leave, and many will experience ongoing work and financial difficulties.	RQ1	Strong	Mayou and Bryant (2001) reported on the impact of RTCs on work participation in the UK. This is corroborated by several international studies and literature reviews including Hours et al. (2013), Gopinath et al. (2015), Tournier et al. (2014) and Almutairi and Altamimi (2019). In addition to academic studies, DfT quantifies the value of fatal and non-fatal casualties as part of its TAG guidance, which includes loss of output due to injury.
Through interviews with stakeholders and a review of support provider websites, it is understood that post-collision support (emotional and practical) is primarily provided by a small number of charitable organisations, including Aftermath Support, Brake, RoadPeace and Road Victims Trust. There are also several other providers that provide support to those affected by RTCs. These are smaller, localised services, and some are set up to support victims and witnesses of crime more generally.	RQ2	General consensus amongst stakeholders	Data from interviews with support providers, plus a review of 32 support provider websites and analysis of DfT's survey with PCCs related to RTC support (Department for Transport, 2023d).

Finding	Research question	Strength of evidence	Justification
Referrals for support and eligibility vary greatly by geographical area, leading to a 'postcode lottery', as described by all stakeholders interviewed and in some of the literature reviewed.	RQ2	Very strong	All stakeholders interviewed as part of this study mentioned variance in type/provision of support by geographical area. Research by Savigar-Shaw et al. (2022) also referred to this as a 'postcode lottery'. The majority of stakeholders and the *Safe Roads for All* report to UK Government UK Road Safety and Mobility Experts (2021) called for a nationally commissioned, standards-driven service.
Whilst providers in some areas receive funding from PCCs, support providers generally are reliant on fundraising and donations. Some receive funding from corporate sponsors, including legal panels. In recent years, DfT provided funding to one national organisation after MoJ ceased funding it. This funding was to enable the central national service to be maintained up to September 2023.	RQ2	General consensus amongst stakeholders	General consensus based on interviews with four support providers, but also from available information on funding provided online by other support providers. The *Forgotten Victims* report (Brake, 2020) and Savigar-Shaw et al. (2022) also provided detail around funding received. There is a gap in understanding around cost of provision and funding sources of some of the smaller providers.
There is not a standardised definition of a victim. Eligibility to receive support varies by region and support provider but tends to include the direct victim (driver, passenger, other road users), others involved in the RTC and family, carers and friends of the victim and witnesses. There are no timeframes for receiving support, and stakeholders emphasised the importance of not placing a time limit on accessing support. Witnesses, culpable drivers, drivers under investigation and children are sometimes not eligible to receive support. In this case, stakeholders noted that they would likely be referred for or signposted to support elsewhere.	RQ3	General consensus amongst stakeholders	None of the four support providers interviewed placed timescales on accessing support, whilst a review of 32 support providers' websites found that these providers also had set timeframes. All stakeholders interviewed provided information on eligibility for support, as did websites reviewed for this information. As part of its study, Savigar-Shaw et al. (2022) carried out a review of existing literature which highlighted that victims may not demonstrate psychological distress immediately after the incident, with symptoms often emerging years later via late onset PTSD.
There may be groups of individuals who do not seek support, but these are difficult to identify. Evidence based on personal observations by all stakeholder groups interviewed suggests these groups may include ethnic	RQ3	NA	Support providers interviewed had some data related to the demographics of individuals supported, but often this data is not collected or is not provided by the individual. There is a lack of data on the type of individuals who do not seek support and their characteristics.

Finding	Research question	Strength of evidence	Justification
minorities, males, older people and other groups such as those on low incomes. However, there is a lack of data to understand the extent to which this is the case.			
Translation services are available but, on some support websites, this information is not always immediately accessible and may be difficult for individuals whose first language is not English.	RQ3	Some evidence amongst stakeholders (but some data gaps)	Four support providers interviewed were asked about translation services provided as part of DfT's survey of support provision. A website review checked for accessibility of translation services. There is a data gap around the number of RTCs/support provided to individuals with English as a second language.
The current range and diversity of support available is extensive, and support providers receive positive feedback from the individuals that they support.	RQ4	General consensus amongst stakeholders	From undertaking stakeholder interviews and undertaking a review of the services offered by all support providers, it is clear that there is a diverse and extensive range of support available. However, there is a data gap around the effectiveness of support and independent evaluation of services.
Support providers considered that they collaborate well with one another and are keen for this to continue. They felt this was an important consideration should any future funding competition opportunities arise.	RQ4	General consensus amongst stakeholders	Feedback from all stakeholders interviewed.
It is clear that support providers provide different services and have different strengths. Generally, there was insufficient evidence to understand the effectiveness of support, and therefore whether one support type was more effective than another. The only type of support noted by stakeholders or in the literature was a caseworker support model. There was a small amount of feedback where some stakeholders and literature suggested that a case worker model can be effective due to these workers often being equipped with localised knowledge, and that they gain a deep understanding of the cases that they work with, allowing a more personalised approach.	RQ4	NA	Absence of robust, independent evaluation evidence on provision of support and type of support. There is a key gap in the evaluation of the type of support that is working well and what is most effective. Two stakeholders and two literature sources (Sudden/Brake (2020) and Savigar-Shaw et al. (2022)) reported that a caseworker support model worked well. However, with the exception of the latter, these sources are not independent evaluations.

Finding	Research question	Strength of evidence	Justification
A notable area for improvement was around the observed lack of consistency in support available across England and Wales. Suggestions on how to improve this included establishing a national service/approach driven by set standards and a required level of service, but still retaining local knowledge and expertise. This could help in removing the perceived 'postcode lottery' of support provision.	RQ4	General consensus amongst stakeholders	All stakeholders interviewed as part of this study mentioned variance in type/provision of support by geographical area. Research by Savigar-Shaw et al. (2022) also referred to this as a 'postcode lottery'. The majority of stakeholders and the *Safe Roads for All* report to UK Government UK Road Safety and Mobility Experts (2021) called for a nationally commissioned, standards-driven service.
Greater funding for the sector was also considered important to improve support provided and could remove the burden of trying to raise funds elsewhere or the reliance on corporate sponsors (e.g., legal panels). There were calls for consistency to be provided for all victims of crime and aligning funding for criminal road traffic collision victims with what is received for homicides.	RQ4	Some evidence amongst stakeholders	Stakeholder interviews.
It was felt that support could be improved by understanding which victims do not access support, and why they do not do so. Some felt that the referral process for support could be made more consistent, that further work could be done to promote/raise awareness of support available and to make eligibility criteria clearer. There is potentially a wider discussion to be had around eligibility, inclusion of culpable drivers and definition of witnesses.	RQ4	NA	This was one of the key evidence gaps identified in this review

Annex C Academic literature review template

Source	Country of research	Objective	Approach and sample	Methodology	Analysis	Ethics	Peer review
Abedi et al. (2022)	Australia, UK, Canada, Denmark	Identify factors that impede or facilitate return to work following minor to serious musculoskeletal road traffic injuries.	Literature review; 11 studies included	High	High	NA	Yes
Alharbi et al. (2019)	10 countries including USA, Canada, England, Germany, France, Australia and Spain	Identify factors reported in the literature that area associated with physical, psychological and functional outcomes of adult trauma patients following a RTC.	Literature review; 31 papers	High	High	NA	Yes
Almutairi and Altamimi (2019)	Spain, France, USA, Japan	Understand the psychosocial consequences of RTCs.	Literature review; 4 studies	Medium	Medium	NA	Yes
Amezcua-Prieto et al. (2020)	USA, Sweden, Kuwait, Israel	Review and quantify the effect of motor vehicle crashes in pregnancy on material and offspring outcomes.	Literature review; 19 studies included	High	High	NA	Yes
Andrade et al. (2021)	USA, China, Norway, Canada, Sweden, Israel, Spain	Review research related to individual and family resilience processes and social support networks for victims post RTC.	Literature review, 23 studies included	High	Medium	NA	Yes
Attwood et al. (2023)	UK	Explore the experiences of individuals who were bereaved due to RTCs involving a family member.	Interviews with 14 individuals who lost a family member	High	Medium	High	Yes

Source	Country of research	Objective	Approach and sample	Methodology	Analysis	Ethics	Peer review
Boelen et al. (2022)	Netherlands	Examine whether there are unique patterns of symptoms for PTS, depression and grief amongst victims of non-fatal traffic collisions.	Self-reported questionnaire; 328 participants	High	High	High	Yes
Bolton et al. (2014)	Canada	Examine the mental, physical and social outcomes experienced by parents who had a child die	Review of medical administrative data, 2 comparison groups (bereaved parents and non-bereaved parents). Comparative sample of 1,281.	High	High	High	Yes
Bryant et al. (2004)	UK	Determine the outcome of road traffic collisions on children and their mothers.	1-year cohort study of consecutive child attenders aged 5-16 at an A&E department. Data extracted from medical notes. 86 children participated (out of 145 children invited)	High	Medium	Low	Yes
Cézard et al. (2020)	Scotland	Investigate ethnic differences in falls and RTCs in Scotland.	Analysis of Scottish census data and hospital and death records for 2001-2013	High	High	High	Yes
Cloutier et al. (2021)	Worldwide	Review best available evidence related to risk factors for child pedestrian motor vehicle collision and identify established and emerging prevention strategies.	Literature review; 41 papers reviewed	High	Medium	NA	Yes
European Transport Safety Council (2007)	EU/UK	Summarise current knowledge on the completeness and accuracy of official RTC statistics, long-term impacts of traffic injuries and social disparities of RTC risk.	Evidence synthesis	Medium	Medium	Medium	No
Evans et al. (2003)	UK	Explore the long-term consequences for young survivors of severe injury.	Population-based cohort study using 5-year post injury structured interview of all cases of major trauma identified retrospectively for a 12-month period within the former Yorkshire Health Authority Area; 109 participants	Medium	Medium	High	Yes
Gopinath et al. (2015)	Australia	Assess potential predictors of return to pre-injury work and daily activities for those injured in a vehicle-related collision.	Analysis of self-reported return to work; 170 participants who reported being in pre-injury paid work and who had mild/moderate musculoskeletal injuries from a vehicle-related collision	High	Medium	High	Yes

Source	Country of research	Objective	Approach and sample	Methodology	Analysis	Ethics	Peer review
Guest et al. (2016)	Australia UK, Netherlands, Germany, Ireland, Hong Kong,	Identify studies that investigated interventions aimed at preventing psychological distress after a vehicle RTC and determine their efficacy.	Literature review; 6 studies	High	High	NA	Yes
Hall et al. (2013)	Australia	Explore experiences of bystanders both at the scene and following a RTC.	Literature review; 13 studies	Medium	Medium	NA	Yes
Heron-Delaney et al. (2013)	UK, USA, Australia and other countries	Understand the predictors of PTSD in RTC survivors.	Literature review; 49 papers, 44 unique studies	High	High	NA	Yes
Hours et al. (2013)	France	Examine the outcomes of adult RTC victims one year after the collision.	Analysis of self-reported outcomes via questionnaire; 886 injured RTC victims aged ≥16. Included people with mild to moderate and severe injuries	High	High	Low	Yes
Hudson et al. (2022)	UK	Understand the impact of caregiving.	Semi-structured interviews with carers of traumatic injury survivors; 10 people interviewed	Medium	High	High	Yes
Kenardy et al. (2015)	Australia	Investigate the relation between mental health and disability up to 24 months after a RTC for claimants with predominantly minor injuries in an Australian sample.	Participants assessed for a broad range of outcomes at 6 (Wave 1), 12 (wave 2), and 24 (wave 3) months post RTC using interviews; Adults who had sustained minor injuries; 382 initially consented, retention of 65% for each wave	High	Medium	High	Yes
Lenferink et al. (2021)	Netherlands	Clarify the needs and use of bereavement care and preferences for online treatment amongst people confronted with the deaths of loved ones through a RTC.	Analysis of self-reported outcomes via questionnaires; 273 people bereaved by a RTC less than 5 years ago	High	High	High	Yes
Malhotra et al. (2008)	England (London)	Examine ethnic variations in trends in road traffic injuries in London.	Analysis of STATS19 data comparing trends in RTC casualties by ethnic group	Medium	Medium	Medium	Yes

Source	Country of research	Objective	Approach and sample	Methodology	Analysis	Ethics	Peer review
Mayou and Bryant (2001)	UK	Determine psychological and social outcome at 3 months and 1 year following a RTC.	Cohort study of a 1-year sample of consecutive attendees aged 17-69 at an A&E of a district general hospital; excludes major head injury, 1,148 individuals, representative of post RTC attendees	High	Medium	Low	Yes
		a RTC					
Roberts et al. (2011)	USA	Identify sources of race/ethnic differences related to PTSD, by comparing trauma exposure, risk for PTSD among those exposed to trauma, and treatment-seeking among Whites, Blacks, Hispanics and Asians in the US general population.	Analysis of data from diagnostic interviews with 34,654 adult respondents to the 2004-2005 National Epidemiological Survey on Alcohol and Related conditions	Medium	Medium	NA	Yes
Stallard et al. (2006)	UK	Understand the cognitive appraisals and coping styles of child RTC survivors that are associated with chronic post-traumatic reactions.	Follow-up assessment with experimental and control group; 132 children, 70 in experimental group, 62 in control	High	Medium	High	Yes
Steinbach et al. (2010)	UK (London)	Explore the distribution of the distance between home residence and collision site (crash distance) by mode of transport, geographic area and social characteristics in England.	Evaluation of 10 years of road casualty data collected by the police; London only	High	Medium	NA	Yes
Tierens et al. (2012)	Belgium	Describe post-traumatic stress reactions in young witnesses of motor vehicle accidents.	Self-reported outcomes via questionnaire; representative sample of 3,007 Flemish children	High	Medium	High	Yes
Tournier et al. (2014)	France	Describe the consequences of a road accident in adults, taking account of the type of road user, and determine predictive factors for consequences at 2 years.	Self-administered questionnaire; 1,168 victims of RTCs aged ≥16 years	High	High	Low	Yes
Vivian-Taylor et al. (2012)	Australia	Describe the incidence of RTCs during pregnancy and the immediate and subsequent pregnancy outcomes.	Analysis of hospital records; 2,147 women admitted to hospital following a RTC	High	High	NA	Yes

Annex D Topic guide (Master)

This master version of the topic guide contains the full list of questions to be asked across all stakeholder interviews, with each question containing a reference to which stakeholder group it will be asked to. This includes:

- All = Asked to all stakeholders
- SP = Support providers
- T = Transport/industry groups
- L = Insurance and legal
- RSF = Road safety campaigner

Introduction [5 mins]

Hello, thank you for your time and agreeing to speak with us today.

Introduce self, SYSTRA and the research:

- My name is …., I am part of SYSTRA's Social and Market Research team. We undertake a lot of independent research to understand views and experiences on different transport related topics.
- The Department for Transport has commissioned us and a company called Frontier Economics to look at the **support services given to individuals affected by road traffic collisions.**
- We are therefore seeking to understand the nature, location and scale of support services provided, as well as what is working well, and where improvements can be made.
- To gain this understanding, we are speaking to a number of organisations and key stakeholders, like yourselves, as well as reviewing existing literature and data that has already been produced in this area.
- The feedback you provide will directly help DfT understand the overall picture of RTC victim support services and understand how to inform future policy.

Explain 'rules':

- Approximately 45 mins;
- Permission to record transcript/anonymity;
- No right or wrong answers;
- Research conducted in accordance with the Market Research Society and Data Protection legislation. Participation is completely voluntary, and you can withdraw at any time. More information can be found in the privacy notice for the research, which was attached to the email organising this discussion.
- Any questions?

You and your role [5]

- Please can you tell me a little about your role at *[organisation] / your background* [All]

[probe to gather information relating to their role, and how it relates to RTC victim support]

[probe how the organisation is structured in terms of staff – e.g., what is the proportion of paid staff vs volunteers?] [SP]

Victim terminology [5-10 mins]

As mentioned, we're interested to hear your views and experiences around the type of support that is currently provided to victims of a RTC.

- *[3b] [You mentioned in your introduction]* the work that you do to support victims of RTCs/ how the work you do links to the support victims of a RTC receive. To start us off, please could you describe in your own words your definition of a victim? [All]
- *[3b]* Within your industry/area of work, is there a specific definition/terminology that is used to describe a victim? *[If yes, what is this?]* [SP, L, T, RSF]
- *[3b]* Are there any sensitivities around the use of victim language? [If yes], is there a preferred term to be used? [SP, L, T, RSF]

Range of individuals affected [10 mins]

- *[1a]* From your experience, can you outline the various categories of people affected by RTCs that you would typically provide support to/who require support? *[e.g., drivers, passengers, families, witnesses, wider participants etc.]* [All]

How many of each of these groups of people do you typically support each year? [SP, L]

- *[1b]* Some of these would be victims of a criminal RTC. Could you tell me how many would tend to be as a result of a criminal RTC? [SP, L, T]

Do you offer support to those considered to be the perpetrator? [Probe – are there any differences between perpetrator type e.g., low end and high end, what is the process if they do get in touch? Are they signposted elsewhere for example?]

- *[1b]* Are there any unique challenges and support needs associated with criminal RTCs? Do you provide specific support in this area for these needs? *(e.g., support with legal proceedings etc.)* [SP, L, T]
- *[3a]* Are there specific eligibility criteria that individuals must meet to receive support from your organisation? What are these? [SP, L, T]

Do some victims have to meet specific eligibility criteria to be eligible to receive support?/ Support via MoJ? If yes, what are these? [RSF]

- *[3c]* And do you think there are people who require support but don't access it? *[If yes, why? Certain groups of people?]* [All]
- *[3b]* Is there demand for support that is not being met at present? [All]

Current support landscape [15 minutes]

As mentioned earlier, as part of this project, we are looking to understand the different types of support that is currently provided to victims of a RTC.

Support providers/legal/transport/FLO:

- Support provided:
- *[2b]* Please could you summarise the different support services your organisation/industry offers to those affected by a RTC (this may include the person(s) directly involved in the collision, witnesses and/or those indirectly affected e.g., family/friends)? *[How is support provided/delivered e.g., in person, by phone, by email, in groups or 1:1, one off or continuous etc.]* [SP, L, T]
- *[2a]* How do people access this support? i.e., what process do they need to go through to get support? How are they made aware of it? *[e.g., is it offered automatically, and how?]* Do you think any groups are excluded from accessing support due to the mechanism the support is provided? (e.g., due to their gender or age?) [SP, L, T]
- *[2a/b]* Are there any age limits relating to who you help? *[do they support children?]* [SP, L, T]
- *[2a]* Are there any people/groups who you don't support/who are not eligible for support? Why? [SP, L, T]
- [2a/b] Are there any limits on geographic areas of where people live for you to offer support to them? [SP, L, T] [i.e., can they offer support to cater for certain groups living in rural areas, such as by phone instead of in person?]
- *[2a]* Are there any timeframes for accessing support after a RTC occurs? [SP, L, T] If yes, what happens in this instance? *i.e., is support refused or are they referred to other support services?*
- [2a] How are referrals made to you? / How are referrals made to the service provider? [SP, L, T] [At what stage is the referral made? Is there a time limit on referrals? If yes, what is the process for the victim, e.g., are they refused support or referred to other services?]
- [2a/b] How do you cater for people whose first language is not English? [SP] [Is support in other languages automatically offered or does it have to be requested/found for themselves?]

Challenges, successes, gaps and addressing gaps:

- Thinking about your organisation:
- *[4a]* How well do you think the needs of those affected by a RTC are currently being met? What is being done well? [SP, L, T] Do you receive any feedback from those you support?
- *[4a]* Can you share some successes your organisation has achieved in delivering support? [SP]
- *[4b]* What have been the key challenges that you have faced? [SP]
- *[4b]* How can these challenges be addressed? [SP]

- Thinking more widely than your organisation: [SP]
- *[4b]* Are there any challenges in the support that is offered to those affected by a RTC, such as the wording of the law? Or any other words/definitions that cause legal issues? What improvements could be made? [L] *[Note: work already underway to try and use 'collision' instead of 'accident' on signs, documents, radio, newspaper, everyday language used by organisation etc. Lots of associated legislation use the word 'accident']*
- *[4b]* In your view, are there any gaps or limitations in the current support services? Why are there gaps? [SP, L, T]
- *[4b]* How can these limitations and gaps be addressed? [SP, L, T]
- *[4b]* How could DfT potentially offer support? [SP, L, T]

Road safety campaigners/FLO:

- *[2a]* I wanted to start this section with a very open question – what types of support are most important for those affected by a RTC to receive? [RSF]

Does this vary by type of person/type of victim?

- *[2a]* And how well do you think the needs of those affected by a RTC are currently being met? [RSF]
- *[2a]* Are there potentially people/groups whose needs are not being met or who are not seeking support? Why is this? *[Probe to understand which groups and why]*
- *[4b]* Are there any areas for improvement? [RSF]

Such as the types of support offered?

Who is it offered to?

How is it accessed?

How could this be addressed?

Part of our work is to understand whether there are any gaps in knowledge which could be filled by future research.

- *[5]* Are there specific areas or aspects relating to support for victims of RTCs where you feel there's a lack of sufficient data or understanding? [All]
- How does your organisation collaborate with other stakeholders and entities like Police and Crime Commissioners/support providers, and how does this collaboration impact support delivery? Do you have any engagement with DfT? [SP, L, T]

Data and evidence [5 minutes]

- *[1]* Do you collect data to monitor and evaluate the impact of your services? [SP, L, T]

[If yes], what data do you collect? Are there any gaps in data which need to be filled for you to be able to evaluate your services better?

[If no], where do you obtain evidence/data to evaluate your services? Are your previous answers based on opinion, anecdotal evidence etc.?

- Would you be willing to share (at an aggregate level) data such as how many of each type of people you typically support each year (and who receive different types of support), and how many would be criminal RTCs? *[timeframe – recent six-month period, provide assurances that the data will not be directly referred to in our research, and the support provider would be anonymous in the report. Note, we would need to ideally receive this data before Christmas to include within our reporting (however, data after this point would still be useful for potential future research)]*

Conclusions and next steps

- *[4]* Aside from the areas we have discussed today, are there any other parts of the RTC victim support field that could be improved or changed? [All]
- Is there any additional information or insights that we haven't already covered, that you would like to share for the benefit of our research? [All]
- That's all of my questions – thank you very much for all for your contributions which are really valuable; and which will help DfT gain a full understanding of the support currently required.
- In terms of next steps, we will be gathering all of the information received during these interviews and collating this with evidence gathered from our wider review of existing literature and data. We will then be summarising the findings within an internal report to be submitted to the DfT in January. We will keep you updated on progress being made.
- Do you have anything else you would like to add before we end the call? [All]
- Next steps

Annex E Bibliography

Abedi, M., E. Gane, T. Aplin, H. Zerguine, and V. Johnston (2022). Barriers and Facilitators Associated with Return to Work Following Minor to Serious Road Traffic Musculoskeletal Injuries: A Systematic Review. *Journal of Occupational Rehabilitation,* 32(1), 13–26. https://doi.org/10.1007/s10926-021-09994-3

Aldred (2018). Inequalities in Self-report Road Injury Risk in Britain: a New Analysis of National Traffic Survey Data, Focusing on Pedesrian Injuries.*Journal of Transport & Health*, 9, 96-104. https://doi.org/10.1016/j.jth.2018.03.006

Alharbi, R., I. Mosley, C. Miller, S. Hillel, and V. Lewis (2019). Factors Associated with Physical, Psychological and Functional Outcomes in Adult Trauma Patients Following Road Traffic Crash: A Scoping Literature Review. *Transportation Research Interdisciplinary Perspectives,* 3, 100061. https://doi.org/10.1016/j.trip.2019.100061

Almutairi, N.M., and M.A. Altamimi (2019). The Psychosocial Consequences of Road Traffic Accidents: A Review Article. *International Journal of Medicine in Developing Countries,* 3(12), 1104-1109. https://doi.org/10.24911/IJMDC.51-1570622250

Amezcua-Prieto, C., J. Ross, E. Rogozinska, P. Mighiu, V. Martinez-Ruiz, K. Brohi, A. Bueno-Cavanillas, K.S. Khan, and S. Thangaratinam (2020). Maternal Trauma Due to Motor Vehicle Crashes and Pregnancy Outcomes: A Systematic Review and Meta-analysis. *BMJ Open,* 10(10). https://doi.org/10.1136/bmjopen-2019-035562

Andrade, E.G.S.D.A., M.A.M. Yunes, and L. Fernandes Martins (2021). Individual and Family Resilience and the Role of Support Networks for Victims of Traffic Accidents: An Integrative Review. *Ciencias Psicológicas,* 15(2). https://doi.org/10.22235/cp.v15i2.2111

Attwood, C., A. Benkwitz, and M. Holland (2023). “We Are the Forgotten Grievers”: Bereaved Family Members’ Experiences of Support and Mental Ill-health Following a Road Traffic Collision. *Death Studies,* 47(9), 1025-1032. https://doi.org/10.1080/07481187.2022.2160032

Boelen, P.A., M.C. Eisma, J. de Keijser, and L.I.M. Lenferink (2022). Traumatic stress, depression, and non-bereavement grief following non-fatal traffic accidents: Symptom patterns and correlates. *PloS One,* 17(2), e0264497. https://doi.org/10.1371/journal.pone.0264497

Bolton, J.M., W. Au, R. Walld, D. Château, P.J. Martens, W.D. Leslie, M.W. Enns, and J. Sareen (2014). Parental Bereavement After the Death of an Offspring in a Motor Vehicle Collision: A Population-based Study. *American Journal of Epidemiology*, 179(2), 177-185. https://doi.org/10.1093/aje/kwt247

Brake (2020). *Forgotten Victims: Post-crash Care for Families.* Available at: https://www.brake.org.uk/files/downloads/Reports/Victim-support-reports/Brake-report-Forgotten-victims.pdf?v=1600793537 (accessed January 2024)

Brake (2021). *Brake, the Road Safety Charity Impact Report 2021: Caring for Bereaved and Injured Road Victims, Campaigning for Zero Harm Roads, for Everyone.* Available at: https://www.brake.org.uk/files/downloads/Annual-reports-accounts/Brake-Impact-Report-2022-WEB-version_FINAL_small-v2.pdf?v=1658335600 (accessed January 2024)

Bryant, B., R. Mayou, L. Wiggs, A. Ehlers, and G. Stores (2004). Psychological Consequences of Road Traffic Accidents for Children and their Mothers. *Psychological Medicine,* 34(2), 335-346. https://doi.org/10.1017/S0033291703001053

Cézard G., L. Gruer, M. Steiner, A. Douglas, C. Davis, D. Buchanan, S.V. Katikireddi, A. Millard, A. Sheikh, and R. Bhopal (2020). Ethnic Variations in Falls and Road Traffic Injuries Resulting in Hospitalisation or Death in

Scotland: The Scottish Health and Ethnicity Linkage Study. *Public Health,* 182, 32-38. https://doi.org/10.1016/j.puhe.2020.01.013

Cloutier, M-S., E. Beaulieu, L. Fridman, A.K. Macpherson, B.E. Hagel, A.W. Howard, T. Churchill, P. Fuselli, C. Macarthur, and L. Rothman (2021). State-of-the-art Review: Preventing Child and Youth Pedestrian Motor Vehicle Collisions: Critical Issues and Future Directions. *Injury Prevention: Journal of the International Society for Child and Adolescent Injury Prevention,* 27, 77–84. https://doi.org/10.1136/injuryprev-2020-043829

College of Policing (2023). Investigation of Fatal and Serious Injury Road Collisions. Available at: https://www.college.police.uk/app/roads-policing/investigation-fatal-and-serious-injury-road-collisions#road-policing-senior-investigating-officer (accessed January 2024)

Collins, A., D. Coughlin, J. Miller, and S. Kirk (2015). *The Production of Quick Scoping Reviews and Rapid Evidence Assessments. a How to Guide.* Department for Environment Food & Rural Affairs, NERC, Joint Water Evidence Group. Available at: https://assets.publishing.service.gov.uk/media/5a7f3a76ed915d74e33f5206/Production_of_quick_scoping_reviews_and_rapid_evidence_assessments.pdf (accessed January 2024)

Department for International Development (2014). Assessing the Strength of Evidence How to Note. Available at: https://www.gov.uk/government/publications/how-to-note-assessing-the-strength-of-evidence (accessed January 2024)

Department for Transport (2011). *Instructions for the Completion of Road Accident Reports from non-CRASH sources.* STATS 20. Available at: https://assets.publishing.service.gov.uk/media/60d0cc968fa8f57cf3f0b3ad/stats20-2011.pdf (accessed January 2024)

Department for Transport (2012). *Linking Police and Hospital Data on Road Accidents in England: 1999 to 2009 results.* Available at: https://assets.publishing.service.gov.uk/media/60d05871d3bf7f4bcfe765e7/hes-linkage.pdf (accessed January 2024)

Department for Transport (2021). *Roads Policing Review.* Available at: https://www.gov.uk/government/calls-for-evidence/roads-policing-review-future-methods-to-improve-safety-and-reduce-causalities/roads-policing-review-call-for-evidence (accessed January 2024)

Department for Transport (2022). *TAG Unit A4.1 Social Impact Appraisal.* Available at: https://assets.publishing.service.gov.uk/media/63a32a8d8fa8f539198d9bf3/TAG_Unit_A4.1_-_Social-impact-appraisal_Nov_2022_Accessible_v1.0.pdf.pdf (accessed January 2024)

Department for Transport (2023a). *Extract of STATS19 data for 2019 and 2022 provided by DfT.*

Department for Transport (2023b). *National Travel Survey: 2022.* Available at: https://www.gov.uk/government/statistics/national-travel-survey-2022 (accessed January 2024)

Department for Transport (2023c). *Reported Road Casualty Statistics: Background Quality Report.* Available at: https://www.gov.uk/government/publications/reported-road-casualty-statistics-background-quality-report/reported-road-casualty-statistics-background-quality-report (accessed January 2024)

Department for Transport (2023d). *Road Traffic Collision Support Survey of PCCs, PFCCs, and Deputy Mayors (for Policing).*

Department of Health and Social Care (2023). *NHS Injury Costs Recovery Scheme: Tariff and Charges from 1 April 2023.* Available at: https://www.gov.uk/guidance/nhs-injury-costs-recovery-scheme-tariff-and-charges-from-1-april-2023 (accessed January 2024)

European Transport Safety Council (2007). *Social and Economic Consequences of Road Traffic Injury in Europe.* Available at: https://etsc.eu/wp-content/uploads/Social-and-economic-consequences-of-road-traffic-injury-in-Europe.pdf (accessed January 2024)

Evans, S.A., M.C. Airey, S.M. Chell, J.B. Connelly, A.S. Rigby, and A. Tennant (2003). Disability in Young Adults Following Major Trauma: 5 Year Follow Up of Survivors. *BMC Public Health,* 3(8). https://doi.org/10.1186/1471-2458-3-8

Gopinath, B., J. Jagnoor, I.A. Harris, M. Nicholas, P. Casey, F. Blyth, C.G. Maher, and I.D. Cameron (2015). Prognostic Indicators of Social Outcomes in Persons Who Sustained an Injury in a Road Traffic Crash. *Injury,* 46(5), 909-917. https://doi.org/10.1016/j.injury.2015.01.002

Guest, R., Y. Tran, B. Gopinath, I.D. Cameron, and A. Craig (2016). Psychological Distress Following a Motor Vehicle Crash: A Systematic Review of Preventative Interventions. *Injury,* 47(11), 2415-2423. https://doi.org/10.1016/j.injury.2016.09.006

Hall, A., K. Wooton, and A. Hutton (2013). Bystander Experiences at and After a Motor Vehicle Accident: a Review of the Literature. *Australasian Journal of Paramedicine,* 10, 1-10. https://doi.org/10.33151/ajp.10

Heron-Delaney, M., J. Kenardy, E. Charlton, and Y. Matsuoka (2013). A Systematic Review of Predictors of Posttraumatic Stress Disorder (PTSD) for Adult Road Traffic Crash Survivors. *Injury,* 44(11), 1413-1422. https://doi.org/10.1016/j.injury.2013.07.011

HM Treasury (2020). Magenta Book, Central Government Guidance on Evaluation. Available at: https://www.gov.uk/government/publications/the-magenta-book (accessed January 2024)

Hours, M., L. L. Chossegros, P. Charney, H. Tardy, H-T. Nhac-Vu, D. Boisson, J. Luauté, and B. Laumon (2013). Outcomes One Year After a Road Accident: Results from the ESPARR Cohort. *Accident Analysis and Prevention*50, 92-102. https://doi.org/10.1016/j.aap.2012.03.037

Hudson C, K. Radford, and J. Kettlewell (2022). A Qualitative Study to Understand the Impact of Caring for Traumatic Injury Survivors. *International Journal of Environmental Research and Public Health,* 19(23), 16202. https://doi.org/10.3390/ijerph192316202

Kenardy, H-D., M. Heron-Delaney, J. Warren, and E.A. Brown (2015). Effect of Mental Health on Long-term Disability After a Road Traffic Crash: Results from The UQ SuPPORT Study. *Archives of Physical Medicine and Rehabilitation,* 96(3), 410-417. https://doi.org/10.1016/j.apmr.2014.10.007

Lenferink, L.I.M., J. de Kaiser, M.C. Eisma, G.E. Smid, and P.A. Boelen (2021). Treatment Gap in Bereavement Care: (Online) Bereavement Support Needs and Use After Traumatic Loss. *Clinical Psychology and Psychotherapy*, 28(4), 907-916. https://doi.org/10.1002/cpp.2544

Malhotra, N., A. Hutchings, and P. Edwards (2008). Does the Decline in Road Traffic Injury in London Vary by Ethnicity? *Injury Prevention*, 14(5), 333-337. https://doi.org/10.1136/ip.2008.018283

Mayou, R., and B. Bryant (2001). Outcome in Consecutive Emergency Department Attenders Following a Road Traffic Accident. *The British Journal of Psychiatry* 179(6), 528-534. https://doi.org/10.1192/bjp.179.6.528

Merseyside Police (2020). *Road Traffic Collisions (Policy & Procedure).* Available at: https://www.merseyside.police.uk/SysSiteAssets/foi-media/merseyside/policies/road-traffic-collisions-policy-2020.pdf (accessed January 2024)

Ministry of Justice (2024). *Code of Practice for Victims of Crime in England and Wales (Victims' Code).* Available at: https://www.gov.uk/government/publications/the-code-of-practice-for-victims-of-crime/code-of-practice-for-victims-of-crime-in-england-and-wales-victims-code (accessed January 2024)

NHS (2023). *Hospital Episode Statistics.*

Office of Rail and Road (2022). *First Annual Assessment of Safety Performance on the Strategic Road Network.* Available at: https://www.orr.gov.uk/sites/default/files/2022-12/first-annual-assessment-of-safety-performance-on-the-srn.pdf (accessed January 2024)

ONS (2024). *Crime in England and Wales: Year Ending September 2023.* Available at: https://www.ons.gov.uk/Peoplepopulationandcommunity/Crimeandjustice/Bulletins/Crimeinenglandandwales/Yearendingseptember2023 (accessed January 2024)

Puttick, R., and J. Ludlow (2013). NESTA Standards of Evidence: An Approach that Balances the Need for Evidence with Innovation. Available at: https://media.nesta.org.uk/documents/standards_of_evidence.pdf (accessed January 2024).

Road Safety Support (2022). *Suffering Caused by Road Crashes Affects More Than Half a Million People Each Year, Says Experts.* Available at: https://www.roadsafetysupport.co.uk/News/Suffering-caused-road-crashes-affects-more-half-million-uk-people-each-year-say-experts (accessed January 2024)

Road Victims Trust (2023). *Annual Report and Impact Statement 2022-2023.* Available at: file:///C:/Users/lesle/Downloads/RVT_AnnualReport-2022-23.pdf (accessed January 2024)

Roberts, A.L., S.E. Gilman, J. Breslau, N. Breslau, and K.C. Koenen (2011). Race/Ethnic Differences in Exposure to Traumatic Events, Development of Post-traumatic Stress Disorder, and Treatment-seeking for Post-traumatic Stress Disorder in the United States. *Psychological Medicine,* Pp. 41(1), 71-83. https://doi.org/10.1017/S0033291710000401

Savigar-Shaw, L., J. Turner, and B. White (2022). *Warwickshire Road Victims Needs Assessment: Research Report.* Police Crime Commissioner for Warwickshire, Staffordshire University, and Supporting Justice. Available at: https://supportingjustice.blob.core.windows.net/media/2022/11/Road-Victims-Report-Full-Staffordshire-University-Supporting-Justice-pdf.pdf (accessed January 2024)

Snow, D. A. (2022). *30 Years of Road Peace,* Liverpool: Liverpool John Moores University.

Stallard, P., R. Velleman, E. Salter, I. Howse, W. Yule, and G. Taylor (2006). A Randomised Controlled Trial to Determine the Effectiveness of an Early Psychological Intervention with Children Involved in Road Traffic Accidents. *Journal of Child Psychology and Psychiatry*, 47(2), 127-134. https://doi.org/10.1111/j.1469-7610.2005.01459.x

StatsWales (2022). *Accident level data.*

Steinbach, R., J. Green, P. Edwards, and C. Grundy (2010). "Race" or Place? Explaining Ethnic Variations in Childhood Pedestrian Injury Rates in London. *Health & Place,* pp. 16(1), 34-42. https://doi.org/10.1016/j.healthplace.2009.08.002

Sudden/Brake (2020). *Help When the Worst Happens: An Urgent Report on Meeting the Needs of People Bereaved in Challenging Circumstances*. Available at: https://www.brake.org.uk/files/downloads/Reports/Victim-support-reports/Sudden-report-Help-when-the-worst-happens.pdf?v=1600793544 (accessed January 2024)

Tierens, M., S. Bal, G. Crombez, T. Loeys, I. Antrop, and D. Deboutte (2012). Differences in Posttraumatic Stress Reactions Between Witnesses and Direct Victims of Motor Vehicle Accidents. *Journal of Traumatic Stress,* 25(3), 280-287. https://doi.org/10.1002/jts.21692

Tournier, C., P. Charnay, H. Tardy, L. Chosssegros, L. Carnis, and M. Hours (2014). A Few Seconds to Have an Accident, A Long Time to Recover: Consequences for Road Accident Victims from the ESPARR Cohort 2 Years After the Accident. *Accident Analysis and Prevention,* 72, 422-432. https://doi.org/10.1016/j.aap.2014.07.011

Transport for London (2023). *Road Safety Data.*

UK Road Safety and Mobility Experts (2021). *Safe Roads for All: An Exert Report to UK Government, Calling for a Sage and Healthy Mobility Strategy and Action Plan for Roads, 2021-30, To Deliver Sustainability and Prosperity.* Available at: https://www.brake.org.uk/files/downloads/Reports/Safe-roads-for-all/Safe-Roads-for-All_FINAL-26.8.21.pdf?v=1638965320 (accessed January 2024)

Victim Support and North Yorkshire Police, Fire & Crime Commissioner (2023). *North Yorkshire Victims' Voice.* Available at: https://www.victimsupport.org.uk/wp-content/uploads/2023/07/North-Yorkshire-Victims-Voice-report-executive-summary-0723.pdf (accessed January 2024)

Victims' Commissioner (2022). *2021/22 Annual Report: Dame Vera Baird QC, Victims Commissioner for England and Wales*. Available at: https://cloud-platform-e218f50a4812967ba1215eaecede923f.s3.amazonaws.com/uploads/sites/6/2022/06/MOJ7216_Victims-commisioner-Annual-report_AW-WEB.pdf (accessed ?)

Vivian-Taylor J., C.L. Roberts, J.S. Chen, and J.B. Ford (2012). Motor Vehicle Accidents During Pregnancy: A Population-based Study. *BJOG,* 119(4), 499-503. https://doi.org/10.1111/j.1471-0528.2011.03226.x

Wedlock E., and J. Tapley (2016). *What Works in Supporting Victims of Crime: A Rapid Evidence Assessment.* Victims' Commissioner and University of Portsmouth.
Available at:
https://pure.port.ac.uk/ws/portalfiles/portal/3695582/What_works_in_supporting_victims_of_crime.pdf (accessed January 2024)

Wijnen W., and H. Stipdonk (2016). Social Costs of Road Crashes: An International Analysis. *Accident Analysis & Prevention,* 94, 97-106. https://doi.org/10.1016/j.aap.2016.05.005

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