## 4. WIDER SOCIAL DETERMINANTS OF HEALTH

## 4.6 Road Safety

Road safety affects all road users; pedestrians, cyclists and vehicle drivers and passengers. This section describes the impact of road safety and presents information on road safety and road casualties in Buckinghamshire.

### 4.6.1 The importance of road safety

Actual and perceived levels of road safety can have a significant impact on the travel and lifestyle choices that people make. As a largely rural county, having a safe and reliable road network in Buckinghamshire is crucial to enable participation in employment and education, and facilitate access to social and leisure facilities and public services. In addition, encouraging more people to make healthier lifestyle choices, by using non-motorised modes of transport, supports one of the key transport-related health challenges that Buckinghamshire faces.

While the UK compares well internationally in terms of road deaths and child fatalities, over 20,000 people are still killed or seriously injured on British roads each year, and the social and economic cost of this is estimated to be in the region of £16 billion per annum<sup>1</sup>. Road collisions have a wide range of costs, with the average cost per injury collision being in the region of £100,000. A large proportion of this cost falls to the NHS due to emergency and long term medical care. This means the estimated cost of collisions in Buckinghamshire over the past 5 years is in excess of £21.5m. Road casualties affect local communities and, in addition to the human suffering, collisions cause network disruption that also affects the local economy.

Transport casualties are also an important cause of inequalities. For example, fatal or serious injuries to child pedestrians or cyclists are much more common in more deprived areas than in the most affluent areas<sup>2</sup>.

## 4.6.2. Information on road safety in Buckinghamshire

There were 1,122 reported injury collisions in Buckinghamshire in 2014, resulting in 21 people being killed and 215 being seriously injured (figure 1). The annual number of killed or seriously injured (KSI) road users halved between 1999 and 2008, but there have been small annual increases since 2011.

Figure 1: Annual number of Killed and seriously injured (KSI) Road Casualties in Buckinghamshire, 1999-2014



Source: AccsMap Database, 2015.

Transport for Buckinghamshire (TfB) has a statutory duty to investigate the causes of road traffic collisions on its road network, and take measures to prevent them. Table 1 shows the proportion of KSI collisions in Buckinghamshire involving different types of drivers in 2014, based on analysis of personal injury data, which is supplied to TfB by Thames Valley Police.

Driver type	% of Bucks KSI Collisions involving each driver type	Example of Interventions to Target User	
Inexperienced Drivers Aged 17- 24 years	20%	Engaging with schools. Delivering 'Safe Drive Stay Alive' event. 'Get In Gear' Driver Training. Attending and carrying out promotion at Freshers' Fairs.	
Business Drivers	20%	Business driver assessments and training.	
Older Drivers Aged 65+ years	17%	Older Driver Assessments. Community events and local road safety initiatives.	
Speeding Drivers	19%	Work with Local Area Forums, Parish Councils and other stakeholders to identify local solutions	

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Source: AccsMap Database, 2015.

Regarding causes of collisions, nationally in 2014 the most common contributory factor as listed by the Police, was drivers failing to look properly. This is mirrored in

Buckinghamshire where since 2005, when analysis of contributory factors was first introduced, 'Failed to look properly' has remained the most frequently occurring factor. The Transport Research Laboratory (TRL) estimates that human error is a factor is 95% of collisions, highlighting the importance of driver education training and publicity (ETP), aimed at changing behaviour and drivers' skills.

## 4.6.3 Road safety in different groups

## 4.6.3.1 Type of road user

Certain groups of road user are disproportionately represented in road collisions. Nationally, motorcyclists account for just 1% of total road traffic, but account for 19% of all road user deaths; in Buckinghamshire they accounted for 22% of KSI casualties in 2014, and 24% of all fatalities. Figure 2 shows the annual number of motorcyclist KSI casualties in Buckinghamshire since 2004. Between 2005 and 2010 there was a downward trend, but the number has increased again since 2012, with the predicted figure for 2015 almost as high as a decade ago.





Source: AccsMap Database, 2015.

## 4.6.3.2 Casualties in different age groups

Road collisions are the biggest killer of young people (aged 17-24) in the UK and worldwide<sup>3</sup>. Young drivers are at a much greater risk of crashing than older drivers. Drivers aged 17-19 make up only 1.5% of UK driving licence holders, but are involved in 12% of fatal and serious collisions<sup>3</sup> Research shows that the combination of youth and inexperience means not only do young drivers have less ability to

identify hazards, but also that they are much more likely to take risks. Data on British drivers shows that 1 in 4 17-24 year olds who pass their driving test crash within 2 years of doing so, and drivers aged 17-19 are more than twice as likely to die in a collision compared with drivers aged 40-49<sup>4</sup>.

Figure 3 shows the annual number of KSI collisions involving drivers aged 17-24 in Buckinghamshire since 2006. There was a steep decline between 2007 and 2008, following the introduction of the Get in Gear course for new drivers in 2006. Since 2009 there has been a more gradual decline.





Source: AccsMap Database, 2015.

Collisions involving older drivers, aged over 65 years, have been identified as an increasing problem in Buckinghamshire.

## 4.6.4 Road safety in different geographical areas

Table 3 shows the KSI casualty rate per million population in Buckinghamshire in 2014, compared to the CIPFA statistically similar comparator local authorities and England<sup>1</sup>. Buckinghamshire ranks 8<sup>th</sup> of the 15 comparable authorities, where 1 has the highest rate. The table also shows the KSI casualty rate per billion vehicle kilometres travelled; Buckinghamshire ranks 12 of 15, where 1 has the highest rate.

Table 3: KSI Casualty rate per million population, and per billion vehicle
kilometres, Buckinghamshire and CIPFA comparator Local Authorities, 2014

Local Authority	2014 KSI casualty rate	2014 KSI casualty rate
	per million population	per billion vehicle
		kilometres
Buckinghamshire	452	37
Cambridgeshire	500	42
Essex	434	43
Gloucestershire	366	35
Hampshire	574	51
Leicestershire	407	33
Northamptonshire	429	53
North Yorkshire	607	37
Oxfordshire	614	51
Somerset	457	35
Staffordshire	223	19
Suffolk	305	40
Warwickshire	541	35
West Sussex	650	68
Worcestershire	233	25
England	394	49

#### Source: DfT

Public Health England (PHE) publishes data on the number and rate of people killed or seriously injured on England's roads at county and District level. This is an important indicator representing the wider determinants that have an impact on the health outcomes in the population. The rate of people killed or seriously injured in Buckinghamshire in 2012-14 was 43.6 per 100,000 resident population, statistically significantly higher than the England average of 39.3 per 100,000<sup>5</sup>. The rate in Buckinghamshire declined slightly from 2009-11 to 2011-13 but increased in 2012-14 (figure 4). There were 675 people killed and seriously injured on Buckinghamshire roads over 2012-14.

Figure 4: People killed and seriously injured on roads in Buckinghamshire, South East and England, rate per 100,000 resident population, 2009-11 to 2012-14



Source: Public Health Outcomes Framework

At District level the rate of people killed or seriously injured is significantly better in Chiltern and Wycombe Districts but significantly worse in South Bucks District compared to the England average. The high rate in South Bucks is most likely attributable to the location of major motorways and high volume of through traffic. The rate in Aylesbury Vale is similar to the England average (figure 5).

# Figure 5: People killed and seriously injured (KSI) on roads, District Councils in Buckinghamshire England and South East average, rate/100,000 resident population, 2012-14



Source: Public Health Outcomes Framework

In 2012-14, Buckinghamshire ranked 8<sup>th</sup> out of 15 statistical neighbours in terms of rate of people killed or seriously injured on roads (figure 6). The Buckinghamshire rate was higher than the South East but lower than the England average.

Figure 6: People killed and seriously injured on roads in Buckinghamshire compared to its nearest statistical neighbours, South East and England, rate/100,000 resident population, 2012-14



Source: Public Health Outcomes Framework

#### 4.6.5 Demand

The Network Safety Team carries out a review annually of all injury collisions that have occurred on Buckinghamshire roads in a five year period, to select and prioritise sites and routes for collision reduction schemes, as well as work to identify different demographics to target educational, training and publicity measures (see Table 1 above). These measures have included the 'Be a Better Biker' campaign aimed at motorcyclists, which ran between 2004 and 2012, and the Get in Gear scheme targeting new drivers which started in 2006. Both these schemes have now ceased due to budget limitations.

The 2014 review of injury collisions produced a list of 166 sites which met criteria for further investigation; however the Network Safety Team currently has the budget to treat approximately 10 sites per year.

## 4.6.6 Horizon scanning

In December 2015 the current Government published its *Road Safety Statement*, which identifies a series of road safety priorities; however no casualty targets or performance criteria are set, and there are very few direct references to actually

reducing casualties, with the term "road safety" preferred. The 2015 report by the RAC Foundation and PACTS (Parliamentary Advice Council for Transport Safety) 'Road Safety Since 2010', states that:

"The UK Coalition Government's strategic approach, coupled with the focus on economic growth and expenditure cuts, has pushed road safety down the political agenda to a disproportionate extent... The absence of national road safety targets for England and Great Britain is seen as a key reason for a lack of focus on road safety at the local level within England, which has had negative consequences in terms of priority, resources and operational capacity" <sup>6</sup>.

Against a backdrop of already significantly reduced national public spending on road safety, as well as budget cuts and a spending freeze on non-essential spend at a local level, there is real concern that the lack of a national target has led to a lack of focus and prioritisation of casualty reduction.

## 4.6.7 Public views

Older/mature driver assessments are offered, with the aim of restoring the driver's confidence and help them drive safely for longer. From 2012 to 2016, 336 people completed older driver assessments. 28% were GP referrals, 24% re-assessments and 39% as a result of promotional campaigns. The oldest driver was 94; however the majority of clients are in their 80s.

User views from people carrying out the assessments have been positive, expressing appreciation for the assessment and how it is carried out and understanding that the older person needs to be aware whether or not they can continue to drive safely.

## 4.6.8 Conclusions

Motor vehicle traffic accidents are a major cause of preventable deaths and morbidity. For children and for men aged 20-64 years, mortality rates for motor vehicle traffic accidents are higher in lower socioeconomic groups. The vast majority of road traffic collisions are preventable and can be avoided through improved education, awareness, road infrastructure and vehicle safety. The public health strategy "Healthy Lives, Healthy People" (2010) highlighted the need to reduce road injuries in children and address the 'strong social and regional variations'. Reports relating to the earlier cross-government "Staying Safe" strategy such as the "Staying Safe: Action Plan" (2008) and "Accident Prevention Amongst Children and Young People - A Priority Review" (2009) address child road safety issues in more detail.<sup>7</sup>

The Department for Transport's new "Strategic Framework for Road Safety" (May 2011) draws together and updates the wide-ranging issues that will need to be addressed to reduce road casualties. The need for safer roads is also linked to the recent public health strategy, and existing government-backed initiatives, to increase "active travel" and physical activity.

The annual trend in road casualties has declined considerably over the past ten years however, latest data on the rate of people killed or seriously injured on roads shows that Buckinghamshire is significantly worse compared to the England average. The high casualty rate can be attributable to major motorways and A roads running through Buckinghamshire, however this is an important indicator for population safety that needs to be monitored.

#### References

<sup>&</sup>lt;sup>1</sup> Department for Transport, (2015) *Reported Road Casualties Great Britain: 2014. London.* TRANSPORT STATISTICS p.14

<sup>&</sup>lt;sup>2</sup> PHE 2014. Reducing unintentional injuries on the roads among children and young people

https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/322212/Reducing\_unintentional\_inj uries\_on\_the\_roads\_among\_children\_and\_young\_people\_under\_25\_years.pdf

<sup>&</sup>lt;sup>3</sup> Brake: The Road Safety Charity http://www.brake.org.uk/campaigns/flagship-campaigns/too-young-to-die/15facts-a-resources/facts/488-young-drivers-the-hard-facts

<sup>&</sup>lt;sup>4</sup> Department for Transport, (2014) *Reported Road Casualties Great Britain: 2013. London.* TRANSPORT STATISTICS Table RAS30025

<sup>&</sup>lt;sup>5</sup> PHE (2015), PHOF http://www.phoutcomes.info/public-health-outcomes-

framework#page/4/gid/1000041/pat/6/par/E1200008/ati/102/are/E07000007/iid/11001/age/1/sex/4

<sup>&</sup>lt;sup>o</sup> Amos, L., Davies, D. and Fosdick, T. (2015). *Road Safety Since 2010.* Parliamentary Advisory Council for Transport Safety & RAC Foundation

<sup>&</sup>lt;sup>7</sup> Public Health Outcomes Framework, Public Health England, 2015