Birmingham City Council

ROAD SAFETY STRATEGY

BIRMINGHAM CONNECTED

CONSULTATION VERSION
JULY 2015

RoSPA
The Royal Society for the Prevention of Accidents

Foreword

I am pleased to present the Birmingham Road Safety Strategy consultation document, setting out the Council's approach to making our roads safer for all.

I am all too aware how friends and family are affected by road death and injury. These are the devastating results of tragedies on our roads; lives lost or changed forever. On an average day in Birmingham, one person is seriously injured and nine receive minor injuries in road traffic collisions. Once a fortnight, someone is killed on our roads.

Every road casualty is one too many and the only acceptable level of road death is zero.

The Birmingham Connected vision for the future of transport in Birmingham looks to a safer, healthier, greener city with a reliable integrated transport system to support our growing population and economy.

Key to this is an increase in walking and cycling within our communities, with people engaging in daily physical activity in high quality environments. This will not be possible if our roads feel unsafe.

However we travel, we all have a responsibility for our own safety and the safety of others. The Council has a statutory duty to take appropriate measures to prevent accidents, so we have set out our vision and plan to ensure we have:

- Safer roads, through the way we design, maintain and make changes to our highway infrastructure;
- Safer people, through our targeted education, training and publicity programmes; and
- Safer vehicles, by making best use of new technologies and by supporting appropriate enforcement of traffic and vehicle standards.

We know that there are particular road user groups who are more likely to be injured or killed in collisions, and we will direct our attention to these vulnerable road users: children; adult pedestrians; cyclists; 16 to 24 year olds, particularly males; and motorcyclists.

Road safety is not an issue that can be addressed by the Council in isolation. We will continue to work with a range of partners and I am especially grateful for the help and support of RoSPA in developing this strategy.

A number of the actions described in this strategy are already underway, but we must listen to public concerns and to those of our partners, and not become complacent. We will keep undertaking road safety analysis and will refresh our action plan to best meet the city's needs within available resources or those we are able to secure.

I am grateful for your interest in our Road Safety Strategy. I encourage you to respond to the consultation so that we can ensure our priorities reflect the views of all our citizens and partners.

Councillor James McKay
Cabinet Member for Inclusion & Community Safety

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01 Policy Context

The Council has a statutory duty to conduct accident studies, use engineering measures to reduce accidents and to promote road safety, either on its own or in partnership with other local authorities and organisations. This Road Safety Strategy has been developed in the context of this duty and in accordance with the Department for Transport's Strategic Framework for Road Safety. The framework promotes a vision for continued improvement in road safety and reduced numbers of road traffic accidents, and is especially focused on vulnerable groups. It highlights the role of improved technology, behaviour change, training and education as important ways to achieve this vision.

The Council aspires to create a road safety culture throughout the city, to ensure that roads are as safe as they can be and that all road users have the knowledge and skills to use the roads safely. The World Health Organisation/ United Nations safe system approach has been adopted to guide this. This extends beyond seeking to change people's behaviour to also include consideration of the road space, vehicle design and vehicle speed. The approach accords with Birmingham Connected, which seeks to achieve an accessible, reliable, safer and healthier transport system to support economic growth.

National Policy

Section 39(2) of the Road Traffic Act 1988[1] sets out the statutory duty for highway authorities to promote road safety. The Act states that each highway authority is required to *"prepare and carry out a programme of measures designed to promote road safety, and may contribute towards the cost of measures for promoting road safety taken by other authorities or bodies"*.

Section 39(3) of the Act (amended by **New Roads and Street Works Act 1991**[2]) states that the highway authority must also carry out accident studies on roads within their area, and take appropriate measures to prevent accidents, including:

- The dissemination of information and advice;
- Practical training to road users
- The construction, improvement, maintenance or repair of roads; and
- Other measures for controlling, protecting or assisting the movement of traffic on roads.

In constructing new roads, the highway authority must take appropriate measures to reduce the possibilities of accidents.

Section 16 of the Traffic Management Act 2004[3] requires local authorities to manage and maintain the road network and reduce traffic congestion through a range of measures and powers for regulation and enforcement. The Act also requires the local highway authority to have regard to road safety in applying these provisions.

In May 2011 the Department for Transport (DfT) published its **Strategic Framework for Road Safety**[4] that sets out the Framework for local authorities to develop local road safety policies and strategies as well as national measures for implementation by the DfT and their agencies. In this Framework, national government recognises its continuing leadership role on road safety which includes: delivering better driving standards and testing; enforcement; education; managing the strategic road infrastructure; and, through research and the collation and provision of public information, to support local delivery.

The Framework's vision for road safety includes:

- Commitment to ensure that the trend of continuous improvement in road safety over previous decades and in recent years is maintained;
- Reducing the incidence of road accidents in vulnerable groups, particularly cyclists and children;
- Improving technology to transform the way we drive and use roads, to protect all road users; and
- Training and education for children and for new and inexperienced drivers.

The outcomes of the Framework are measured against the number of road deaths and rate per billion vehicle miles:

- Motorcyclist deaths per billion vehicle miles;
- Car occupant deaths per billion vehicle miles;
- Pedal cyclist deaths per billion vehicle miles;
- Pedestrian deaths per billion miles walked; and
- Number of deaths resulting from collisions involving drivers under 25.

In a comparison of local highway authorities, the Framework identifies Birmingham as having more than a 40% reduction in reported killed and seriously injured casualties per billion vehicle miles between 1994 - 1998 and 2007 - 2009.

Work carried out by the Council contributes to the framework's aims by:

- Providing road safety education, training and publicity for all road users;
- Maintaining the highway and equipment such as street lights, traffic signals and traffic signs to a high standard;
- Delivering general highway improvements, e.g. new pedestrian crossings, cycle lanes, red routes, constructed to appropriate design standards; and
- Undertaking formal safety audits of individual highway improvement schemes during design and construction phases.

Disability Discrimination Act 1995 (DDA) Part III[5] gives a right of access to goods, facilities, services and premises. These requirements apply to the road environment as well as buildings and need to be considered as an integral component of providing a safe, inclusive and accessible environment for all people, including those with disabilities.

In this context, **Birmingham Connected**[6], the Council's long-term strategy for transport, includes a commitment to the principle that, *"for any transport scheme proposed in Birmingham the needs of people with disabilities will be fully taken into consideration"*.

Birmingham Connected also includes a table of considerations, a design reference guide and a checklist of design considerations to ensure schemes cater for various user-groups that identify as disabled.

Sub-Regional Policy

The **West Midlands Local Transport Plan 3 (LTP3) 2011**[7] sets out the Integrated Transport Authority's strategy for transport for the period 2011 – 2026 and contains an implementation plan for the first five years (2011 – 2016).

LTP3 contains a number of road safety actions, which have informed this document:

- Further casualty reductions will be sought, including achieving an understanding of where and why collisions occur and to whom;
- Greater co-ordination will be achieved between road safety partners;
- The needs of powered two-wheelers will be actively taken account of; and
- Measures will be taken to reduce actual and perceived safety concerns towards public transport use.

LTP3 also sets a road safety performance target for the West Midlands metropolitan districts to reduce killed and seriously injured casualties by 17.3% between the baseline 2005 - 2009 average and the 2011 - 2015 average.

Local Policy

Birmingham Connected[6], the long-term strategy for transport, sets a new direction and reinforces transport's role in creating a successful, vibrant,

healthy and green city. It ushers in a new era of choice for moving people and goods, delivering and improving infrastructure and funding.

Birmingham Connected sits alongside the **Birmingham Development Plan**[8], the Council's statutory framework to guide decisions on development and regeneration up to 2031. The plan specifies how and where new homes, jobs, services and infrastructure will be delivered and the type of environments that will be created.

The vision of Birmingham Connected is *"to create a transport system which puts the user first and delivers the connectivity that people and businesses require. We will improve people's daily lives by making travel more accessible, more reliable, safer and healthier and using investment in transport as a catalyst to improve the fabric of our city. We also want to use the transport system as a way of reducing inequalities across the city by providing better access to jobs, training, healthcare and education as well as removing barriers to mobility".*

Birmingham Connected's core objectives are:

- Efficient Birmingham - facilitating the growth agenda;
- Equitable Birmingham - linking communities and improving access to jobs and services;
- Sustainable Birmingham - reducing energy consumption;
- Healthy Birmingham - improving health standards through active travel; and
- Attractive Birmingham - enhancing the quality of the urban environment.

The Council will promote healthier and more active travel and remove barriers to walking and cycling. An Active Travel Strategy will consider the health characteristics of Birmingham's communities and aim to better understand the activities and infrastructure required to encourage people to walk and cycle more. This will result in more pedestrians and cyclists using Birmingham's roads and it is important to ensure their safety.

Vision

Road safety is critical to delivering the Birmingham Connected vision and it is important that roads are as safe as possible, and that users are appropriately informed on how to use them.

This will be achieved through a programme of evidence-based actions. The action plan outlines a mix of engineering, enforcement and compliance activities and educational interventions. The Council will also seek to address people's perceptions of road safety, which can be a barrier to the uptake of more sustainable and active forms of transport. New technology and innovation will play a key part in the action plan and the Council will work with and support partners to influence these developments.

The Council is adopting the 'safe system' approach, as advocated by the United Nations and the World Health Organisation in the **Global Plan for the Decade of Action for Road Safety 2011 - 2020**[9]. This approach aims to develop a road transport system that is better able to accommodate human error and take into consideration the vulnerability of the human body. It starts from the acceptance of human error and thus the realisation that traffic collisions cannot be completely avoided. The goal of a safe system is to ensure that accidents do not result in serious injury. Road users, vehicles and the road network/ environment are addressed in an integrated manner, through a wide range of interventions, with greater attention to speed management and vehicle and road design than in traditional approaches to road safety.

The approach has been adopted in countries such as the Netherlands, Sweden and New Zealand, and components of the approach have been adopted in the Safe Streets for London[10] action plan.

The Safe System Approach identifies five pillars for delivery:

- Road safety management;
- Safer roads and mobility;
- Safer vehicles;
- Safer road users; and
- Post-crash response.

Figure 1 sets out the framework within which the vision and measures have been developed, incorporating three key themes:

Safer roads sets out how the Council ensures that the city's roads are maintained, operated and improved in as safe a way as possible.

Safer people sets out how the Council uses a programme of education, training and promotion activities and works with partners to improve road user behaviour and encourage more sustainable and active travel.

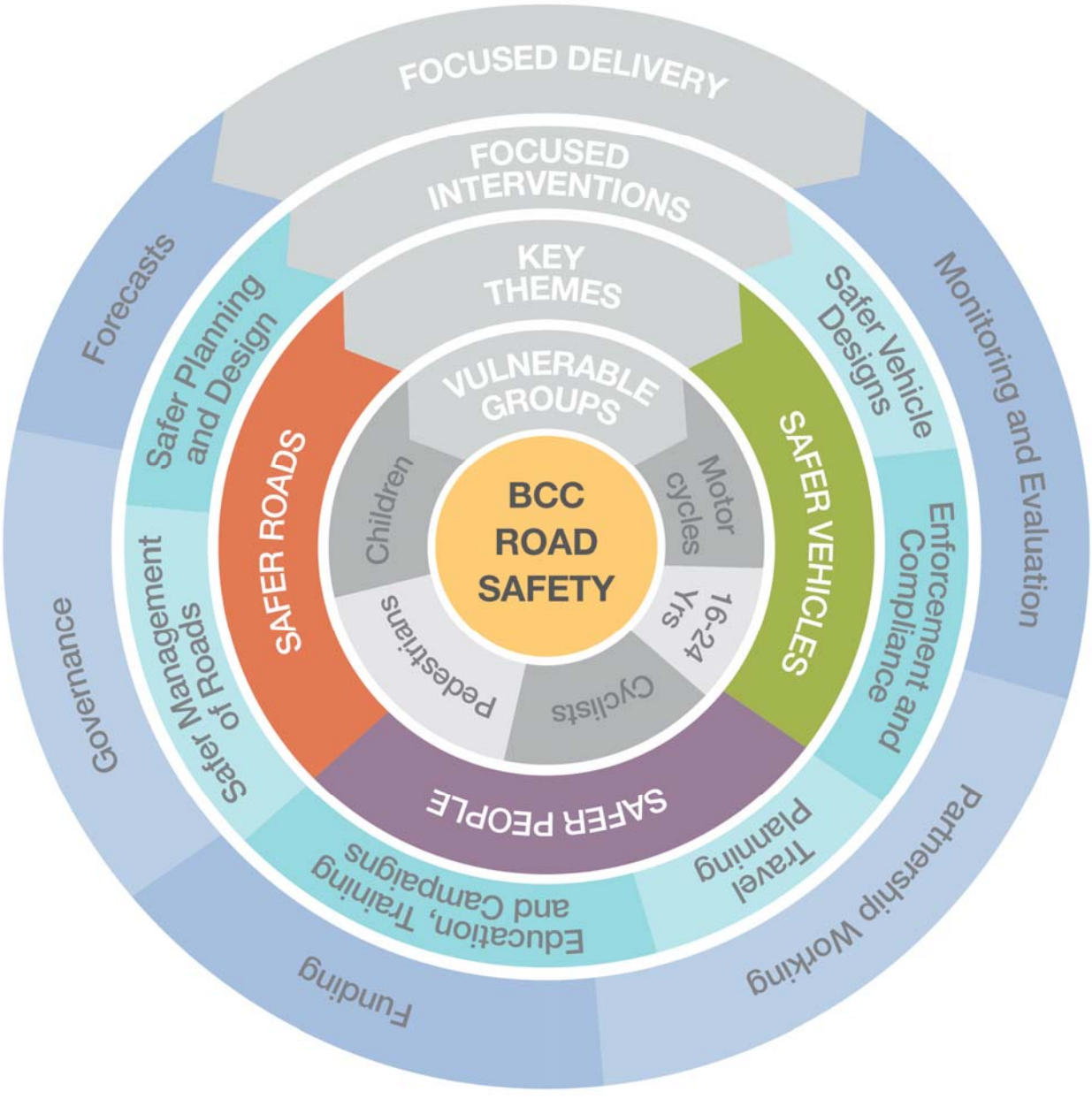
Safer vehicles sets out how the Council can encourage and enforce compliance with regulatory standards, and encourage best practice, to ensure vehicles using our roads are as safe as possible.

Strategic Outcomes

The Council has the following strategic outcomes for road safety:

- A reduction in the number and severity of road traffic accidents;
- A reduction in the number of people killed or seriously injured as a result of road traffic accidents;
- A reduction in the total cost to society of accidents;
- More people making their journeys on foot or by bicycle;
- More children walking and cycling to school; and
- Improved air quality.

Figure 1: Road Safety Strategy Vision



01 Policy Context

Partnership Working

The Council delivers road safety education, training and publicity and changes to the highway infrastructure to improve road safety. Further activities are undertaken in partnership with others including: the emergency services; schools; public health bodies and NHS providers; neighbouring authorities; and third and private sector organisations such as the Royal Society for the Prevention of Accidents (RoSPA). The Council also works with local communities and individuals who have been affected by road traffic accidents to help to deliver road safety messages within the community.

The Council is a founder member of Eurocities[11], an association of European cities with common objectives for stronger and more cohesive economies. As part of this wider work, the Council is a member of the Eurocities Mobility Forum which promotes road safety, and is a signatory to the European Charter on Road Safety[12].

Partnership working is essential given the complexity and impact of road safety, and partnerships continue to bring together resources, knowledge, innovation and expertise. This strategy highlights much of the joint working undertaken in road safety education and enforcement.

The Council plans to reform the Birmingham Road Safety Partnership, led by the Councillor responsible for road safety, to co-ordinate and oversee road safety activities across the city. Alongside the Council, it is proposed that membership will include the emergency services, road safety organisations and Highways England.


Bike

02 Understanding Road Safety in Birmingham

Each day in Birmingham, on average, nearly ten people are injured in road traffic collisions. One of these injuries is serious.

Once a fortnight, on average, someone is killed on our roads.

Every year, road accidents in Birmingham cost the economy an estimated £176 million[13].

A good understanding of the nature and causes of accidents ensures that the response from the Council and its partners is appropriate and is focused on measures that can make a difference. In this process of analysis, it is necessary to recognise that some accidents result from individual behaviours such as lack of attentiveness, inappropriate manoeuvring or driving speed. Mistakes are human and it is very difficult to mitigate against all of them.

Set out in this chapter is a brief overview of Birmingham's road safety data. This generally shows good progress on tackling the problems in the city through training and promotional activities as well as engineering measures. There is always more that can be done, and the data analysis is used to inform the strategy and to ensure targeted and appropriate actions that will further reduce the numbers of collisions and casualties.

Road Safety Data – Overview

This chapter provides a high level overview of road safety data for Birmingham.

A detailed analysis of the evidence base has informed the development of the action plan and additional supporting documents are available via the Council's website at www.birmingham.gov.uk/roadsafety.

Collision and Casualty Data Sources

The road safety analysis presented in this section is primarily based on the STATS19[14] collision data and socio-demographic classification of the city's households from the Experian Mosaic dataset.

Collision and Casualty Categories

Road safety data includes information about collisions and about the casualties (people) involved in collisions. As one collision may result in several casualties, the number of casualties in any year is greater than the number of collisions.

Casualties are categorised by severity as:

- Fatal - injury resulting in the death of a casualty within 30 days of the collision;
- Serious - injury including fracture, internal injury, concussion, severe shock, severe cuts, detention in hospital; and
- Slight - injury including sprains, whiplash, bruises, slight cuts.

Collisions are categorised by the most severe casualty category. So if, for example, a collision results in three casualties – one fatal, one serious and one slight – the collision is categorised as fatal.

When reporting on road safety data, the fatal and serious categories are often combined to highlight the collisions or casualties with the greatest human cost. These are referred to as KSI (killed or seriously injured).

Analysis by Location

Analysis can be undertaken based on the locations where collisions took place and also based on the home location of people who are involved in the accident (the casualties).

This chapter first considers data from accidents

that occurred within the Birmingham boundary, then goes on to some analysis of the involvement of Birmingham residents in accidents, wherever in the country these accidents occurred.

Perception of Road Safety

While the actual numbers of collisions and casualties can be quantified and measures targeted accordingly, it is the perception of risk viewed by individuals, as opposed to the actual risk, which frequently determines the acceptability or success of any interventions. Perceptions of risk can act as a barrier to improved road safety and to the take up of active and sustainable modes of travel. The Council's Active Travel Strategy will seek to address poor perceptions of safety and personal security through promotional activities and improved infrastructure that encourages walking and cycling.

The **Birmingham Transport Study 2012/13**[15] asked a range of questions about transport to a representative group of 1,000 residents who make up the Birmingham People's Panel. When asked what was the greatest influence on transport choice, safety was given the highest rating (23% of respondents chose 'concerns about safety (e.g. road/rail safety, personal security, etc.)' as the most important factor). In particular, this was the case for women, households with children, and people aged 25-34. However, few respondents identified concerns about safety as a reason for changing travel mode, or as a reason why they might change travel mode in future.

Limitations of Road Safety Data

Human error is the most significant factor in the majority of road traffic accidents. Over time, this can be influenced by external factors such as: the engineering of roads and vehicles; enforcement of laws relating to issues such as vehicle standards and driver behaviour; and shifts in social perceptions, such as the general unacceptability of driving under the influence of drink or drugs, wearing of seatbelts and mobile phone use whilst driving.

There are also factors beyond the control of authorities. For example:

- **The economy**: worsening economic conditions can result in fewer journeys and a change in driver behaviour to use less fuel;
- **Weather conditions**: for example, heavy snow results in slower vehicle speeds, so although there may be an increased risk of a collision, the outcome is usually less severe. Fine weather sees an increase in use of more vulnerable modes such as motorcycling, cycling and walking;
- **Time of year**: more accidents are reported in Autumn and Winter months due to the increased hours of darkness; and
- **Migration**: people arriving from outside the UK may be less familiar with the conditions, rules and conventions of the roads and thus more likely to be involved in a collision.

Comparisons of road accident reports with death registrations show that very few, if any, road accident fatalities are not reported to the Police. National Travel Survey[16] data suggests that 48% of injury accidents are not reported to the Police and thus cannot be included in any data analysis.

27% of non-injury accidents are reported to the Police[16], but these are not recorded on the STATS19 database and again, are not included in the analysis.

Road Traffic Casualties on Birmingham Roads

Birmingham, in common with many other authorities across the UK, has experienced significant reductions in reported traffic related casualties, with a 41% reduction between 2000 and 2014. Figure 2 shows this change over time, which is in keeping with the national trend.

This fall in total casualties suggests that road safety interventions have had an effect and may also be due to improvements in vehicle design and in the quality of medical care, especially at the roadside.

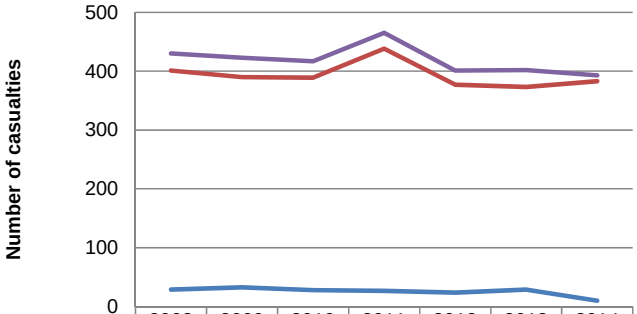
Despite this positive longer term trend, the total number of casualties has been rising year on year since 2012.

The recent increase is in the number of slight casualties; fatal and serious casualties do not follow the same trend and, as seen in figure 3, have remained fairly constant between 2008 and 2014. The 2014 figure of ten fatal casualties is unusually low.

Figure 4 shows that the highest percentage of road casualties in Birmingham are drivers and passengers in cars and taxis at 63%. This is followed by pedestrian casualties that make up 19% of total road casualties in Birmingham.

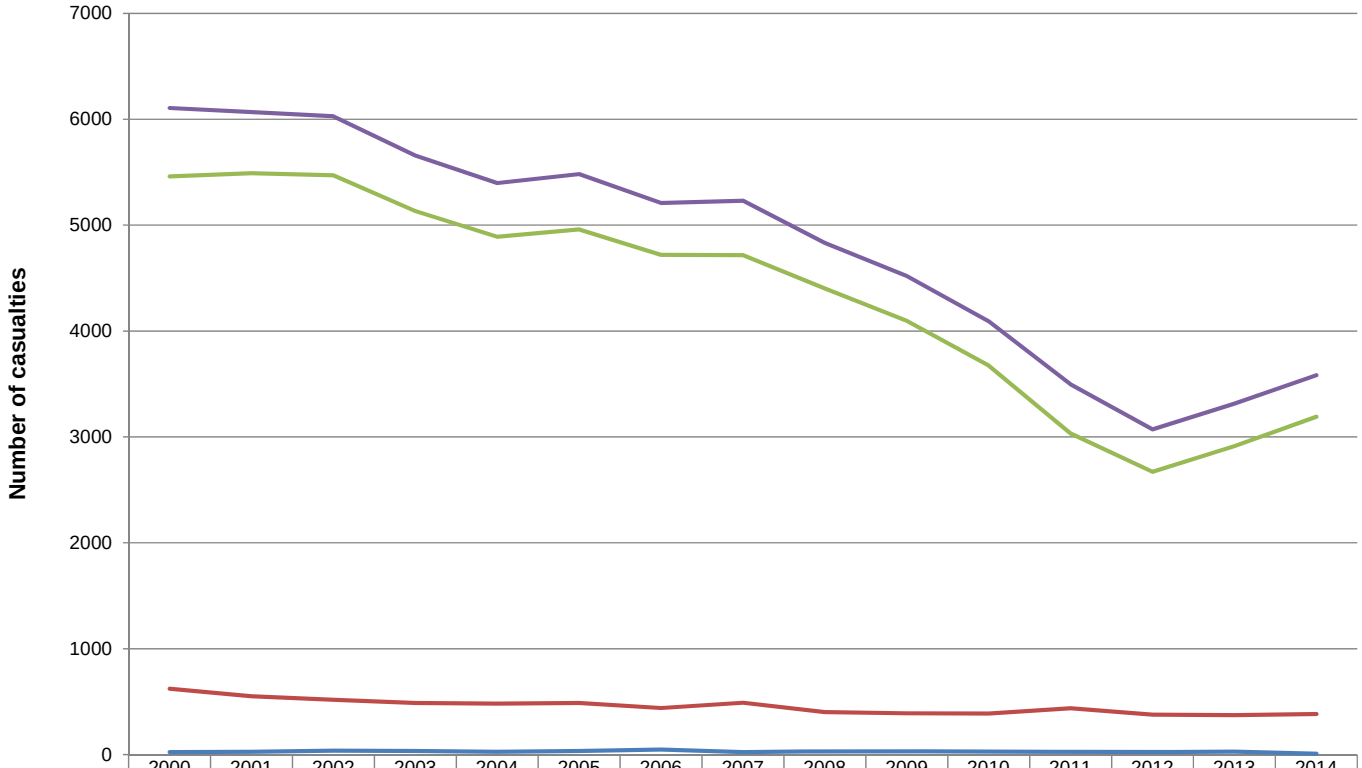
Figures 5 and 6 consider only KSI casualties. Pedestrians and the occupants of cars/taxis result in the highest numbers of casualties killed or seriously injured, as seen in figure 5. However, when compared with the split of all casualties, occupants of cars/taxis are actually underrepresented. Figure 6 compares KSI

Figure 3: KSI casualties in Birmingham (2008-2014)



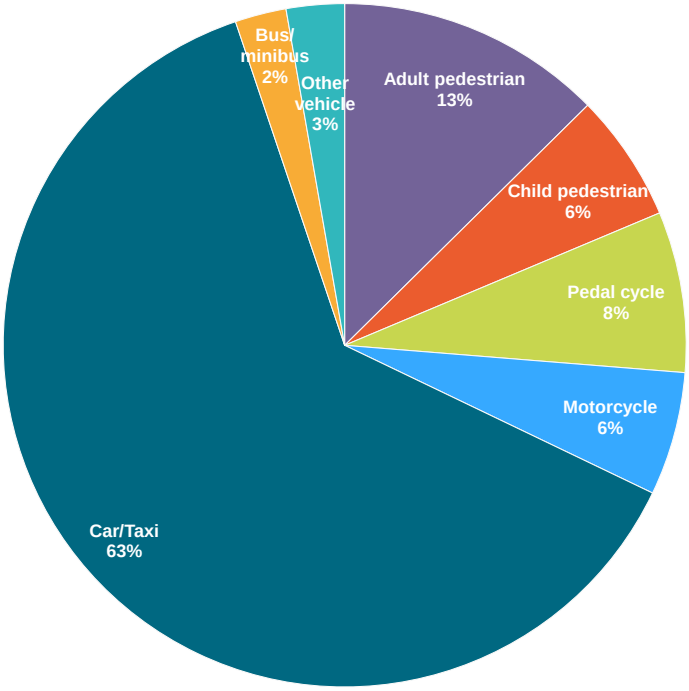
	2008	2009	2010	2011	2012	2013	2014
Fatal	29	33	28	27	24	29	10
Serious	401	390	389	438	377	373	383
KSI	430	423	417	465	401	402	393

Figure 2: All road casualties in Birmingham (2000-2014)



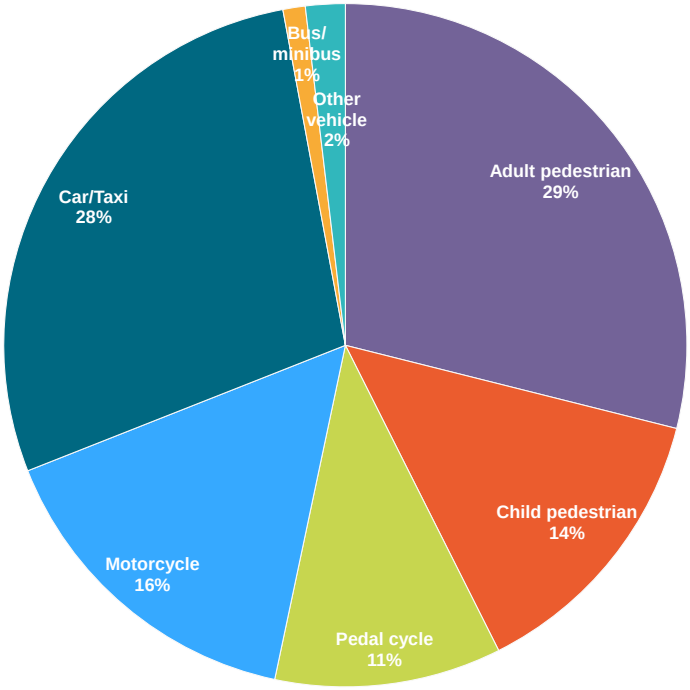
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Fatal	24	27	38	36	26	34	49	24	29	33	28	27	24	29	10
Serious	622	550	518	489	481	487	441	490	401	390	389	438	377	373	383
Slight	5461	5490	5472	5132	4891	4960	4719	4717	4402	4096	3675	3032	2670	2913	3191
Total	6107	6067	6028	5657	5398	5481	5209	5231	4832	4519	4092	3497	3071	3315	3584

Figure 4: All road casualties in Birmingham, by travel mode (2010-2014)



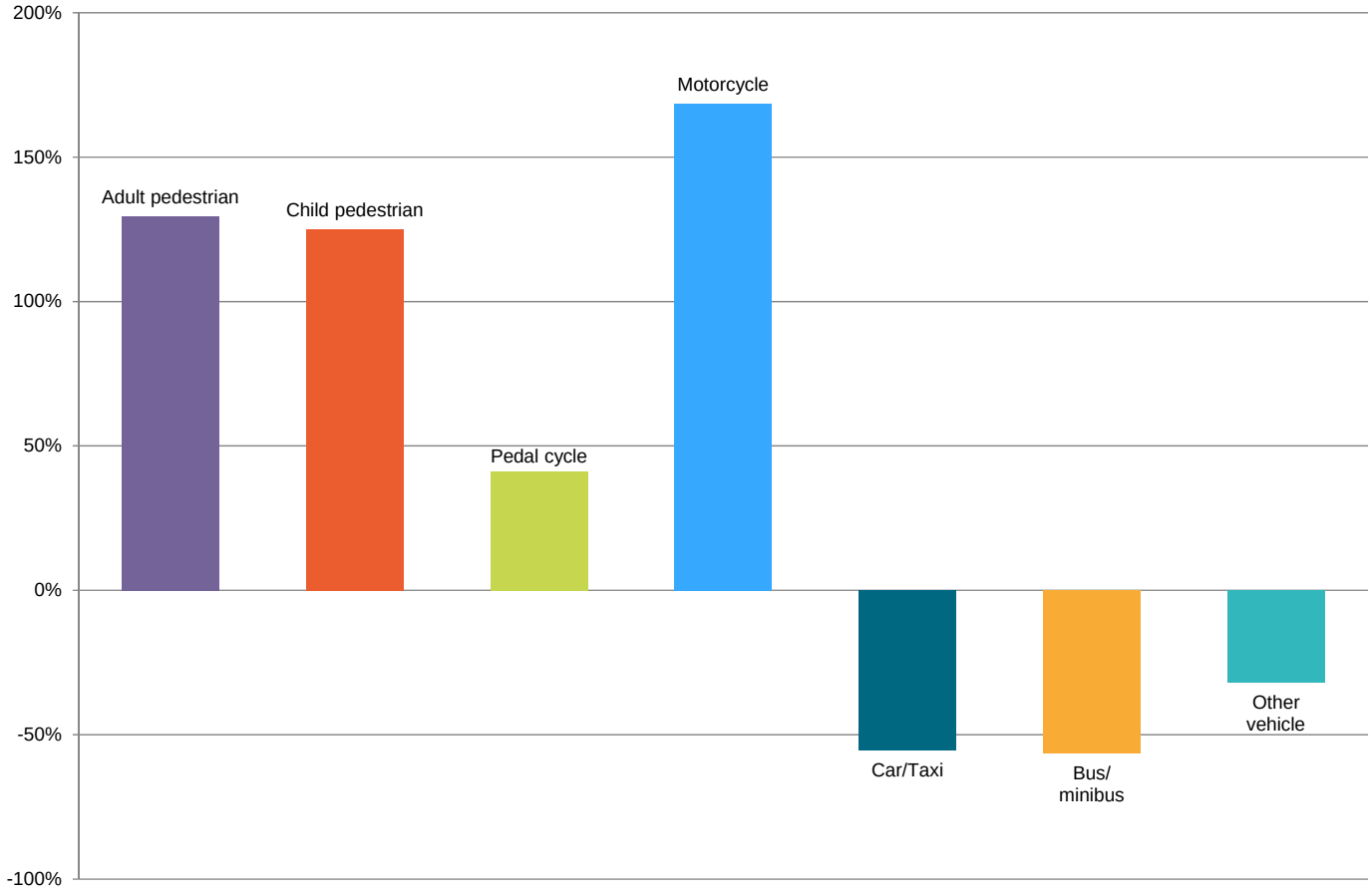
Total: 17,599 casualties

Figure 5: KSI casualties in Birmingham, by mode (2010-2014)



Total: 2,078 casualties

Figure 6: KSI casualties in Birmingham, by mode, compared to all casualties (2010-2014)



casualties with all casualties, illustrating that motorcyclists, adult and child pedestrians and pedal cyclists are overrepresented, meaning that they are more likely to be KSI in the event of an accident.

Figure 7 shows the modal split for all journeys made in Birmingham taken from the West Midlands Household Travel Survey[17]. This highlights the overrepresentation and underrepresentation of some road users in comparison to their overall mode share. For example motorcycles account for less than 2% of journeys in Birmingham yet account for 16% of KSIs on the city's roads, while bus travel has a mode share of 18% yet accounts for just 2% of all casualties.

More men are injured in collisions than women; for the years 2010-2014, 71% of KSI casualties, and 59% of all casualties in Birmingham were male. Figure 8 shows that male road users aged 20-29 constitute the highest proportion of casualties in Birmingham's road traffic collisions. In the last five years, 30% of all fatalities were males aged 20-29.

The districts of Hodge Hill, Hall Green and Yardley have the highest overall casualty rates, with the lowest levels of casualties found in the district of Sutton Coldfield.

As part of understanding road safety issues it is important to consider contributory factors alongside the data, for example social

Figure 7: Mode split of journeys made by Birmingham residents

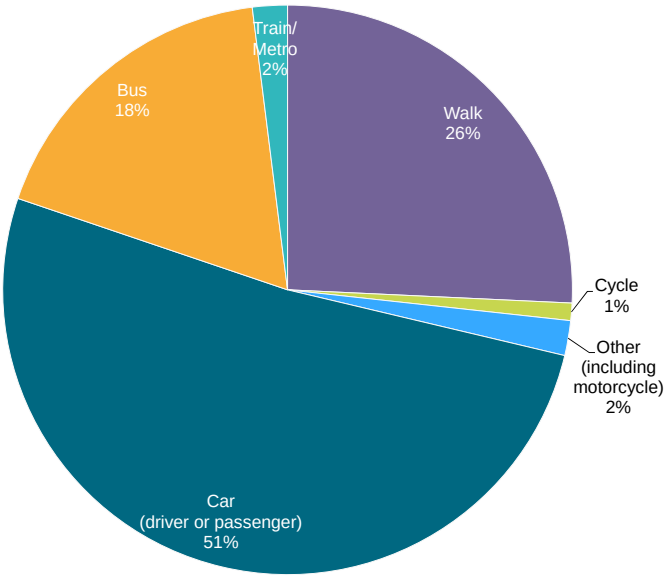
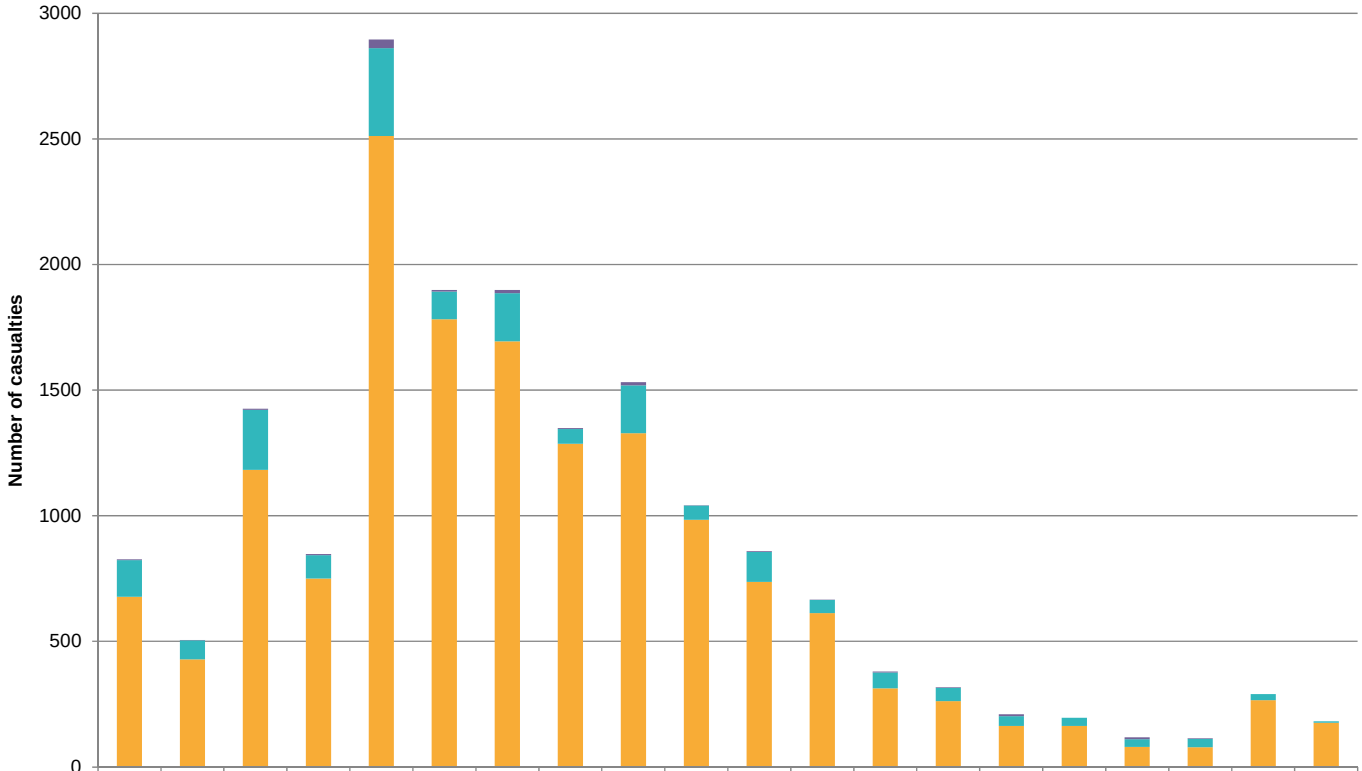


Figure 8: Road traffic casualties in Birmingham by gender and severity (2010-2014)



	0 - 11 M	0 - 11 F	12 - 19 M	12 - 19 F	20 - 29 M	20 - 29 F	30 - 39 M	30 - 39 F	40 - 49 M	40 - 49 F	50 - 59 M	50 - 59 F	60 - 69 M	60 - 69 F	70 - 79 M	70 - 79 F	80+ M	80+ F	Unkn-own M	Unkn-own F
Fatal	4	2	4	5	35	7	13	4	13	2	3	1	4	3	8	0	7	3	0	0
Serious	146	76	239	93	349	110	192	58	190	56	119	52	63	53	38	32	31	33	25	5
Slight	677	428	1183	750	2512	1782	1694	1287	1329	984	737	613	313	262	164	164	80	79	266	177

background and geographical locations which affect personal travel behaviour such as greater levels of walking and also the proximity to and need to use and cross major roads. This is illustrated further in Figure 9 which shows the geographical spread and frequency of road traffic collisions in the city.

From figure 9, it can be seen that most accidents tend to be on larger roads and/or at major junctions. Nationally, about 75% of cycling accidents happen at or near a road junction, with roundabouts being particularly dangerous junctions for cyclists[18]. Similarly, there are high levels of accidents in busy local centres where there are higher traffic volumes, large numbers of pedestrians and cyclists and significant numbers of people crossing roads. These much higher levels of exposure and interaction between motor vehicles and pedestrians increase the opportunities for, and likelihood of, accidents.

Conclusions

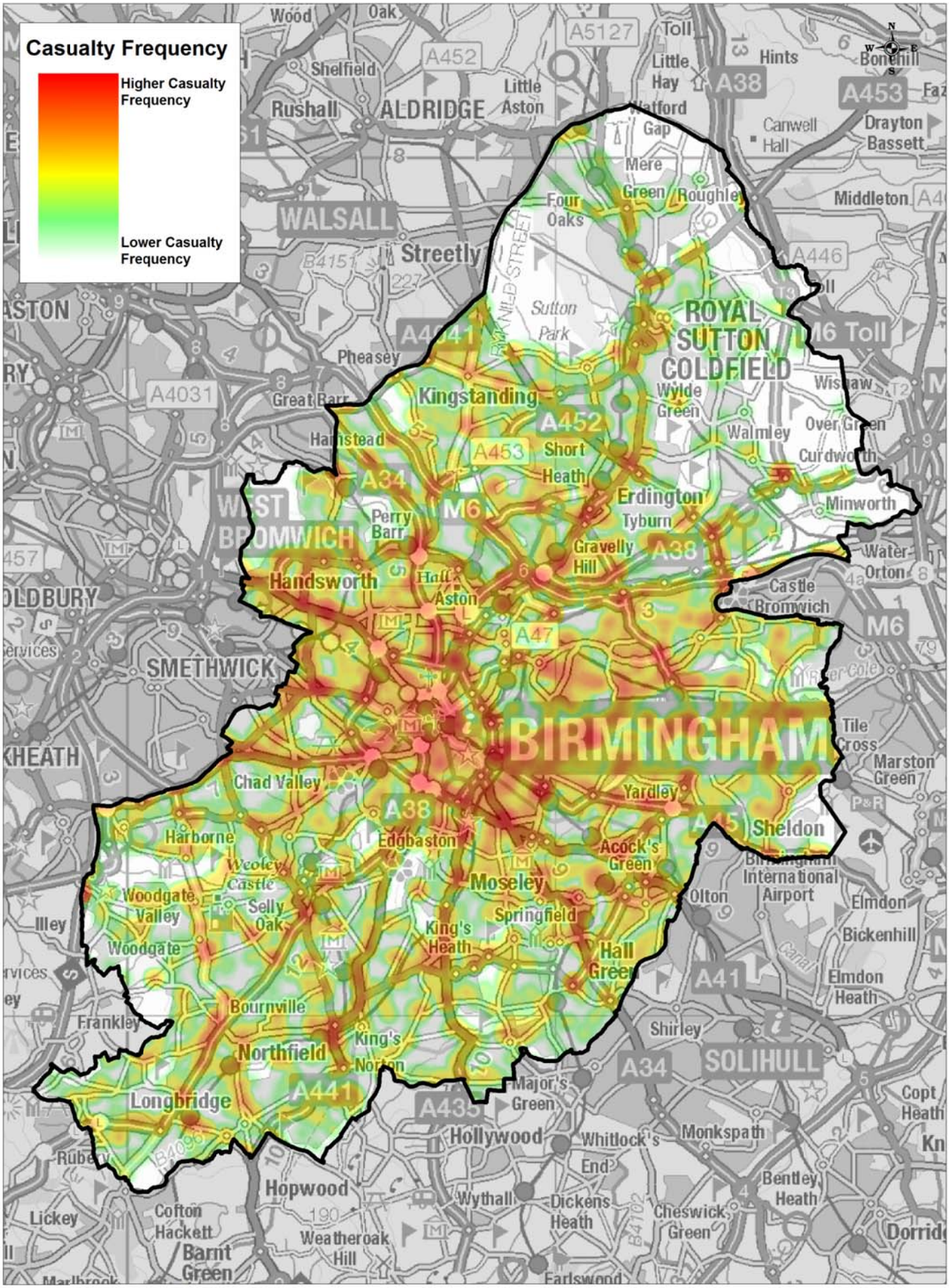
There are particular road user groups which are more likely to be involved in collisions in Birmingham, and to be killed or seriously injured. For the purposes of this strategy these are defined as 'vulnerable road users'. These are:

- Children, particularly child pedestrians and child cyclists;
- Adult pedestrians;
- Cyclists;
- 16 to 24 year olds, particularly males; and
- Motorcyclists.

Drivers and passengers of cars/taxis make up the greatest proportion of road traffic casualties. However, cars and taxis are also overwhelmingly the most common travel mode, and so the number and severity of casualties are not as high when considered as a rate relative to exposure. Cars and taxis have therefore not been included in the vulnerable user category.

It is important to understand the data and undertake baseline analysis of each of the vulnerable groups to effectively tailor interventions to the road users and communities most in need.

Figure 9: Spatial distribution of all road traffic casualties in Birmingham 2012-14



Contains Ordnance Survey data
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Casualties and Collisions involving Birmingham Residents

78% of the casualties (with known postcodes) that are injured on Birmingham's roads are Birmingham residents. This compares to the national rate of 66% residing in the local authority area in which they were injured.

Figures 10 and 11 show the home locations of Birmingham residents injured or killed in road traffic accidents in the city. The main concentration of KSI casualties are focused in Saltley, Sparkbrook, Handsworth, Stockland Green and Perry Barr. Lower rates are mainly located to the north, in and around Sutton Coldfield, Walmley and Four Oaks.

In the following analysis[19], trends for Birmingham residents have been analysed using data from 2008 - 2012. There are plans to update this analysis up to 2014. The trends are compared with Great Britain as a whole and with eight similar authorities: Coventry, Derby, Dudley, Leeds, Leicester, Salford, Sandwell and Walsall.

General Trends

The road safety risk for the city's residents was, in most respects, similar to that seen nationally, but was higher than all the comparator authorities. When considering only KSI casualties, the rate in Birmingham was a little lower than the national average and in the middle of the comparator authorities.

Erdington district had the highest overall KSI casualty rate per head of population with the districts of Hodge Hill, Hall Green and Yardley exhibiting the highest rates for all casualties. Sutton Coldfield consistently displayed the lowest casualty rate per head of population.

Total child casualties reduced significantly between 2008 and 2012, but there was a slight increase in child KSI casualties, with rates being above the national rate and that of the comparator authorities. At a local level, Hall Green District had a child casualty rate which was over 30% higher than the national norm.

Birmingham residents aged 16-24 were the most vulnerable age group in terms of absolute casualty numbers, and also exhibited higher casualty rates relative to population than other age groups and than the national norm for this age group. However, Birmingham drivers in this age group show a rate of injury collisions which is 28% lower than the national rate.

There is significant local variation in the distribution of young driver collision rates in Birmingham, with the highest levels in Yardley, Hodge Hill, Hall Green and Sutton Coldfield districts.

Birmingham's resident pedestrian casualty rate is significantly higher than the national rate and the rates in all the comparator authorities. Ladywood has the highest pedestrian casualty levels, with Hodge Hill, Erdington and Hall Green also high.

Figure 10: Home location of Birmingham residents injured in road traffic accidents (2009-2014)

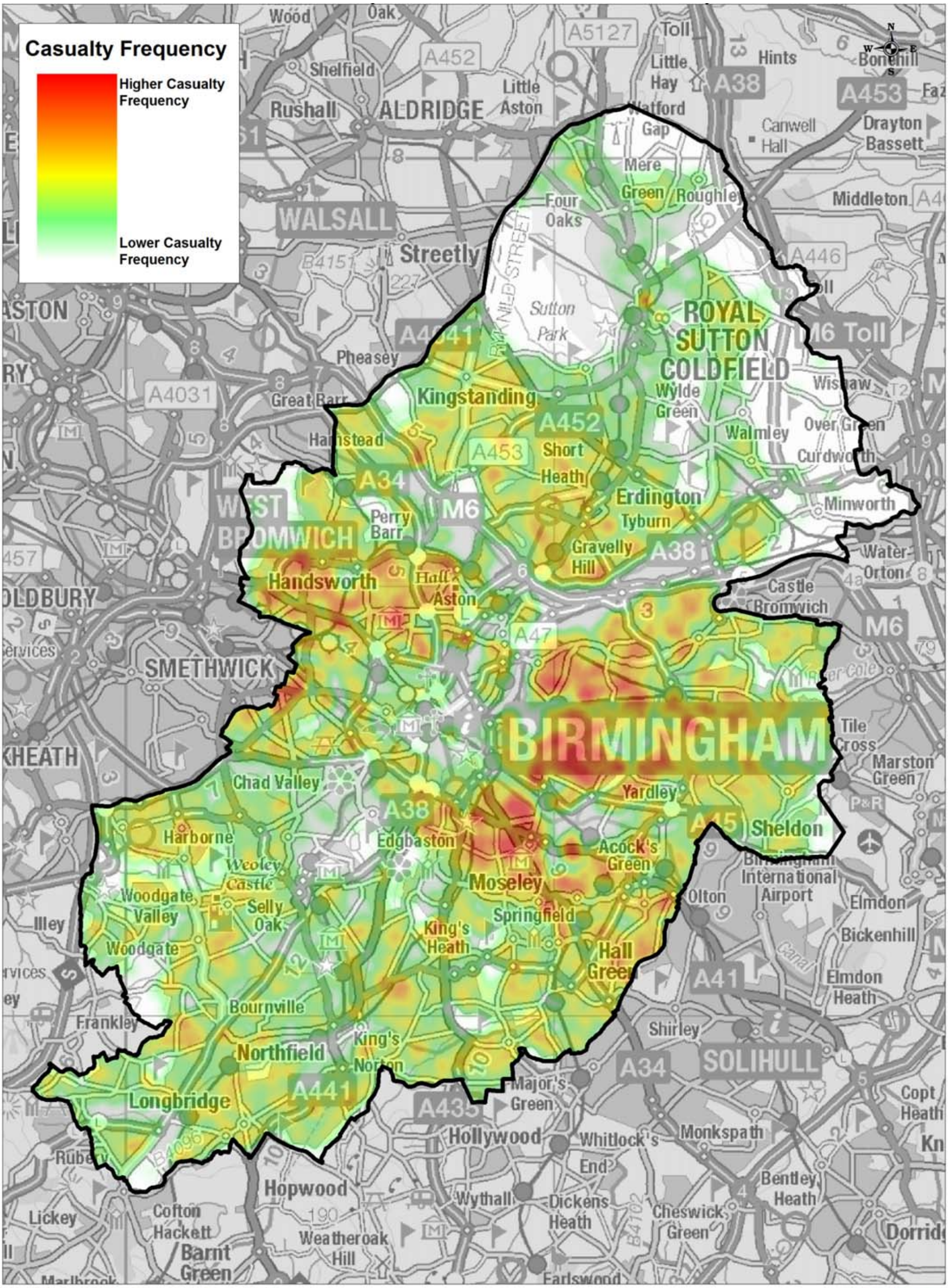
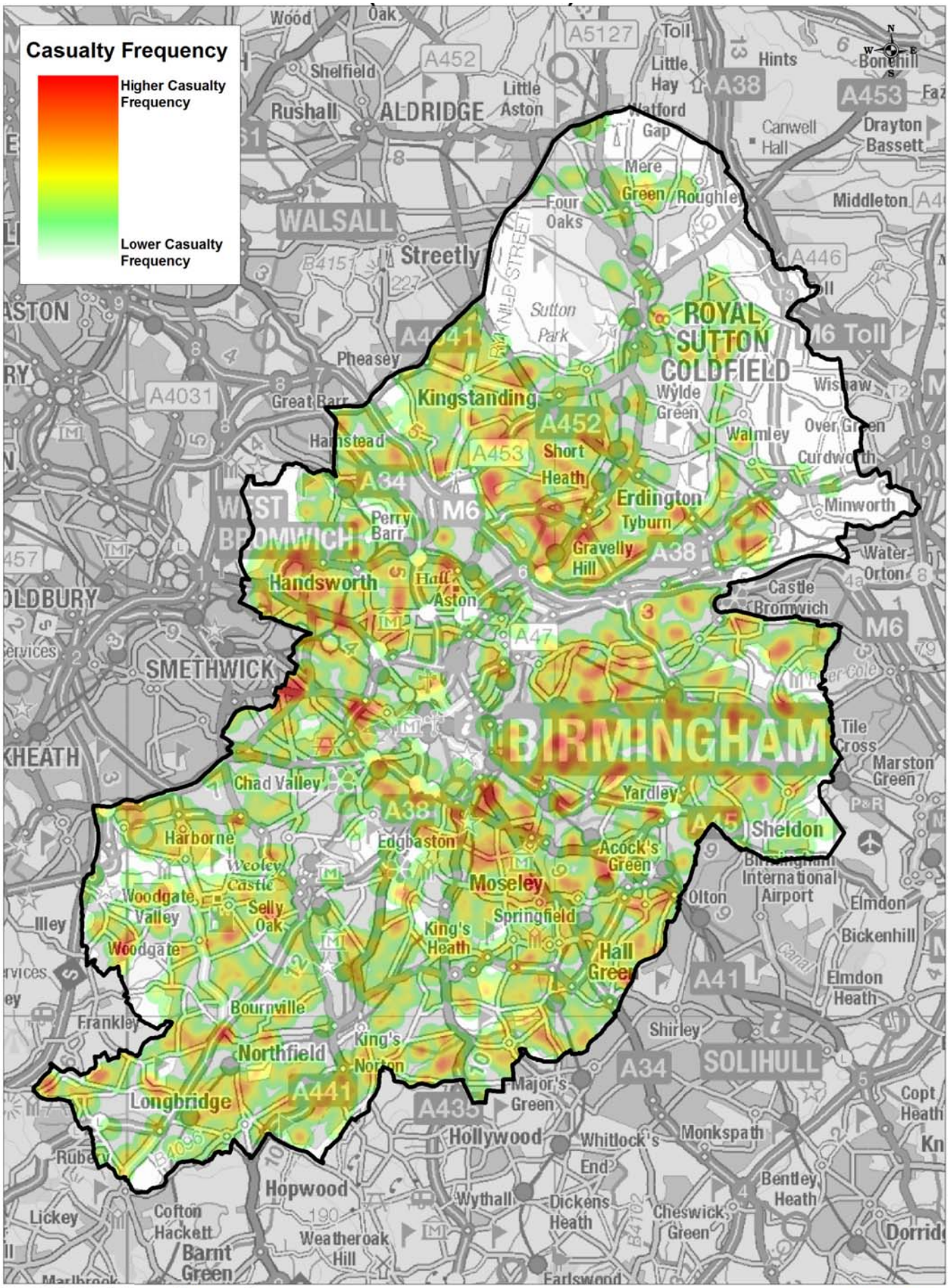


Figure 11: Home location of Birmingham residents killed or seriously injured (KSI) in road traffic accidents (2009-2014)



02 Understanding Road Safety in Birmingham

Motorcycle casualties on Birmingham's roads fell by 23% between 2008 and 2012, but the number of serious or fatal accidents in this group remained high, with 27% of motorcycle casualties that occurred in this period being killed or seriously injured. Significantly more Northfield residents were injured while using a motorcycle than residents living in any other Birmingham district.

Birmingham's resident pedal cycle casualty rate was below the national rate and broadly typical of that of its comparator authorities. The districts of Edgbaston and Hall Green exhibited the highest rates in Birmingham and rates similar to the national norm. The number of adult cycle casualties increased, whilst child cyclist casualty numbers fell between 2008 and 2012.

Birmingham residents living in inner city areas, and Black and Minority Ethnic (BME) residents were at a higher risk of being involved in a road traffic accident. Some of this increased risk can be attributed to factors such as exposure e.g. they may not have access to a car and therefore walk or cycle more, or they live in areas close to major roads and therefore their daily exposure to road traffic conflicts and risk is much higher that the wider population.

The number of collisions involving lorries decreased between 2008 and 2012, and the lorry collision rate by road length is typical of the comparator authority networks, although it is above the national norm. 36% of those killed or seriously injured in lorry crashes in Birmingham were pedestrians.

Contributory Factors (CFs)

The CF most commonly attributed to collisions in Birmingham was 'failed to look properly' with 39% of collisions having this CF attributed to at least one participant. This is similar to the national frequency with which this CF is assigned.

It is also notable that attending Police officers attributed 'Pedestrian Failed to Look Properly' much more frequently than is the case nationally, accounting for 16% of all officer attended collisions in Birmingham where at least one CF was recorded, compared with just 10% nationally.

Collisions attributed by Police officers to alcohol impairment, or to drivers disobeying signs or signals, decreased at a faster rate than collisions overall. However collisions related to road surface conditions, and those where driver distraction was a CF, remain at levels similar between 2008 and 2012. Collisions related to driver behaviour dropped at a slower rate than collisions overall.

Conclusions

In general, road safety risk for Birmingham's residents is in line with national trends and considerable progress has been made to improve road safety through engineering measures as well as education, training and publicity initiatives to reduce the number and severity of accidents.

There are a number of road user groups that are involved in a disproportionate number of road accidents and who are more likely to be killed or seriously injured as a result. These include children, adult pedestrians, cyclists, motorcyclists and 16-24 year olds, particularly males.

Within the city there are a number of districts that are consistently highlighted as having specific road safety issues, including Yardley, Hodge Hill and Hall Green, as well as locations along busy roads and in local centres. There is however variation within districts. Some districts may have a very specific and localised road safety problem, but otherwise exhibit very low levels of road traffic accidents. One such example is Sutton Coldfield where the incidence of accidents is very low in comparison with the rest of the city but where accidents and casualties involving young drivers are high relative to the remainder of the city.

The analysis of road safety data provides a good understanding of the patterns and trends of road safety, collisions and casualties and this has been used as a framework to inform the development of this strategy and action plan.

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03 Key Strategy Themes and Approach

The actions proposed as part of Birmingham's Road Safety Strategy are set out around three key themes:

Safer Roads

Safer People

Safer Vehicles

This section explains how, using the data on road safety, the Council will continue to develop and deliver interventions to address road safety through a range of engineering, educational/training and enforcement methods.

The Council will continue to create safer roads, bringing down speeds and casualty rates, and, by encouraging more active travel, will deliver a healthier, safer and more welcoming city. Every time changes are made on the road network, road safety, and the needs of vulnerable users, will be a fundamental consideration.

Safer Roads

The Council implements a wide range of engineering measures to make physical changes to the nature of the road and its environs through the Transportation and Highways Capital Programme. This includes schemes to support development and regeneration and those which seek to address traffic congestion as well as specific interventions to address road safety concerns. Scheme designs are specific to the location and are informed by accident data, road safety audits and reviews of the location.

Physical measures that are employed to address safety can include:

- Traffic calming measures such as road humps, build-outs or chicanes to slow down vehicles;
- Changes to speed limits, such as 20mph limits or zones;
- Amendments to road signs and lines;
- Provision of new pedestrian crossings;
- Improved street lighting;
- Reduced distances for pedestrians to cross the road and increased width of footways;
- Improvements to pedestrian and motorist visibility; and
- Amendments to reduce potential conflicts between vehicles and pedestrians or cyclists.

Day to day management of the road network, for example through speed and parking management, and responses to disruption on the network are also key to reducing accidents and improving road safety.

03 Key Strategy Themes and Approach

Safer Planning and Design

Local Safety Schemes/Accident Studies

Following any fatal collision, or serious collision which may become fatal, the Council's response protocol[20] is implemented to evaluate whether local highway conditions or road layout were a contributory factor and whether any remedial engineering or other measures are required. Remedial measures may also be prompted in response to a Coroner's recommendation.

The Council has an ongoing Local Safety Schemes programme that seeks to address specific existing road safety concerns on the highway. Schemes are identified for inclusion in this programme by a detailed analysis of injury accident data collected by the Police. Accident records are analysed in accordance with an objective analysis and decision making process for road safety schemes, GlassBox, set out in figure 12.

The GlassBox and first year rate of return process prioritises schemes and focuses limited resources on measures or packages of measures that address a number of accidents. It does not automatically follow that priority should be given to the largest numbers of accidents; it may be more beneficial to treat a location with a smaller number of accidents but where those accidents have very similar causes, rather than a location with more accidents but where the causes have little in common or where the road layout is not a contributory factor.

Each of the road safety scheme sites is monitored for accidents before and after engineering measures are implemented, to assess effectiveness.

It is acknowledged that not all injury accidents are reported and that any reports of non-injury accidents are not available to the Council. In addition, there is no way to objectively measure perceptions of safety or 'near misses' - accidents which are narrowly avoided. Despite these limitations, records of past accidents are currently the best available indicator of future accidents.

Road Safety Audits (RSA)

All highway and transportation schemes are subject to a RSA procedure: a formal safety performance examination by an independent, multidisciplinary team.

Audits are conducted in accordance with Highways England's Design Manual for Roads and Bridges[21], examining the overall layout of the scheme and considering all users of the highway, with particular attention to vulnerable road users such as the very young, older users and the mobility and visually impaired. They should take place at:

- Completion of preliminary design;
- Completion of detailed design;
- Completion of construction; and
- Monitoring (usually 12 months after implementation).

All problems and recommendations raised in a RSA must be given due consideration and appropriate actions undertaken.

Safer Routes to Schools Programme

Birmingham's dedicated Safer Routes to Schools programme seeks to improve the safety of the highway and the quality of cycling and walking routes around schools.

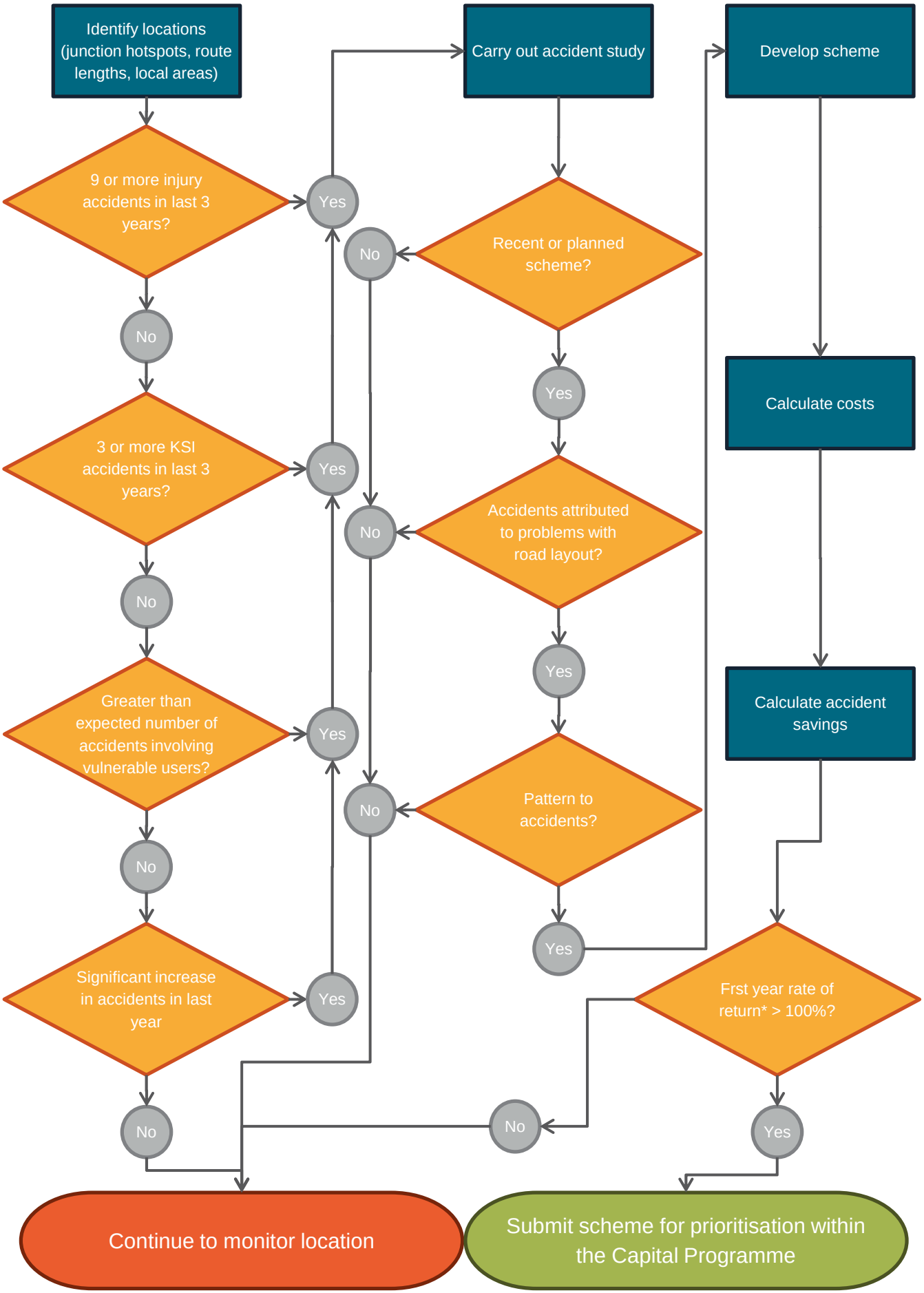
Together with school travel planning, this programme identifies and facilitates safe and convenient access to schools, and promotes and encourages more sustainable and active travel for the school journey.

Infrastructure for Safer Cycling

The Council, through the Birmingham Cycle Revolution (BCR) programme, is seeking to develop a network of local and longer distance cycle routes across the city.

Bike North Birmingham (funded through Local Sustainable Transport Fund) and BCR (funded through Cycle City Ambition Grant) have already delivered extensive improvements to off-road cycling and walking routes through green spaces and along canal towpaths, with further work planned. BCR will also deliver cycling facilities on main route corridors.

Figure 12: GlassBox Process for Identification and Prioritisation of Local Safety Schemes



$$*FYRR = \frac{forecast\ accident\ cost\ reduction\ in\ first\ year}{total\ cost\ of\ works} \times 100$$

Engineering measures are accompanied by an extensive programme of training for safer cycling and promotion of cycling and walking as healthy and sustainable modes of transport.

Pedestrian Crossings

Birmingham Connected's approach to roadspace allocation gives priority to the provision of appropriately designed and well-located crossings to encourage walking, cycling and public transport use. The location, type and detailed design of a pedestrian crossing is decided with regard to the Council's Policy for the Installation of Pedestrian Crossings[22], which has been developed in accordance with government guidance for pedestrian crossings and inclusive mobility for people with disabilities.

New or additional pedestrian crossing facilities are considered:

- After a direct request from local residents or community groups;
- Where a specific problem for pedestrians has been identified e.g. traffic accidents involving pedestrians, or difficulty in gaining access to shops; and
- As part of a new road or highway improvement scheme.

A key safety consideration is the crossing time allowed by traffic signal controlled crossings, The Council will ensure these are set in line with DfT guidance for inclusive mobility.

Type-approved signal controlled crossings now include puffin and toucan crossings, which have sensors to extend the crossing times if required.

The Council will continue with pedestrian training and education to ensure people know how to use the crossings safely.

Maintaining Safer Roads

The Council, working with its highways maintenance and management partner Amey, is responsible for almost two and half thousand kilometres of road. Areas of responsibility include: upkeep and repair of the roads; management of footways, bridges, street lighting and traffic signals; and upkeep of structures on the street such as safety barriers, seats and trees. Ensuring that streets are kept as clear as possible with the minimum of clutter is important, both for visual amenity and to improve road safety.

Key improvements since 2010 include:

- Improving the average condition of roads, carriageways and pavements;
- Replacing and upgrading around 41,000 street lighting columns – about half of all of those in the city – to more energy efficient equipment that can also be monitored and managed more effectively;
- Refurbishing the three main city centre road tunnels and installing modern safety equipment;
- Strengthening a number of bridges to expand the highway network that is capable of carrying 40 tonne vehicles; and
- Replacing a large number of traffic signal controllers to improve links to the city's traffic management systems.

Investment will continue, maintaining the standards reached by 2015, and replacing assets as necessary. A further 24,000 street lighting columns will be replaced by 2032.

As well as the investment works, Amey has an obligation to ensure that the highway infrastructure is functioning, safe and available for use and to submit an annual Network Integrity Report and Network Safety Improvement Assessment Report.

Safer Management of our Road Network

Safety Cameras

There is evidence that the deployment of a safety camera leads to an appreciable reduction in vehicle speeds, collisions and KSI casualties at the site of the camera[23].

In 2011, the funding provided by government to fund safety cameras was withdrawn. Safety camera operation was continued for a further two years using local contributions. In 2012 the Council, on behalf of the West Midlands Road Safety Partnership, commissioned a review to explore options for taking forward a digital safety camera operation across the West Midlands. It was resolved to support a pilot of digital fixed camera enforcement to augment the current mobile provision.

Vehicle Activated Speed Signs (VASS)

The Council has approximately fifty VASS on the road network. These are electronic signs which measure a vehicle's speed and provide drivers with a corresponding message; either the speed at which they are travelling or a reminder of the speed limit.

Research undertaken in Birmingham[24] indicates that VASS can have a positive impact in terms of reducing traffic speeds and have the most notable effect on drivers who travel significantly above the

speed limit. At the Birmingham locations studied, the percentage of drivers travelling above the enforcement speed level reduced by between three and 18 percentage points. Mobile VASS signs may be more effective than static signs, although moving these signs can incur a significant cost, so the benefits of such an approach may not always represent value for money.

While VASS can be successful in reducing vehicle speeds in certain circumstances, the signs need to be installed at locations where motorists understand the need to reduce their speed. Signs located on fairly straight sections of road, with no

Digital Safety Camera Pilot

Birmingham and Solihull Councils, working with the Police and the Police and Crime Commissioner, are conducting a pilot programme using digital speed camera technology.

Seven existing speed camera sites in Birmingham will be replaced or upgraded to digital cameras. A review of the operation will be undertaken after 21 months and the results of this will dictate whether the cameras are installed in the other West Midland districts.

The pilot sites and any new sites for digital speed cameras will be selected against the following criteria:

- Location is already a fixed safety camera site;
- History of road traffic collisions and casualties;
- High vehicle speeds, evidenced by speed surveys;
- Risk of 'high severity' collisions if traffic speed remains high;
- No acceptable engineering solution to reduce vehicle speeds and address road traffic collisions; and
- Road layout is suitable for enforcement cameras.

perceivable hazards, would appear to be less effective. There is also a danger that the overuse of VASS could also reduce their impact.

Freight Deliveries

Controlling freight delivery times to retail centres and the city centre, together with restricting the use of road space by certain vehicles can enhance road safety. The Council is working with Business Improvement Districts (BIDs) within Green Travel Districts (GTDs) to understand what changes to freight deliveries might be possible, using the principles of reroute, reduce, retime and remode.

Traffic Management - Speed Limits, including 20mph Speed Limits

As a highway authority, the Council is required to keep speed limits under review and can change local speed limits in certain circumstances.

The DfT has identified evidence that reducing traffic speeds reduces collisions and both the number and severity of casualties that result[25].

The Council is introducing a programme of 20mph speed limits on residential roads and in local centres to improve road safety and reduce the number of accidents. The scheme areas include approximately a fifth of the city area, comprising the entire city centre within the ring road, plus areas to the east and south of the city centre.

The reduction of speed limits is a key element in a wider package of measures including publicity campaigns and work with local communities to encourage driver compliance and to encourage walking and cycling for shorter journeys.

The 20mph limits will be required to be self-enforcing, relying on Traffic Regulation Orders, appropriate signage and strong community support.

The Police have recorded support for reduced speed limits in appropriate locations and expect that drivers will comply. However, the Council and the Police will work in partnership to monitor the schemes, and where there are persistent breaches of the speed limit, will consider involving the local community with Community Speed Watch.

The outcomes of the initial schemes will inform the case for the development of further 20mph limits elsewhere in the city.

The Council will continue to review speed limits across the city, in accordance with DfT guidance.

Traffic Management – Parking

Inappropriate on-street parking can impact driver and pedestrian safety by reducing visibility for road users and narrowing the road space.

The Birmingham Parking Policy[26] sets out the Council's position on parking management, including:

- A comprehensive approach to management and enforcement;

Parking Management

Across Birmingham, parking on 'school keep clear' zigzag markings is a problem. Unsafe and inappropriate parking at many of the city's schools has been raised by parents and school staff. The Council will continue to work with schools and civil enforcement officers to reduce the number of vehicles parked illegally and dangerously outside schools.

Indiscriminate parking around the city continues to be an issue and a contributory factor in a number of collisions. The introduction of parking schemes, from small sections of double yellow lines through to Controlled Parking Zones, will be considered, to address inconsiderate and illegal parking and to help improve road safety.

A review of Traffic Regulation Orders (TROs) and the enforcement regime is undertaken in problem areas and as part of schemes such as Safer Routes to Schools. Analysis of road safety collision data from before and after the implementation of TROs in these locations indicates a reduction in the number of collisions and improved safety.

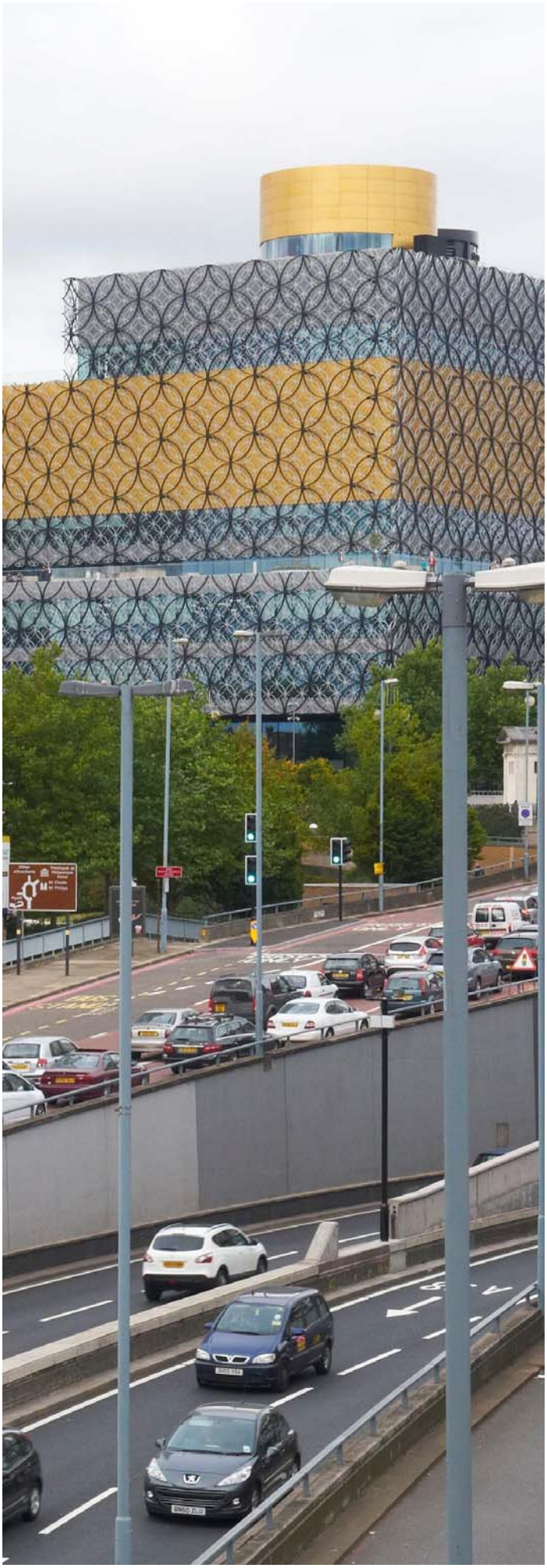
- An on-going review of Traffic Regulation Orders to remove inappropriate parking; and
- The use of Controlled Parking Zones and Resident Parking Schemes where there are wider problems.

Technology

Technology will continue to play a key role in making our roads safer in the future. Intelligent Transport Systems (ITS) offer opportunities to optimise urban mobility and achieve policy objectives, such as increased safety and lower congestion.

As part of a £26million West Midlands major scheme, traffic management technology across the city has been upgraded in recent years. In addition to this, the Council has been involved in a number of high profile European projects:

- **Opticities** – using ITS to automatically detect incidents from roadside counting equipment and reroute traffic around accident sites; and
- **OTN** – creating a new analysis tool to help provide deeper understanding of our road safety data and continue to improve our response to road safety issues.



03 Key Strategy Themes and Approach

Safer People

Everyone, whether they are travelling on the road or the footway, has a responsibility for their own safety and the safety of others. An important component of the Road Safety Strategy is to promote road safety and sustainable travel choices through targeted education, training and promotion; ultimately improving the behaviour of road users.

The interventions implemented by the Council are developed in light of the road safety data. This allows the approach to be targeted and focused at those vulnerable user groups identified in the analysis of accidents and casualty data and, where appropriate, towards certain geographical areas and communities in the city where there is a high propensity for involvement in road traffic accidents.

The Council will continue to work with public, private and other organisations to ensure that the public receive consistent and coherent messages on road safety, and that these messages are linked to other areas such as illegal and antisocial behaviour and health. Local partnerships involve working across local authority boundaries and with the Police and fire services as well as public health to support national and regional campaigns. More local partnerships and initiatives are very effective in delivering education and training tailored to the local context and specific local need.

Education, Training and Campaigns

Road safety education and sustainable travel promotion is focused around key vulnerable road user groups.

Children

Children are amongst the most vulnerable road users and conveying road safety messages to them is essential. Just over half of child pedestrian road deaths or serious injuries occur during what is typically classified as the school run or journeys undertaken in school hours[27]. The Council's programmes aim to provide children with the necessary life skills to cope with their environment. Road safety education and training is a lifelong learning process and does not simply begin or end at school; work with children also seeks to educate parents so they set a good example to their children and engender a road safety culture.

Primary School Education

Children from the most deprived backgrounds are five times more likely to be injured on the roads nationally compared with children from the most affluent backgrounds[28]. Among pedestrians in the five to nine years age group, the rate of fatal and serious injuries to children living in the 20% most deprived areas is nine times higher than to children in the 20% least deprived[29].

Pedestrian workshops based on the principles of Kerbcraft[30] have been developed. These include important practical training and are delivered in partnership with schools.

The Council currently provides School Crossing Patrols at key locations, although this is not a statutory duty. This service will continue to be reviewed to ensure limited resources are targeted to areas where the benefit will be greatest.

Secondary School Education

The transition between primary and secondary school is a significant factor in child pedestrian casualties as children often begin to walk to school unassisted and have to negotiate unfamiliar routes; age 12 is the peak for child pedestrian accidents[28]. The road safety education programme therefore includes focused training for

Independent Travel Training

Independent travel training teaches the skills for young people who need additional help or support to make journeys independently and safely. Being able to access public transport helps young people to make their own choices about how they live and what they want to achieve.

children moving from year six to year seven – the transition between primary and secondary school.

An initiative being progressed with the Council's Children and Family Services is the promotion of independent travel for young people with Special Educational Needs (SEN). An Open College Network independent travel qualification for SEN pupils has also been developed. Travel is an important life skill and training can improve pupils' confidence, increase awareness of personal and road safety, and introduce public transport, walking and cycling as modes of travel which can increase their independence.

16 to 24 year olds

More Birmingham residents aged 16-24 are road accident casualties than any other age group[19]. Nearly one in five newly qualified drivers experience some form of accident within their first six months of driving[31]. Male drivers, aged between 17 and 19 years, are involved in 30% more accidents than female drivers in the same age category[32]. Key reasons for this tend to relate to inexperience, overconfidence, speed, drink, drugs and peer pressure.

The Council will work with partners and third sector organisations on the development and delivery of pre-driver and young driver education programmes.

Adult Pedestrians

The majority of adult pedestrian accidents are caused by poor pedestrian behaviour; failing to look properly is the most frequently reported contributory factor allocated to pedestrians in accidents[33]. Pedestrians may also use crossing facilities incorrectly or choose to cross the road at a point which is masked by parked or stationary cars.

Programmes the Council has been engaged with include:

- Practical pedestrian training for parents, in collaboration with schools;
- Pictorial photobook for adults where English is not the first language;
- Steward scheme to train volunteers from places of worship to escort children to and from their place of worship in a safe and appropriate manner;
- Campaigns at supermarkets to remind people of safer behaviour on the roads, with a particular focus on older residents; and
- Community website MyNeighbourhood (MyN), which develops and strengthens links with community groups and residents in local neighbourhoods to raise road safety awareness in accordance with specific local need.

Cyclists

The areas of the city with the highest levels of cycle use (Edgbaston, Selly Oak and Hall Green) also experience the highest levels of cyclist casualties. The Council is actively promoting cycling through the Birmingham Cycle Revolution (BCR) and will continue to strive to develop an environment that encourages cycling, whilst providing measures which enhance safety.

A recent RoSPA YouGov[34] survey found that 39% of those surveyed said they would cycle more if

MyNeighbourhood

MyN (MyNeighbourhood) is an online tool, developed as part of a European project, which seeks to improve city living, restoring people's sense of belonging to their neighbourhood. MyN brings residents together to work in partnership, innovating and implementing local services based on real life and local need. The Council is using the MyN platform to enable a two-way dialogue with local people for the benefit of road safety and sustainable travel.

www.my-n.eu

Birmingham Cycle Revolution (BCR)

Birmingham Cycle Revolution is a 20 year strategy to enable cycling to become a mainstream form of transport across the city. BCR aims to create a deliverable city-wide strategic cycle route network, along radial corridors extending twenty minutes cycling time from the city centre. Promotion, education and training to ensure our cyclists are safe on the city's expanding cycle network are vital.

www.birmingham.gov.uk/bcr

the roads were safer.

Research by Rune Elvik[35] suggests that if large transfers of trips from motor vehicles to walking or cycling take place, the total number of accidents may be reduced. The 'safety in numbers' effect for pedestrians and cyclists would then combine favourably with the effect of a lower number of motor vehicles to produce a lower total number of accidents.

TRL research[36] supports this, concluding that there may be 'safety in numbers' and that the risk of an injury accident per cyclist can reduce when there are more people cycling overall.

BCR includes a range of education, training and promotion programmes where road safety forms a particular focus.

Cycle Training

In 2007, the Council adopted the National Standard for Cycle Training[37]; a scheme designed to give students the skills and confidence to ride their bikes. The Council has delivered the national cycle training programme, Bikeability, in primary and secondary schools since 2007. To date, over 10,000 students have been trained and a grant of £228,000 has been secured to train 5,720 students in 2015 - 2016.

The Council is now seeking to extend the Bikeability programme in schools to include additional activities and training for parents and teachers, through a concept called Bikeability Plus.

Big Birmingham Bikes (part of BCR) is providing free training to Bikeability level two to 3,000 individuals living in the most deprived areas of the city, as a prerequisite for going on to receive a free bike.

Bikeability

Analysis by the National Foundation for Educational Research (NFER)[38] shows that 93% of children who took part in Bikeability reported feeling more confident about riding their bike in general and 86% felt confident riding their bike on the road.

It confirmed that this confidence is sustained over a period of at least two months following training. But, without practice, the ability to put that knowledge into practice can decline over time.

In addition, the Council has delivered the successful Women on Wheels project, providing women only cycle training to encourage more women from Black and Minority Ethnic (BME) groups to cycle. Since July 2011, over 270 women have been trained, with research showing that many have continued cycling and a few have gone on to be trained as national standard instructors[39].

Organisations across the city are encouraged to become Top Cycle Locations. To achieve this status, they must participate in activities to promote more and safer cycling, including cycle training.

Motorcyclists

Despite an overall long term decrease in motorcycle casualties, there remains a significant and recently rising number of KSI casualties amongst motorcyclists on Birmingham's roads. 16% of KSI casualties in 2010 - 2014 were motorcyclists. Although Birmingham residents have a lower motorcycle casualty rate than the rest of the UK, Northfield district experiences a notably higher rate of casualties than the rest of Birmingham and the UK.

The Council will continue to work with partners to develop a programme of interventions targeted directly at motorcyclists and especially to help improve the skills of new riders.

Car Drivers, including young drivers

In-Car Safety

Seatbelts and child car seats are designed to reduce the severity of injury and the risk of being thrown from the vehicle in the event of a collision. Not wearing a seatbelt also makes airbags and head restraints less effective in reducing the risk of injury.

The incorrect use of child car seats is still a major problem, and the Council offers families the opportunity to have their child car seat checked at free clinics, and educational workshops are delivered at children's centres and community centres.

Driver Education

Young driver accident rates are highest for people living in Sutton Coldfield district. The Council will continue to work with private and third sector organisations in delivering driver education aimed at Year 11+ pupils.

This will be complemented with marketing materials focused on the behaviour of all road users, including materials targeted at young drivers.

Technology

There has been a significant increase in the use of telematics to improve driving behaviour. For example, a telematics-based product can be fixed to vehicles by insurance companies, to reward good driving through reduced insurance costs.

The Council will continue to monitor new technologies and, where appropriate, support partners in their development and use.

Exchanging Places

The Council is working with transport operators to organise Exchanging Places events, which raise awareness of the dangers that cyclists face when they travel in close proximity to large vehicles. Cyclists are able to sit in the cab of a HGV to experience the driver's view of the road and get a better understanding of the blind spots around the vehicle.

Freight Drivers and Operators

The number of accidents involving lorries is low: in Birmingham, collisions involving lorries result in less than 1% of KSI casualties. However, there is an increased likelihood of those involved in collisions with lorries being killed or seriously injured.

The EU Directive 2003/59[40], designed to improve the knowledge and skills of professional freight drivers, requires large goods vehicle and passenger carrying vehicle drivers to do 35 hours training every five years to maintain a certificate of professional competency. This training does not currently include anything specific on cyclist awareness, but the Council is committed to working with partners to encourage its inclusion within the programme. The Council will also continue to work with local haulage firms to provide regular events which promote cycle safety issues related to the freight and haulage industry.

The Council will promote the Freight Transport Association's Cycling Code[41] to local haulage firms. This aims to reduce the number of collisions between commercial vehicles and cyclists, and provides a toolkit for cyclists, drivers/operators, and employers.

The Council will also continue to monitor developments in technology and, where appropriate, support partners in their use.

Green Travel Districts and Travel Planning

Road safety is an important consideration in promoting sustainable travel. The Council and its partners undertake a wide range of initiatives focused on supporting healthier and more sustainable travel as well as promoting road safety. These include promotional activities to influence travel behaviour, the provision of improved infrastructure for walking and cycling, and working with partners such as Centro and rail and bus operators to increase public transport use.

Green Travel Districts

As set out in Birmingham Connected, Green Travel Districts (GTDs) are intended to be locations where people can choose from a range

of sustainable modes of transport that are viable, long term alternatives to the private car.

Initially, eleven locations have been selected as GTDs, including the city centre, a number of local centres and certain key employment and education centres. A range of measures will be used to reduce single occupancy car use, including:

- Innovative technology;
- More sustainable freight management; and
- Promotion of cycling, walking and public transport.

The aim will be to develop models of best practice for other locations in the city.

Travel Planning (Education and Workplace)

The Council works with major employers, universities, colleges and schools to promote safe and sustainable travel.

Workplace initiatives include:

- Journey planning;
- Discounted public transport tickets;
- Parking management; and
- Better on-site facilities e.g. cycle parking.

Support is also provided to companies that are required to produce travel plans as part of the planning process. The Council provides a guidance and monitoring role which helps individual establishments develop a comprehensive sustainable travel package.

The majority of Birmingham's schools now have travel plans in place and are provided with resources and information to review and keep these up to date. From 2015, schools will use the Modeshift STARS[42] travel plan and accreditation scheme. The Council, together with Centro, will provide support and assistance to schools to adopt this system, which includes road safety resources and campaign information.

Public Transport

Public transport is a very safe way to travel, with bus/minibus accounting for just 2% of all casualties and 1% of KSI casualties, despite a mode share of 18%.

By working with operators and Centro to improve public transport and encourage its use for more journeys, the Council will contribute to a reduction in the number and severity of casualties.

Active Travel Strategy

The Council is developing an Active Travel Strategy to encourage and promote more active and sustainable travel. It will complement the public health programmes being promoted to encourage healthier lifestyles and tackle obesity and Public Health will be a key stakeholder.

Safer Vehicles

The Council supports the Police and other agencies in ensuring that vehicles on our roads are safe and roadworthy. Enforcement is primarily carried out by the Police; however, the Council undertakes some enforcement, in particular through the Trading Standards service.

Vehicle design and technology both play important roles in ensuring the safety of road users, but this relies on appropriate use of systems such as seatbelts, child car seats and airbags.

Initiatives around safer vehicles are primarily nationally or even internationally (through EU membership and directives) led, but local authorities do have a supporting role. The Council's involvement in Eurocities and the EU Committee of the Regions is important to this work.

Enforcement and Compliance

Police Enforcement Action

Policing the Roads[43] is the Association of Chief Police Officers' five year strategy, which encourages an approach balancing enforcement with education and engineering. Its ambition is to create a shift in public attitude and behaviour to one of habitual compliance with the laws and conventions of the road, thus fulfilling the vision of a safe and secure environment for all road users.

In the West Midlands, key areas of traffic enforcement are:

- Speeding;
- Wearing of seatbelts;
- Drinking/drug-taking and driving;
- Use of mobile phones whilst driving;
- Uninsured and unlicensed driving; and
- Driving without due care and attention.

Speed Management Protocol

The Council is working with the Police and other local authorities to develop a Speed Management Protocol, setting out a consistent approach to speed management across Birmingham and the West Midlands.

This will include consideration of the speed thresholds at which enforcement and education activities are invoked, the enforcement of 20mph limits, and the Community Speed Watch initiative.

Community Speed Watch (CSW)

The Police undertake intelligence-led speed enforcement activity. However, it is acknowledged that public perceptions of speeding may not correspond with reality, and public expectation of where speed monitoring and enforcement should take place does not always match evidential data.

CSW is a joint initiative being developed by the Council and the Police, which enables community members to raise awareness of speed related issues and encourage drivers to travel at an appropriate speed. CSW also provides the opportunity for volunteers to positively influence and contribute to the education of drivers.

CSW allows volunteers to use equipment which displays the speed of a vehicle to the driver

(similar to a VASS). Volunteers can also choose to record details of a speeding vehicle and ask the Police to send a letter of advice to its registered keeper.

CSW is especially important to the success of 20mph speed limits.

Parking Enforcement

The enforcement of parking restrictions, by the Council and the Police, plays a key role in road safety. In addition to the deployment of Civil Enforcement Officers, the use of CCTV vehicles is considered to be an important and flexible approach to enforcement of parking restrictions, especially around schools.

Tackling Uninsured Drivers

Birmingham has one of the highest levels of uninsured driving in the UK: in 2012, the number of motorists without insurance in Bordesley was eight times higher than the national average[44]. There is also some evidence that road casualties are more likely than average to be associated with other criminal activity[3].

The Council will continue to work with the Police to reduce the number of uninsured and unlicensed drivers on Birmingham's roads. Opportunities to work with partners such as the Motor Insurance Bureau are also being explored, such as supporting their campaigns, including social media, to raise awareness about uninsured driving and the consequences associated with it.

Safer Vehicle Design and Technology

The Council will work collaboratively with the Driver and Vehicle Standards Agency (DVSA). The DVSA improves road safety by ensuring drivers, vehicle operators, and MOT garages understand and comply with roadworthiness standards. It also provides a range of vehicle licensing, testing, and enforcement services. Targeted checks on vehicles, drivers, and operators by the DVSA ensure compliance with road safety legislation.

Improving Vehicle Safety through Legislation

Trading Standards

The Birmingham Trading Standards team work to achieve regulatory compliance across a range of areas, including areas that influence road safety, particularly quality of car servicing, sales of dangerous vehicles or those with a false mileage reading and overloaded goods vehicles.

EU Legislation

Since 2009, European Community Whole Vehicle Type Approval[45] has been in operation. This is a mechanism for ensuring that vehicles meet

relevant environmental, safety and security standards by testing one representative production vehicle for each vehicle type, seeking to ensure consistent safety standards throughout Europe.

Vehicle Design and Technology

HGVs

While the number of collisions involving HGVs in Birmingham is reasonably low, the chance of a pedestrian, cyclist or motorist being killed or seriously injured is much higher when in collision a HGV, compared with collision with other vehicles.

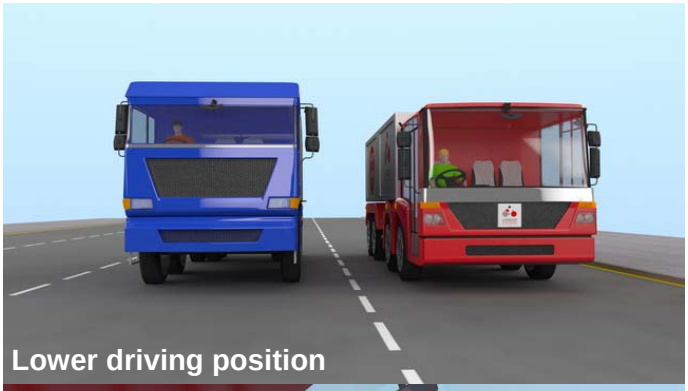
The London Cycling Campaign[46] has published pictures (right) and a video of its Safer Urban Lorry design, and is calling on the construction industry to adopt similar vehicle designs to reduce lorry-cyclist fatalities. The Safer Urban Lorry features a lower driving position and larger windows, so the driver has an improved visibility of the area around the vehicle. The Council will liaise with local haulage firms to encourage them to embrace emerging technology as well as promoting research in safer vehicle design.

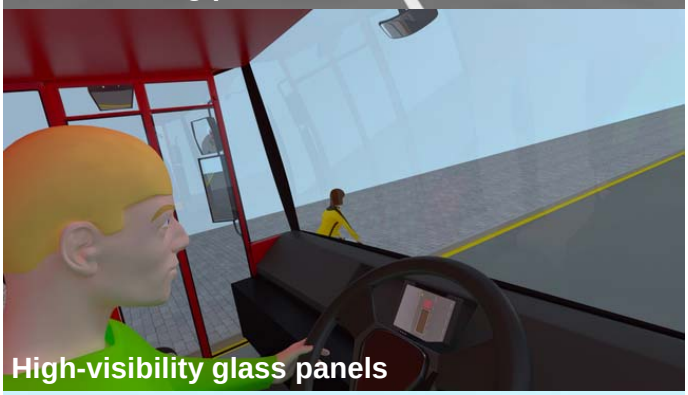
Research carried out by the Transport Research Laboratory[47] for the DfT indicates that the majority of cyclist and HGV collisions occur when vehicles are turning left at junctions.

There are a number of solutions being developed to address this, including motion activated sensors attached to a cyclist's helmet or bicycle which warn the HGV driver of the presence and position of the cyclist. Other technologies and products are in use and being developed and the Council will continue to monitor these and, where appropriate, support partners in product development and use.

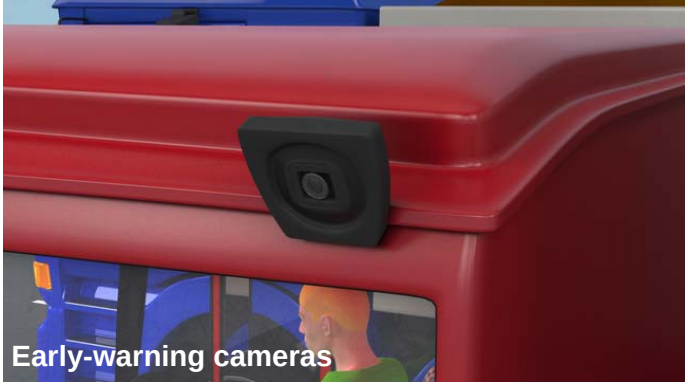
The Council is investigating becoming a Construction Logistics and Cyclist Safety (CLOCS)[48] champion and embedding a requirement to implement CLOCS into Council contracts, procurement and planning processes. The aim of CLOCS is to manage work-related road risk and ensure that a road safety culture is embedded across the industry to protect pedestrians, cyclists and motorcyclists. It can be a means of securing additional safety features such as wing mirrors and vehicle warning signs to ensure cyclists and drivers of larger vehicles (over 3.5 tonnes) are aware of each other.

In parallel, the Council is looking into becoming Fleet Operator Recognition Scheme (FORS)[49] accredited and embedding FORS standards in the Council fleet and waste management service. FORS is intended to set standards for fleet vehicles and includes a specific requirement to protect vulnerable road users.


Lower driving position


High-visibility glass panels

Lower bumper clearance and sideguards


Early-warning cameras


Cyclists
Beware of passing this vehicle on the inside

04 Action Plan

The action plan sets out a list of interventions and actions proposed to address road safety concerns and to address the road accidents and severity of accidents on Birmingham's highway and transportation network. It is intended that each of the actions will be monitored before and after implementation of the specific initiative and that the action plan will be reviewed and refreshed annually in light of the monitoring and as informed by accident and transport data and trends.

The action plan is constructed around the three key themes of the strategy, subdivided into more focussed target areas:

Safer Roads

- Safer planning and design
- Safer management of our road network

Safer People

- Education, training and campaigns
- Travel planning

Safer Vehicles

- Enforcement and compliance
- Safer vehicle design

Governance

Ref	Actions	Outcome	Target area	Programme	2015	2016	2017	2018	2019
BRSP	Set up a new Birmingham Road Safety Partnership, led by the councillor responsible for road safety with membership from the emergency services, road safety organisations and Highways England to co-ordinate and oversee road safety activities across the city.	Birmingham Road Safety Partnership set up and operational.	Birmingham wide.	2015 onwards	●	●	●	●	●

Safer Roads: safer planning and design

Ref	Actions	Outcomes/ measures of success	Target area	Programme	2015	2016	2017	2018	2019
SR1	Continue to use an evidence-based prioritisation process to determine how Local Safety Scheme funding is used. FYRR should be greater than 100%.	Delivery of Local Safety Schemes.	Birmingham wide.	Annual	●	●	●	●	●
SR2	Continue to work with schools to identify and deliver Safer Routes to School schemes.	Improved perception of safety. Increased number of children walking and cycling to school. Reduced number and severity of accidents involving children.	Birmingham wide.	Annual	●	●	●	●	●
SR3	Plan, design and deliver Birmingham Cycle Revolution (BCR) to enhance cycle safety. Implement associated cycle training to encourage safer cycling and promote safe use of cycle infrastructure.	95km improvements to existing routes, 115km new cycle routes. Reduced number of accidents and severity of casualties involving cyclists.	Area within 20 minute cycling time of city centre and a number of routes on selected main corridors.	2015 - 2019	●	●	●	●	●
SR4	Continue to develop, design and deliver type-approved pedestrian crossings.	Reduced number and severity of accidents involving pedestrians.	Birmingham wide.	Annual	●	●	●	●	●
SR5	Continue to use measures to reduce traffic speeds, such as Vehicle Activated Speed Signs (VASS) and local 20mph limits.	Reduced number and severity of accidents with speed as a contributory factor.	Birmingham wide.	Annual	●	●	●	●	●

Safer Roads: safer management of our road network

Ref	Actions	Outcomes/ measures of success	Target area	Programme	2015	2016	2017	2018	2019
SR6	Implementation of 20mph speed limit areas.	Reduced traffic speed within the 20mph speed limit areas. Reduced number of accidents within the 20mph speed limit areas. Reduced number of KSI casualties within the 20mph speed limit areas.	Central Birmingham Area, Central East Birmingham Area, Central South Birmingham Area and other key locations (e.g outside schools).	2015 - 2019	●	●	●	●	●
SR7	Implement Digital Safety Camera trial in partnership with Solihull MBC and the Police.	Reduced number and severity of accidents with speed as a contributory factor.	Locations informed by speeding and accident data.	2015-2017	●	●	●	○	○
SR8	Develop Intelligent Transport System (ITS) Strategy, including appropriate ITS technology for the safer management of the road network.	Adopted ITS strategy.	Birmingham wide.	2016	○	●	○	○	○
SR9	Monitor new products and technologies for safer management of the road network and, where appropriate, support partners in their development and use. Continue active involvement in Opticities and OTN projects.	Council aware of new technologies. Completion of Opticities and OTN.	Birmingham wide.	Ongoing	●	●	●	●	●

Safer Roads: safer management of our road network

Ref	Actions	Outcomes/ measures of success	Target area	Programme	2015	2016	2017	2018	2019
SR10	Work with schools and Parking Enforcement to reduce the number of vehicles parked illegally outside schools through the deployment of Civil Enforcement Officers and CCTV mobile enforcement vehicle.	Reduced incidence of illegal parking outside schools.	Birmingham wide.	Ongoing	●	●	●	●	●
SR11	Continue to work with partners on new approaches to freight deliveries.	New approaches to deliveries trialled.	Birmingham wide.	Ongoing	●	●	●	●	●

Safer People: education, training and campaigns

Ref	Actions	Outcomes/ measures of success	Target area	Programme	2015	2016	2017	2018	2019
SP1	Deliver pedestrian training to 4,000 school students each year.	Improved student knowledge of good pedestrian behaviour, safer road crossing and understanding and recognising hazards. Reduced number and severity of accidents involving child pedestrians.	Birmingham wide.	Annual	●	●	●	●	●
SP2	Deliver Independent Travel Training (ITT) to SEN pupils aged 14+. Work with Children and Family Services to deliver ITT qualification to SEN pupils attending mainstream schools.	Increased number of pupils attaining the ITT qualification. Increased number of those SEN children travelling to school, using walking, cycling and public transport.	Birmingham wide.	Annual	●	●	●	●	●
SP3	Deliver Bikeability training to at least 4,000 students per year, aged between 9 and 13 years old.	Target numbers of children trained. Improved confidence and cycling ability of students. Reduced number and severity of accidents involving child cyclists.	Birmingham wide.	2015 onwards	●	●	●	●	●
SP4	Deliver Bikeability Plus training for students, parents and teachers.	Target number of people trained. Improved awareness of safer cycling practice and proficiency. Reduced number and severity of accidents involving cyclists.	Birmingham wide.	Ongoing	●	●	●	●	●
SP5	Continue to deliver Women on Wheels cycle training for BME communities.	Increased number of women receiving training. Improved confidence and cycling ability of participants. Improved awareness of safer cycling practice and proficiency.	Erdington, Hodge Hill, Hall Green, Ladywood.	2015-2017	●	●	●	○	○

Safer People: education, training and campaigns

Ref	Actions	Outcomes/ measures of success	Target area	Programme	2015	2016	2017	2018	2019
SP6	Implement educational programmes to support engineering measures introduced through Local Safety Schemes and Safer Routes to Schools.	Increased awareness of safe use of new infrastructure.	Communities affected by schemes.	Annual	●	●	●	●	●
SP7	Work with partners and local communities where there are high levels of KSI accidents, to address specific local road safety issues. Develop and deliver appropriate information/training programmes. Develop the 'MyN' website to disseminate and gather road safety messages to and from local communities: facilitated by the Council but managed day to day by community volunteers.	Increased awareness of travel behaviours and local road safety issues within the target communities. Reduced number and severity of accidents within the target communities.	Birmingham wide, focussing on specific communities.	2015 onwards	●	●	●	●	●
SP8	Deliver hands-on training and road safety workshops in newly arrived community groups.	Improved awareness of road safety hazards and improved behaviours, particularly as motorists and pedestrians.	Newly arrived communities.	Ongoing	●	●	●	●	●
SP9	Work with partners to deliver driver education, focussing specifically on: (i) learners and novices, often engaged in school or further education. (ii) post-education adults who drive as a routine part of life.	Reduced number and severity of accidents involving key target groups.	Birmingham wide.	Annual	●	●	●	●	●

Safer People: education, training and campaigns

Ref	Actions	Outcomes/ measures of success	Target area	Programme	2015	2016	2017	2018	2019
SP10	Work with partners to deliver driver seatbelt clinics aimed at communities where non-compliance is shown to be an issue.	Reduced non-compliance with seatbelt laws.	Birmingham wide.	Annual	●	●	●	●	●
SP11	Work with partners to develop and deliver a targeted programme for motorcyclists.	Reduced number and severity of accidents and involving motorcycles.	Birmingham wide but with evidence based local focus.	Annual	●	●	●	●	●
SP12	Work with partners to deliver Exchanging Places HGV and cyclist awareness sessions to groups such as schools, cyclists, employers and freight operators. Explore extending awareness sessions to bus operators.	Reduced number and severity of accidents involving cyclists and HGVs.	Birmingham wide.	2015-2017	●	●	●	○	○
SP13	Support and promote national and regional road safety campaigns. Develop and maintain links with other sectors/organisations to deliver further awareness campaigns and training.	Effective support for the themed campaigns. Improved awareness of road safety issues within target groups.	Birmingham wide.	Ongoing	●	●	●	●	●
SP14	Work with partners to develop and utilise digital media to promote road safety including social media and mobile phone apps.	Increased road safety awareness as a result of digital and social media.	Birmingham wide.	2015 onwards	●	●	●	●	●
SP15	Use web based toolkit E-valu-it to evaluate road safety education, training and publicity initiatives.	Use of E-valu-it for road safety education, training, and promotion activities.	Birmingham wide.	2015 onwards	●	●	●	●	●

Safer People: travel planning

Ref	Actions	Outcomes/ measures of success	Target area	Programme	2015	2016	2017	2018	2019
SP16	Promote sustainable travel, and safer cycling and walking in schools using Modeshift STARS and travel planning.	All Birmingham schools signed up to Modeshift STARS by 2017.	Birmingham wide.	2015 onwards	●	●	●	●	●
SP17	Review and prioritise sites covered by School Crossing Patrols. Consider where alternative arrangements may be appropriate.	Review process completed.	Birmingham wide.	2015	●	○	○	○	○
SP18	Promote sustainable travel and road safety messages in workplaces using workplace travel plans and travel plan co-ordinators.	Increased number of people cycling, walking and using public transport for travel to work.	Birmingham wide.	Ongoing	●	●	●	●	●

Safer Vehicles: enforcement and compliance

Ref	Actions	Outcomes/ measures of success	Target area	Programme	2015	2016	2017	2018	2019
SV1	Support the Police and the Motor Insurance Bureau to promote awareness, deliver campaigns and take enforcement actions targeting uninsured drivers.	Reduced number of uninsured drivers.	Birmingham wide.	2015-2017	●	●	●	○	○
SV2	Develop and agree Speed Management Protocol with the Police and other Local Authorities (to include the use of Community Speed Watch). Work with the Police to investigate lowering the thresholds at which drivers exceeding the speed limit receive warning letters.	Adopted Speed Management Protocol.	Birmingham wide.	2015	●	○	○	○	○
SV3	Continue Community Speed Watch (CWS) campaign. Work with the Police to produce a city-wide toolkit for volunteer-led awareness of speeding issues.	Short term: increased awareness of CSW and the role and purpose of 20mph limits. Long term: change in public attitude to speeding, reduction in vehicles exceeding legal speed limits.	20mph limit pilot areas with the potential to roll out Birmingham wide.	2015-2016	●	●	○	○	○
SV4	Support the Police work to improve compliance with road traffic legislation.	Reduced number and severity of accidents.	Birmingham wide.	Annual	●	●	●	●	●

Safer Vehicles: safer vehicle design

Ref	Actions	Outcomes/ measures of success	Target area	Programme	2015	2016	2017	2018	2019
SV5	Investigate becoming a Construction Logistics and Cyclist Safety (CLOCS) champion and embedding a requirement to implement CLOCS into Council contracts, procurement and planning requirements. Investigate becoming Fleet Operator Recognition Scheme (FORS) accredited and embedding FORS standards in the Council fleet and waste management service.	Membership of CLOCS or alternative vehicle safety measures adopted. FORS accreditation achieved and raised standards of service and vehicles.	Birmingham wide.	2015-2017	●	●	●	○	○
SV6	Review London's Safer Urban Lorry Scheme and work with partners to support further and complementary research and development in safer vehicle design.	Promotion to the local haulage industry of safer urban lorry schemes and proven technologies for cycle safety on vehicles.	Birmingham wide.	2015-2017	●	●	●	○	○
SV7	Promote the use of new technology to support road safety, for example cycle safety systems such as cycle sensor/ cycle alert system, to local haulage firms through ITS strategy and improved in-vehicle systems.	Promotion of new technology to relevant audiences.	Birmingham wide.	2015 onwards	●	●	●	●	●

05 Delivery Framework

The Council will take a lead role by embedding a road safety culture within all its activities and programmes, but successful and effective delivery of the activities identified within this strategy will require close working and co-operation with a number of partner organisations including the emergency services, neighbouring local authorities, schools and the local community.

A Birmingham Road Safety Partnership will provide a co-ordinating role, overseeing many of the Council's activities and will seek to influence partner organisations and community initiatives. At the same time, it will seek to ensure that any activities of organisations which could have a potential impact on local road safety or behaviour change are done in ways that support the vision of this strategy.

The availability of funding and resources will be fundamental to achieving the strategic outcomes. The Council will maximise the available funding for delivery of the action plan through efficient and effective use of Council controlled finances.

Investment by partner organisations and the resources of the wider community will be equally important. The Local Sustainable Transport Fund and Bikeability grants have provided vital boosts to road safety activities in recent years and the Council will continue to seek opportunities to attract further funding, for example, from Government and European sources.

Delivering road safety in partnership

Road safety must not be viewed in isolation from wider policy agendas. Although it is a statutory duty for local authorities, successful delivery is reliant on a number of partners coming together. The Council works with a range of authorities and organisations with different powers, roles and responsibilities in order to address road safety issues.

Local authorities, the Police and the Fire Service, work together to deliver the road safety agenda. In order to meet the Council's statutory obligations it has also been necessary to develop much closer collaborative approaches with neighbouring authorities and third and private sector organisations, to develop campaigns and initiatives.

Local partnerships already play a critical role in delivering road safety education, with the most successful initiatives being those that are developed and delivered with, and welcomed by, the community.

Figure 12 shows the governance and partnership working that will deliver this strategy successfully.

Funding

Road safety activities across the city are funded in a variety of ways. The Council receives government funding for local transport and some of this is specifically allocated for road safety activities. Additionally, all of the Council's highway and transportation activities have road safety as a key consideration.

The Council has been successful in securing funding through programmes such as the Local Sustainable Transport Fund (LSTF) for projects such as Bike North Birmingham and Smart Network, Smarter Choices (Centro led LSTF programme). These projects are delivering safer cycle and pedestrian infrastructure, with associated training and promotional support, to communities, educational establishments and employers. Opportunities to expand and extend these programmes, where they can add value to existing investment and support road safety and

sustainable travel objectives, will be sought.

Birmingham Cycle Revolution has attracted significant government and local investment and is encouraging more people to cycle in Birmingham by delivering enhanced cycling infrastructure, promotion and training.

The government also currently provides a grant for its cycle training programme, Bikeability.

Opportunities to work with other services across the Council, such as the Children and Families Service and Public Health, to deliver mutually beneficial transport and road safety activities will be secured as opportunities arise.

The Council will also utilise developer contributions secured through the planning consent process (known as Section 106 and Section 278/Section 38 agreements), as appropriate, to improve road safety.

Funding bids will continue to be submitted to government and EU funds and other organisations for specific projects and initiatives.

Clearly, delivery of the strategy and the desired road safety benefits are dependent upon funding from a range of sources. The Council will seek to deliver the actions identified in this strategy in the most effective and efficient way possible, including working with partners from the third and private sectors to ensure maximum road safety benefits for the funding available.

Monitoring and Evaluation

The overall aim of any road safety intervention is to bring about safe road user behaviour, reduce the number of road traffic collisions and reduce the number and severity of resulting casualties. Monitoring the impact and outcomes of interventions is essential to ensure progress and value for money. The action plan identifies the individual outcomes of each action: these will need to be monitored individually and as part of an overall road safety programme.

The Council has already begun to trial the web based toolkit E-valu-it to evaluate some road safety education, training and publicity initiatives implemented across the city, measuring their effectiveness and value for money. E-valu-it is an excellent tool for open and in-depth assessment of the measures being used and provides opportunities for the Council, working in partnership with others, to adapt and change road safety programmes and projects in the light of rigorous assessment. Use of E-valu-it to assess more interventions during the life of this strategy

Figure 12: Overview of delivery Road Safety Strategy with our partners

will provide valuable evidence to further improve practices.

Each road safety infrastructure scheme is monitored for accidents before and after measures are implemented, to provide a full picture of the impact of the change.

The Police conduct vehicle speed monitoring where road safety cameras have been deployed as part of the mitigation measures. Some of the Vehicle Activated Speed Signs deployed by the Council also record vehicle speeds, and Community Speed Watch Volunteers may create records of vehicle speeds, all of which can contribute to the monitoring of schemes.

The context for the monitoring of the strategy is provided through national, regional and local policies and frameworks, as set out below.

National Framework

The DfT's Strategic Framework for Road Safety[4] states that the government will not set a target or definitive forecast for road safety and that local authorities are able to set out their own road safety priorities, taking account of local circumstances and needs. The Framework identifies key indicators within an outcomes framework to assist with monitoring at both a national and local level.

While the Framework notes that accurately predicting future levels of road deaths and injuries is not straightforward, it uses modelling undertaken by the Transport Research Laboratory[50] to make estimated projections based on past rates and trends, the expected effect of current measures and projections of traffic growth.

The Framework contains forecasts of expected casualty reductions at a national level based on the 2005 - 2009 average.

Regional Forecasts

The West Midlands Local Transport Plan[7] has set a road safety performance aim for the West Midlands metropolitan districts, which is to reduce the annual figure of KSI casualties by 17.3% between the baseline 2005 - 2009 average and the 2011 - 2015 average.

Local Forecasts

The forecasts for reducing the number of people killed or seriously injured in Birmingham up to 2020 are shown in Figure 13. Three forecast scenarios are presented:

- Central projection: 40% reduction in KSIs by 2020 from 2005 - 2009 average;
- Low projection: 50% reduction in KSIs by 2020 from 2005 - 2009 average; and
- Trend: based on data from 2005 - 2009 to 2010 to 2015.

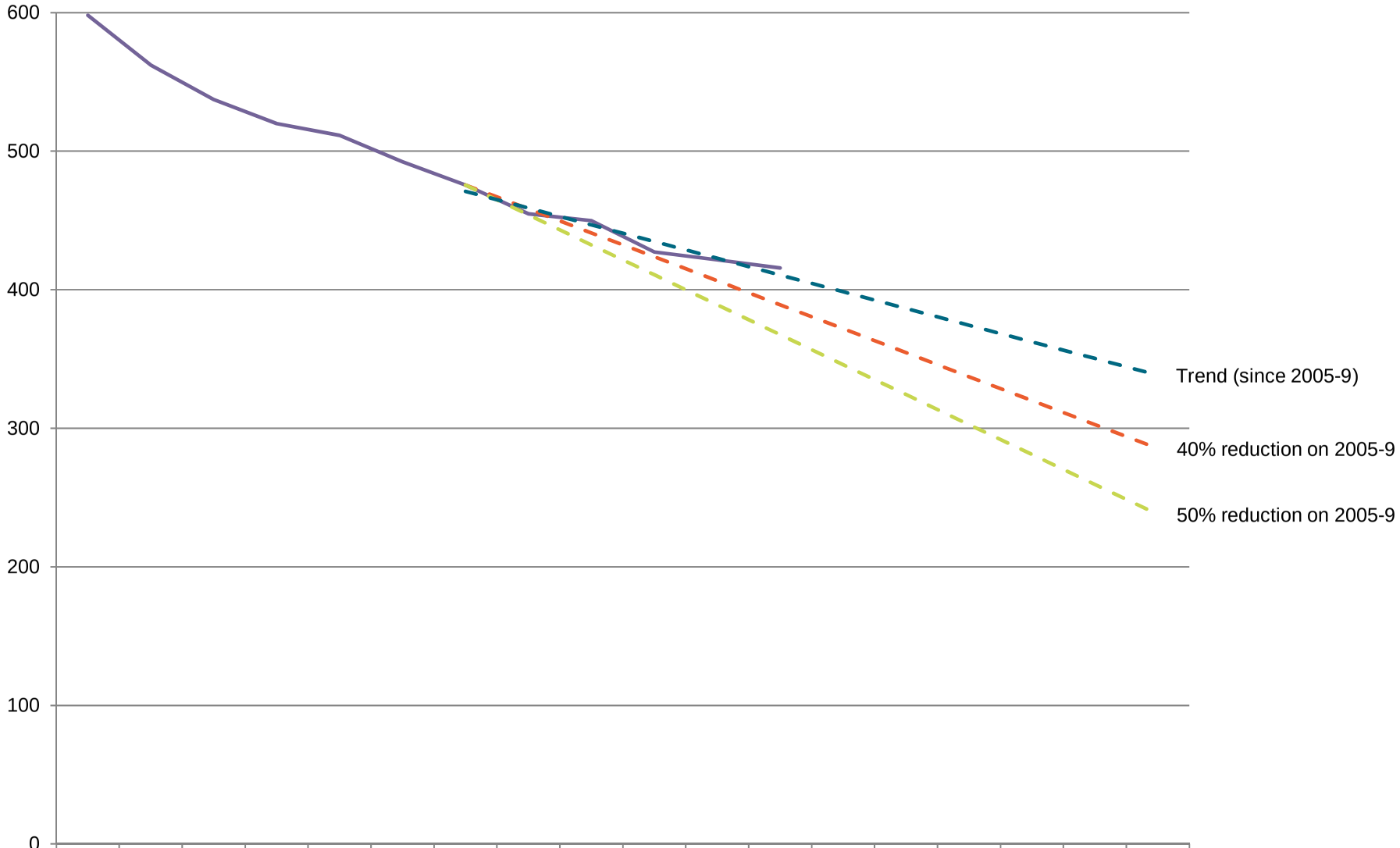
Having different forecast scenarios provides parameters which allow flexibility for the numerous factors and social conditions influencing the collision rate, while still maintaining a focus on a downward trend.

Taking all of the above into account, the Council believes it is reasonable to forecast a 40% reduction in KSI casualties by 2020, and will work closely with partners and communities to reduce KSIs to this level. This will largely be underpinned by refocusing on certain key areas and vulnerable user groups to make the best use of available resources.

The Transport Research Laboratory modelling[50] suggests that improvements in in-car secondary safety such as the vehicle body shell, seatbelt and pedestrian protection measures have the most significant impact on national casualty levels. Road safety engineering projects, enforcement and education, in particular the reduction of vehicle speeds in urban areas have also been effective and resulted in reduced pedestrian casualties. The research suggests that sustaining this progress will be more challenging and that some measures undertaken to date may lose effectiveness in future and so any forecast could be optimistic and challenging.

The Council will continue to review data on an annual basis and forecasts for KSI casualty reduction will be reconsidered in 2020, when new forecasts will be established.

Figure 13 – KSI Forecast Scenarios for Birmingham up to 2020



	1999-2003	2000-2004	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016	2013-2017	2014-2018	2015-2019	2016-2020
Actual	598	562	537	520	511	492	476	455	450	427	422	416						
40% reduction on 2005-9							476	458	441	424	406	389	372	355	337	320	303	285
50% reduction on 2005-9							476	454	432	411	389	368	346	324	303	281	259	238
Trend (since 2005-9)							471	459	447	435	423	411	399	386	374	362	350	338

Glossary

Term	Acronym	Definition/Explanation
Be Heard		Website for Council public consultations (www.birminghambeheard.org.uk)
Bike North Birmingham		Project to promote cycling in Sutton Coldfield and Erdington. This was funded by the DfT Local Sustainable Transport Fund and run by the Council between 2011 and 2015. It is now led by the community.
Bikeability		The national programme for cycle training in England, Wales, and Scotland. Similar to the old 'Cycling Proficiency'.
Bikeability Plus		A pilot to enhance the Bikeability cycle training programme. Bikeability Plus is a suite of additional cycling activities and extra training based around the core Bikeability course
Birmingham Connected		A 20 year transport strategy for Birmingham launched in the Birmingham Connected White Paper in November 2014.
Birmingham Cycle Revolution		A Council project to make cycling an everyday way to travel in Birmingham over the next 20 years through infrastructure investment and cycling promotion.
Black and Minority Ethnic	BME	The term normally used in the UK to describe people of non-white descent.
Centro		Centro are responsible for delivery of public transport in the West Midlands. They manage the Travel Concessionary Scheme, and bus stations and Travel Information Centres across the seven metropolitan councils of the West Midlands.
Community Speed Watch	CSW	A scheme to help people reduce speeding traffic though their community. The scheme enables volunteers to work within their community and with the Police to raise awareness of the dangers of speeding and to help control the problem locally.
Contributory Factor	CF	The key actions and failures that led directly to the actual impact in a road accident, as reported by a police officer attending the scene. Recorded in STATS 19. CFs reflect the officer's opinion at the time of reporting and are not necessarily the result of extensive investigation.
Construction Logistics and Cyclist Safety	CLOCS	A scheme bringing together the construction logistics industry to manage work related road risk and ensure a road safety culture is embedded across the industry. Aiming to protect pedestrians, cyclists, motorcyclists and other road users who share the roads with construction vehicles.
Department for Transport	DfT	The government department responsible for the English transport network and a limited number of transport matters in Scotland, Wales and Northern Ireland. The department is run by the Secretary of State for Transport.
Driver and Vehicle Standards Agency	DVSA	An executive agency, sponsored by the Department for Transport, responsible for setting standards for driving and motorcycling, and making sure drivers, vehicle operators and MOT garages follow roadworthiness standards. They also provide a range of licensing, testing, education and enforcement services.
Eurocities		A network of major European cities. Enables knowledge sharingto respond to common issues that affect the day-to-day lives of Europeans.

Term	Acronym	Definition/Explanation
E-valu-it		A website toolkit, funded by the DfT and designed by RoSPA, for evaluating road safety education training, and publicity interventions.
Exchanging Places		A partnership between the Police and the Council to raise awareness of cycle safety around Heavy Goods Vehicles.
Experian Mosaic		A consumer classification dataset designed to help understand the demographics, lifestyles, preferences and behaviours of the UK adult population in detail.
Fatal (causalty)		Injury resulting in the death of a casualty within 30 days of the collision.
First Year Rate of Return	FYRR	A method of cost benefit analysis.
Fleet Operator Recognition Scheme	FORS	A voluntary accreditation scheme open to any company operating a fleet including vans, lorries, minibuses and coaches. Assessing standards based upon lawfulness, safety, efficiency, and environmental protection.
Freight		Goods transported in bulk by truck, train, ship, or aircraft.
GlassBox		A Council objective analysis and decision making process for Local Safety Schemes.
Green Travel Districts	GTDs	Areas of high economic, social and civic activity where, because of the high volume of inbound and outbound trips, infrastructure and other interventions are most likely to achieve modal shift away from the private car. Part of Birmingham Connected.
Heavy Goods Vehicle	HGV	A vehicle over 3.5 tonnes in weight (also see Lorry).
Highways England		The new government company (formerly Highways Agency) charged with management of motorways and major A roads. Responsibilities include modernising and maintaining the highways, as well as running the network and keeping traffic moving.
Intelligent Transport System	ITS	Advanced applications which aim to provide innovative services relating to different modes of transport and traffic management and enable various users to be better informed and make safer, more coordinated, and 'smarter' use of transport networks.
Kerbcraft		A DfT pedestrian training scheme.
Killed and Seriously Injured	KSI	Casualties are categorised by severity as Fatal, Serious, or Slight. When reporting on road safety data, the fatal and serious categories are often combined to highlight the collisions or casualties with the greatest human cost.
Lorry		A vehicle over 3.5 tonnes in weight (also see HGV) .
MAST		A road safety data analysis tool providing national collision data and insights into the people involved in collisions.
Modeshift STARS		A national schools accreditation scheme to recognise schools' actions to support safe and sustainable travel. The scheme also acts as an online mechanism to support and maintain school travel plans.
Motor Ordinance Test	MOT	A compulsory annual test for safety and exhaust emissions of motor vehicles of more than a specified age.

Glossary

Term	Acronym	Definition/Explanation
Open College Network		A nationally recognised awarding organisation.
Opticities		A European project using Intelligent Transport Systems to automatically detect incidents from roadside counting equipment and reroute traffic around accidents sites.
OpenTransportNet	OTN	European project bringing together open geo-spatial data within City Data Hubs and enabling it to be viewed in new easy to understand ways. The Birmingham pilot will enable access data about accidents and traffic.
Puffin Crossing		A pedestrian user friendly intelligent crossing (puffin crossing) is a type of pedestrian crossing. The lights controlling the pedestrians are on the near side of the road. The system utilises sensors which detect the presence of pedestrians waiting at the crossing, and as they are crossing the road.
The Royal Society for the Prevention of Accidents	RoSPA	A registered charity at the heart of accident prevention in the UK and around the world for almost 100 years. They promote safety and the prevention of accidents at work, at leisure, on the road, in the home and through safety education.
Safe System Approach		An approach championed by the United Nations and the World Health Organisation which aims to develop a road transport system that is better able to accommodate human error and take into consideration the vulnerability of the human body. It accepts human error and that collisions are unavoidable and therefore aims to ensure that accidents do not result in serious human injury.
Safer Routes to School	SRTS	A Council programme to improve the safety of the highway around schools and the quality of cycling and walking routes to schools.
School Crossing Patrols	SCP	Assistance provided to children when crossing certain roads on the way to school. School Crossing Wardens are commonly known as “lollipop people”.
Special Educational Needs	SEN	Referring to children who have learning difficulties or disabilities that make it harder for them to learn than most children of the same age.
Serious (casualty)		Injury including fracture, internal injury, concussion, severe shock, severe cuts, detention in hospital.
Slight (casualty)		Injury including sprains, whiplash, bruises, slight cuts.
STATS 19		The STATS19 database is a collection of all road traffic accidents that resulted in a personal injury and were reported to the police within 30 days of the accident.
Top Cycle Locations	TCL	Top Cycle Location status is awarded to Birmingham workplaces in recognition of their dedication to making it easier for staff to travel to work by bike.
Toucan Crossing		A type of pedestrian crossing that also allows bicycles to be ridden across. Since *two–can*, both pedestrians and cyclists, cross together, the name "*toucan*" was chosen.
Traffic Regulation Order	TRO	Used by highway authorities to place temporary, experimental or permanent restrictions on traffic within their areas.

Term	Acronym	Definition/Explanation
Travel Plans		Documents which evaluate the travel situation in a workplace or education site, and draw out actions to improve travel to the site, with a particular emphasis on safe and sustainable travel.
Vehicle Activated Speed Signs	VASS	A type of road traffic sign which displays a message conditional upon the presence, or speed, of a road vehicle.
YouGov		An international internet-based market research firm, headquartered in the UK.
Independent Travel Training	ITT	Independent travel training teaches the skills for young people who need additional help or support to make journeys independently and safely.
My Neighbourhood	MyN	An online tool, developed as part of a European project, which seeks to improve city living, restoring people's sense of belonging to their neighbourhood by encouraging interaction between neighbours, local

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www.birmingham.gov.uk/connected