Local Transport Plan

Gloucestershire's Local Transport Plan 2020 - 2041

A resilient transport network that enables sustainable economic growth by providing travel choices for all, making Gloucestershire a better place to live, work and visit.





Local Transport Plan (2020-2041)

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Chapter 1

Introduction



1. Introduction

1.1. A New Local Transport Plan to 2041

- **1.1.1** Welcome to the Local Transport Plan (LTP). This LTP is an update and sets out the transport strategy for Gloucestershire for 2020-2041, reviewed to reflect national policy updates and local priorities in the face of change.
- **1.1.2** We are living in a time of unprecedented change in terms of population growth, housing demand, and technological advancement. At the same time, there are key challenges including the urgency of reducing CO2 emissions to combat climate change and the need for a more inclusive trans port system. These issues demand a decisive response to how transport is planned and organised, enabling the way we travel to change profoundly within the LTP delivery period.
- 1.1.3 Geographically, Gloucestershire is at a cross roads. It connects via strategic rail and road networks to major cities, such as Birmingham, Bristol, Cardiff and London. The LTP is structured around a transport picture of Gloucestershire based on a patchwork of distinctive travel corridors. These spatial areas are termed the 'Connecting Places Strategy' areas. However, Gloucestershire is also a gateway to its own valued landscapes, distinctive towns and vibrant local economies that must be safeguarded as a destination. Gloucestershire's iconic landscapes, natural environment, heritage and culture all play a major role by attracting business and staff into the county demonstrating that it is a popular place to live and work.

- 1.1.4 Transport, and the decisions all of us make about how and why we travel, is key to reducing our CO2 impact. Gloucestershire recognises the urgency of this issue; the County Council declared a 'climate emergency' in 2019. In the light of this the LTP has developed new policy areas and strengthened its target to reduce per capita transport carbon emissions. This LTP review has considered how to move towards a more sustainable transport delivery model and seeks to optimise the existing transport network to full capacity, while recognising that we cannot build our way out of projected traffic growth.
- 1.1.5 As we move towards 2041, people will seek more responsive and less environmentally damaging modes of transport. The LTP is instrumental in enabling Gloucestershire to offer real transport choice and the innovations behind it. It will help build out the evidence base so that we can understand how transport impacts can be mitigated. It will lock 'futures thinking' into our decision-making by updating the LTP in line with the 2050 Vision, the Gfirst LEP Local Industrial Strategy, Gloucestershire's Climate Change Strategy and the carbon agenda. It will encourage the resourcing of smarter choices and transport mode shift by building on changing attitudes and opportunities for transport in Gloucestershire. To enable this we need to; support open source data, innovation and low carbon infrastructure. We need to invest in transformative new public transport infrastructure, multi-modal interchange, attractive cycle links and encourage active travel. All of this will need a better integration of strategic land use, infrastructure and transport planning.
- **1.1.6** Since the revised draft LTP was published for consultation in early 2020, the Covid-19 pandemic and subsequent lock down has, and still is, dramatically and profoundly changing the world we live in and with it the way we travel. At the time of finalising this LTP, the long term implication of these changes on how we organise and plantransport are still largely unknown. The many challenges and considerations to be made are outlined in the "Our Vision to 2041" chapter.



1.2. Document Structure

- 1.2.1 Gloucestershire Local Transport Plan sets the strategic transport vision for the county to 2041. The plan sets out the overarching and mode policies that support the spatial Connecting Places Strategies (CPS) and the Transport Scenarios, looking to 2041. The Delivery chapter provides the LTP scheme priorities and targets to deliver the expected outcomes. The LTP Summary Evidence Base provides further context to support LTP policy.
- 1.2.2 The spatial element of the LTP is structured around a number of travel corridors, each of which has distinctive transport issues and opportunities set out in six spatial strategies entitled Connecting Places Strategy. A 'Link and Place' approach was applied with the aim to identify travel focused strategy areas based on connections, moving away from a district based perspective (Annex 3.0).
- 1.2.3 Each CPS area lists its scheme priorities. These LTP schemes represent the transport priorities for Gloucestershire, rather than a funding commitment. Priorities identified in this LTP provide the basis for future funding bids, as opportunities arise, and discussions with funding partners, such as government, GFirst LEP, Public Health, statutory bodies, transport operators, District, Parish and Town Councils, developers and the private sector.
- 1.2.4 The CPS Strategies set out our vision for transport until 2031, roughly in line with the time horizons for growth allocations in the adopted Local Plans. However, emerging trends in technology and society as well as strategic ambitions in Gloucestershire require a more ambitious strategy that will shape the way Gloucestershire will develop until 2041 and beyond. It is envisioned that this vision for 2041 will inform discussions with Gloucestershire Districts on current Local Plan reviews and that there will be another review of this Local Transport Plan, once Gloucestershire's areas of growth post 2031 are better understood. Figure 1 (A) illustrates the new LTP document structure.



Figure 1 (A) New LTP Document Structure

Our Vision to 2041

LTP Vision and Objectives

LTP Policy Documents

Overarching, Public & Community Transport, Cycling, Freight, Highways, Rail, Walking

LTP Spatial Context

Connecting Places Strategies and transport scenarios, looking to 2041

LTP Delivery

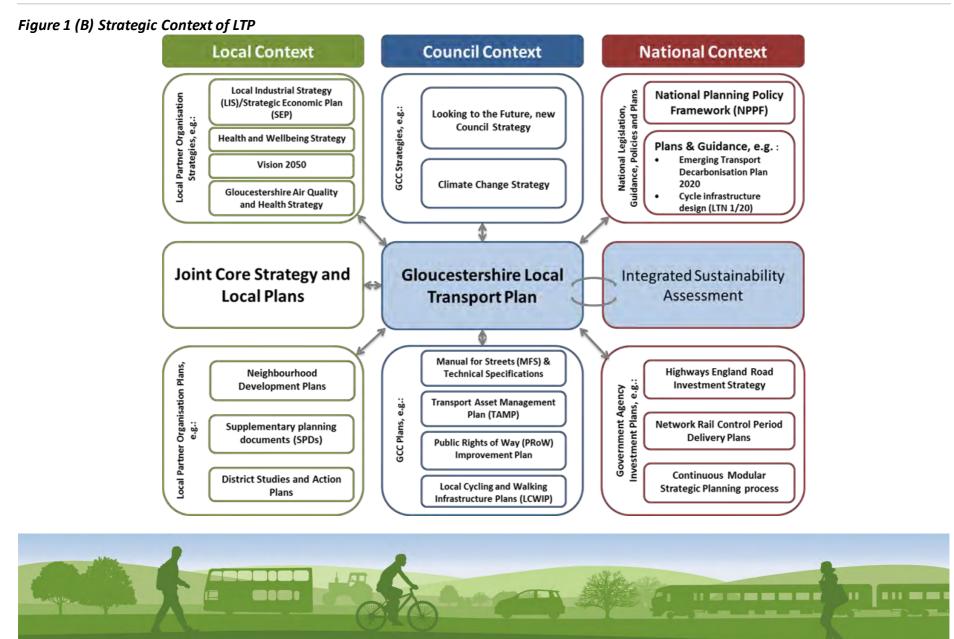
Scheme priorities and prioritisation process, LTP targets, monitoring and governance

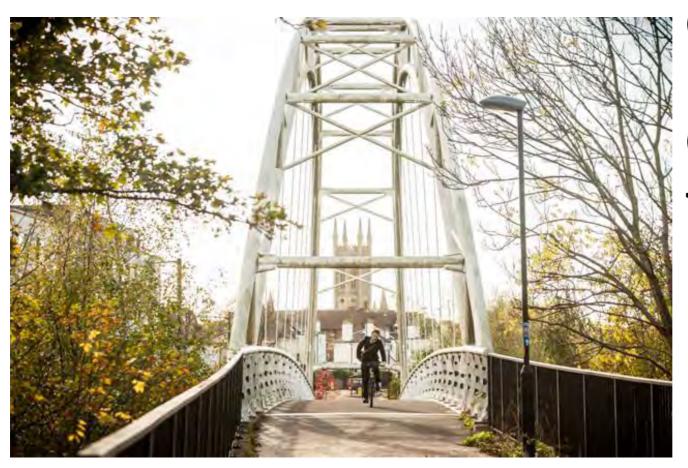
Annexes

Summary of Evidence Base, Link and Place Spectrum, Logic Map, Glossary of Terms

- 1.2.5 The production of a Local Transport Plan is a statutory requirement under the Local Transport Act 2008 for Local Authorities. However, its role has changed. It no longer provides the basis of a financial allocation from the Department for Transport (DfT). Instead it sets out the long term policy structure for local transport delivery including a set of scheme priorities.
- **1.2.6** The LTP links to a number of strategic documents which will help shape Gloucestershire's future. <u>Figure 1 (B)</u> illustrates the relationship of these documents. It also identifies three supporting plans which enable the delivery of the LTP and provide more information on Gloucestershire County Council's (GCC) approach to highways maintenance investment, highways development management and managing the Public Rights of Way network.







Chapter 2

Our Vision to 2041



2. Our Vision to 2041

2.1. Future Challenges

- **2.1.1** Looking towards 2041, Gloucestershire is facing demographic, social, economic and technological changes that will provide both challenges and opportunities for Gloucestershire's transport network and the movement of people and goods.
- 2.1.2 The way we travel has always been shaped by new technology, inventions, new business models and social change. Unfortunately, in 2020, we also saw the impacts of a global pandemic on the transport system in the UK and across the world. However, even before the Covid-19 crisis, our transport system has been at the cusp of radical changes, driven by an increasing awareness of the impacts of transport on Climate Change, our health and ever increasing road congestion. Gloucestershire needs to be prepared to adapt to future mobility needs in and agile and decisive way. This chapter sets out the role of innovation and change in ushering in a new transport era.

Uncertain Times

2.1.3 The impacts of the Covid-19 related restrictions on the transport sector cannot be overstated. Almost over night, the way people live, work and travel has changed fundamentally through home working, home schooling, changing retail choices and changing travel choices. Transport organisations and planners have had to shift from normal operations to ensuring peoples safety under pandemic conditions and keeping a core system of operational services running. At the same time, the sudden drop in passenger numbers meant unprecedented pressure on the financial stability of transport operators.

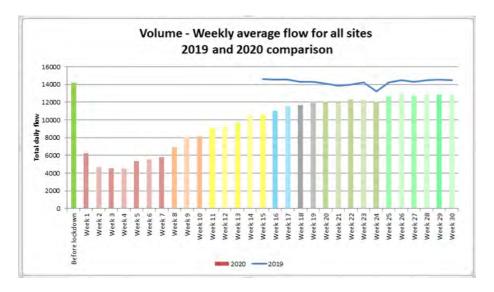
- **2.1.4** Some of the changes we have seen in recent months will change society permanently. It is, for example, likely that more flexible working arrangements with an increase in home working will remain, as employees and employers find that jobs can be performed perfectly adequately from home, using digital tools. It is of utmost importance to influence the travel behaviour that corresponds with these changes in our society while people are re-assessing their personal travel choices.
- **2.1.5** In the weeks immediately after the Covid-19 lock down, in March 2020, levels of motor vehicles in the UK fell as low as 25% of an equivalent day¹. In Gloucestershire traffic levels reached a level as low as 33% of the previous year². At the same time we saw a rise in the popularity of cycling and walking, with cycle trips on some weekends doubling, compared to before the Covid-19 restrictions in the UK and up to 78% higher on some summer weeks in Gloucestershire.³ However, by September 2020, traffic levels in both Gloucestershire and the UK as a whole had almost returned back to levels seen in previous years, while public transport journeys remained at a lower level and cycling continued to be higher than before the Covid-19 lock down, though not to the extend seen during the lockdown, illustrated in Figure 1 (C).

² GCC Traffic Level Reports ³ GCC Traffic Level Reports



¹ https://www.gov.uk/government/statistics/transport-use-during-the-coronavirus-covid-19-pandemic

Figure 1 (C) – Lockdown Traffic Flow Weekly Comparison (2019-20)



- **2.1.6** As outlined in the Government's "Gear Change" document, there is a once in a generation chance to accelerate active travel by embedding the move towards walking and cycling in people's travel behaviour. ⁴ Gloucesters hire has done this through schemes funded though successful Emergency Active Travel Fund bid(s). At the same time, investment in public transport infrastructure and the provision of positive, informative messaging to let people in Gloucesters hire know they are safe to travel on public transport is fundamentally important.
- **2.1.7** At the time of finalising this LTP, it is impossible to predict how these trends will continue into the future and what the long term outcomes of the Covid-19 restrictions on the transport sector, traffic levels and modal share will be. It is clear, however, that transport planners and decision makes will need to take decisive action to transform permanently how people travel to make Gloucestershire's transport system more resilient and future-prove.

Economic Prosperity and the Need for Improved Connectivity

2.1.8 Improving connectivity is at the heart of economic prosperity as expressed in the LEP's Strategic Economic (2018) Plan, the emerging Gloucestershire Local Industrial Strategy⁵ and the Gloucestershire 2050 vision. In the future, national and international connections will become even more important; sustainable, clean transport connections with existing major urban centres and international airports including London/Heathrow, Bristol, Birmingham, and Cardiff will be vital to provide this connectivity.

⁶ Launched in 2017, 2050 Vision includes the specific ambition for improved transport connectivity across the city region



⁴https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/904146/gear-change-a-bold-vision-for-cycling-and-walking.pdf

Gfirst LEP: Local Industrial Strategy - www.gfirstlep.com/industrial-strategy/

2.1.9 Gloucestershire's connectivity currently depends largely on its highway network, with car and vantravel making up 65% of all travel to work journeys in the county.⁷



2.1.10 However, this connectivity is already considerably impacted by congestion on parts of the network. With expected traffic growth and the traffic generated by Gloucestershire's growth ambitions, Gloucestershire's future productivity could be significantly impacted if steps are not taken to improve the efficiency of the overall mobility offer in Gloucestershire.⁸

2.1.11 Gloucestershire has been successful in attracting significant investment in transport infrastructure to accommodate growth, including more than £60 million Growth Deal funding invested in transport projects and Highways England's commitment to deliver the A417 'Missing Link' scheme (between £250m and £500m). GCC has successfully bid for funding to improve J10 on the M5. Nevertheless, with increasing traffic growth levels, the significant growth expected in Gloucestershire up to 2031 and emerging equally ambitious growth ambitions beyond 2031, simply trying to increase highway network capacity will be neither possible nor affordable. More innovative solutions need to be found that optimise all transport modes serving Gloucestershire.

Inclusion

2.1.12 Gloucestershire has a low population growth rate and an aging population At the same time, research undertaken for the Gloucestershire 2050 Vision suggests that growth in the number of jobs in Gloucestershire will outpace the availability of working age people (20-64 years) over the next 20 years. ¹⁰ This makes it ever more important to fully understand the emerging mobility needs and expectations of people of all age groups, to ensure that Gloucestershire is successful in its ambitions to act as a "Magnet County", attracting and retaining young and working age people to live and work in Gloucestershire and to cater for the mobility needs of people aged 65 years and above.

a year due to congestion, costing UK drivers £7.9 billion in 2018, an average of £1,317 per driver. (http://inrix.com/press-releases/scorecard-2018-uk)

¹⁰ Children and Young People's Needs Assessments 2018



⁷ Census 2011 data

⁸ Regionally, traffic growth mirrors population increases (2015-2050), the South West forecast being the highest. Nationally, the proportion of traffic in congested conditions in 2050 is forecast to range from 8% to 16% compared to 7% in 2015 (DfT – Road Traffic Forecasts 2018). In the top 20 urban areas in the UK, drivers lost an average of 178 hours

⁹ Gloucestershire has experienced a lower rate of growth in population compared with the South West and England and Wales between 2010 and 2017, with the slowest growth being in young people 0-19 years and working age people between 20-64 years, as compared to growth in the older population aged 65 years and above.

2.1.13 In rural areas, there are lower levels of connectivity and fewer transport options available than in the towns and cities. Public transport is often limited or in frequent, leading to problems for residents that do not have access to a private vehicle. Almost 20% of households in Glouces tershire do not own a private vehicle, and approximately a third of the population can not drive. ¹¹



20% Non-car households in Gloucestershire

2.1.14 Moreover thirteen of the most deprived wards in England are in Gloucestershire, meaning that affordable transport options are required. This could be achieved through technological innovation and emerging Mobility as a Service (MaaS) models which aim to achieve a seamless integration of multiple modes of transport. Offering access to a broader mix of transport and mobility options will also benefit objectives of social inclusion and more deprived areas of Gloucestershire (see reference to inclusion in the **Overarching Policy Document**)¹².

"Looking at the 152 upper-tier authorities, Gloucestershire has a rank 5 of 124, putting it in the least deprived quintile for overall deprivation. In general, Gloucestershire is not a very deprived county. An average IMD rank for each of the six districts in Gloucestershire

Changes in Attitude and Consumer Behaviour

- **2.1.15** There is growing evidence that the public attitude towards transport and its negative impacts is changing. A recent Government survey shows that there is increasing concern about Climate Change, with 80% of respondents in the 2019 survey saying they were 'very' or 'fairly' concerned about climate change¹³. Transport is a key contributor to greenhouse gas emissions and the transport sector will have to address this if Glouces tershire wants to achieve its carbon dioxide (CO₂) transport emission target of zero emission per capita by 2045. Similarly, transport is a source of air pollutants and noise, that impacts public health.
- **2.1.16** There is also a growing understanding that more active forms of transport canplay a key role in supporting a physically active lifestyle which is related to a reduction in incidences of many chronic conditions, including reductions in obesity levels, which are addressed in more detail in health & wellbeing section of this LTP.
- **2.1.17** At the same time, evidence suggests changes in the values and attitudes of young people with young adults in Great Britain and other countries driving less than young adults did in the early 1990s. Research suggests that the rise in motoring costs have discouraged young people from learning to drive -

shows that even the most deprived districts (Gloucester City, and Forest of Dean) fall in the middle quintile (middle 20%) for deprivation out of 326 English authorities. Tewkesbury, Cotswold, and Stroud districts are in the least deprived quintile, with Cheltenham in the second least deprived quintile. (Indices of Deprivation 2015: Gloucestershire).

"In March 2019, 80% of the public said they were either fairly concerned (45%) or very concerned (35%) about climate change. This is the highest proportion of overall concern since the survey started and is driven by an increase in the proportion very concerned about climate change." BEIS PUBLIC ATTITUDES TRACKER March 2019 (Wave 29) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment/data/file/800429/BEIS Public Attitudes Tracker - Wave 29 - key findings.pdf



¹¹ Census 2011

some say they would "never" be interested in learning to drive. This has resulted in a decline in young full car driving licence holders in England, a 3% drop (2010-2017) for drivers aged 17-20 years ¹⁴.



broadband. The rollout of 5G services will enable data to be streamed more quickly and in greater quantity. Gloucestershire's future digital connectivity strategy will explore opportunities for full fibre and mobile connectivity.

2.1.19 Mobility solutions for the future will depend on strong digital connectivity to ensure a continued high level of multi modal physical connectivity. At the same time, innovations in technology and in business models emerging in the transport sector will directly benefit businesses in Gloucestershire.

Innovation

2.1.18 In Gloucestershire 70.3% of businesses are 'innovation active', compared to the national average of 55.1% and GFirst LEP has the second highest rate of innovation activity compared to other LEPs. ¹⁵ The mobility solutions of the future will need to ensure that Gloucestershire stays highly connected, delivering digital and integrated transport connectivity to stimulate business growth. Broadband and mobile connectivity continues to be vital for business, communities and increasingly also for future mobility services. Gloucestershire is in a very good starting position to make best use of its digital connectivity, with Fastershire delivering in Phase I & II almost 98% of homes and businesses across Gloucestershire and Herefordshire with access to superfast

¹⁵ www.gov.uk/government/statistics/uk-innovation-survey-2015-statistical-annex-and-interactive-report



¹⁴ Source - National Travel Survey: England 2017 and Table NTS0201

2.2. Horizon Scanning

- **2.2.1** Advances in data science, artificial intelligence and sensing technology are increasing the speed of transport innovation. Cleaner transport, automation, new business models and actual new modes of travel are about to transform how people, goods and services move in Gloucestershire. The importance of understanding and meeting the opportunities and challenges this will bring cannot be overstated, and particularly in a county that has a rural identity.
- **2.2.2** Key outputs driving these technological advances and societal changes are:
 - Better integration of all modes
 - SMART Places & Innovation
 - New vehicle technologies
 - Shared Mobility



Better Integration of All Modes

- 2.2.3 The fundamental question for Gloucestershire's future transport network will be how to balance the demand for clean growth and improved connectivity withan increasingly congested transport system that is in many places at capacity. Ensuring that the existing infrastructure is used to its maximum efficiency will be at the core of the future of mobility in the County. This can only be achieved through a significant mode shift from the private car to public transport and active forms of travel. At present, 1% of mode share for Gloucestershire is rail, as opposed to the national figure of 5%. This is despite the fact that Gloucestershire is well connected by rail to all major conurbations in the region, such as Birmingham, Bristol, London and South Wales, indicating significant growth potential.
- **2.2.4** Congestion on the road network could be reduced significantly, if more people used rail and buses or decided to walk and cycle. Proposals for how an improved public transport and active travel network in Gloucestershire could look like are outlined in the spatial potential growth scenarios in chapter 4. Significant investment in mass public transport, for example in a rapid transit system between Gloucestershire's main conurbations, and strategic as well as local walking and cycling routes will be key to meet Gloucestershire's future mobility needs.
- 2.2.5 Changes in how the passenger transport business model operates, will have profound impacts on the way we purchase, consume and demand travel in future years. One of the difficulties in urban and semi urban transport systems is the lack of co-ordination between different transport providers. People want to know how to get from A to B as easily as possible, whether that's on foot, by bicycle, bus, train, hire car or taxi or a mixture of some or all of those. The increasing availability of shared data, a ccessed through smart phone applications will allow us to plan our journeys more efficiently and conveniently. Overall,

¹⁶ 2011 Census data (Office for National Statistics)



transport will become more integrated, smart, clean and efficient and people will increasingly view Mobility as an on-demand, personalised service (Mobility as a Service). Dynamic demand responsive transport will be better integrated with mass public transport which will become the backbone of mobility in more densely populated areas.

- **2.2.6** In rural areas, demand responsive transport services will link to core public transport routes. Traditional forms of demand responsive transport include services such as Dial-a-Ride. These services need to be expanded to attract a larger customer base, including younger passengers, through the provision of dynamic demand responsive transport, such as the PickMeUP minibuses in Oxford, which collects passengers form a 'virtual bus stop' within a short distance of their location and the intelligent software calculates the best route to take all passengers to their chosen destination.¹⁷
- **2.2.7** Gloucestershire is addressing these challenges head on with its 'Total Transport' project which will provide a public facing web based 'one-stop shop' portal, for travel information, journey planning and booking. The portal will benefit communities, especially those lacking conventional transport options, by providing journey planner information for both scheduled (e.g. timetabled buses) and 'alternative' transport solutions (e.g. community transport, dial-a-ride etc.) via Application Programming Interface (API) from key systems. Providing information in this way has not yet been achieved on any other platform in the UK and will remove a key barrier to information and cultural barriers to services.
- **2.2.8** The increased integration of transport modes via internet platforms will be mirrored by physical transport interchange hubs. These Interchange Hubs will offer the opportunity to provide wider community benefits e.g. thought the dissemination of information related not just to transport, but also to health and wellbeing. They may also be combined with other transport related services,

Department for Transport (2019) Future of Mobility: Urban Strategy

such as the provision of secure parcel collection boxes and access to low carbon vehicle solutions for onward connectivity. Just like passenger Interchange Hubs, freight distribution centres will also help to minimise unnecessary local trips.

SMART Places & Innovation

- **2.2.9** 'SMART'; Self-Monitoring Analysis and Reporting Technology solution is a term that can be applied to any asset¹⁸. For example, a SMART bridge or building has the ability to alert us of its changing condition. This becomes possible because the physical and digital worlds are converging. As we embrace this it may transform the way we travel and allow more efficient ways of managing and maintaining facilities and infrastructure.¹⁹
- **2.2.10** Improved data use will enable us to manage traffic on our roads in more efficient ways. Intelligent Transport Systems (ITS) are already used to advise road users of disruptions, and maximise the efficiency of trafficsignals to keep the highway network operating as efficiently as possible. ITS vary in technologies applied, from basic management systems such as car navigation; trafficsignal control systems; variable message signs; automatic number plate recognition or speed cameras to more advanced applications that integrate live data and feedback from a number of other sources.

 $^{^{19}}$ Planning SMART Places, unlocking growth and place-making through innovations (ADEPT Nov 2017)



¹⁸ Digital innovation in planning SMART places is a key area of research for the Association of Directors of Environment, Economy, Planning and Transport (ADEPT), which represents Place Directors from local government authorities together with LEPs and corporate partner members. A report by ADEPT, "Planning SMART Places Final Report (2017)" recognises where digital innovation and approaches can be adopted to shape places that are sustainable, accessible and promote wellbeing. 'Big data', meaning insight and intelligence using behavioural economics to stimulate mode shift, will bring opportunities centred on digital infrastructure and connectivity that is central to future mobility.

2.2.11 All of these systems are reliant on high quality data and GCC will work with District, Parish and Town Councils and transport network operators, including Highways England, to release open source data to ensure that users of the network enjoy better journeys, limited road capacity is used efficiently and drivers are directed to the most appropriate routes. An example of the benefits of sharing data is the digitalisation of Traffic Regulation Orders (TROs) to ensure that information such as weight restrictions is available on all relevant navigating systems, thus directing heavy goods vehicles (HGVs) away from unsuitable routes. Currently Gloucestershire road works are digitised and available in an online mapping format (roadworks.org). Street Manager, a nationally funded digital street works planning service to be launched in 2019 will replace existing systems and provide improved accuracy and real time data free to technology companies and app developers to use. Allowing existing providers such as Google maps to enhance their services to help drivers GCC already digitised some TROs, including all parking restrictions through www.gloucestershiretraffweb.co.uk and will continue this process. Equally, Gloucestershire already complies with government ambitions to ensure that all bus timetables and routes are openly published.²⁰

2.2.12 An example of how the availability of live data influences driver behaviour, is where it informs drivers of available parking spaces, thereby reducing levels of driving around towns searching for a space. Enabling drivers to

access real-time parking availability and tariffs, including on-street spaces also supports more efficient use of local parking provision.

2.2.13 GCC will continue to work with Highways England and other key stakeholders to explore and develop innovative measures to improve the efficiency of the transport network, including car parking, through technology.

New Vehicle Technology

2.2.14 In 2017 Government announced plans to ban the sale of new petrol and diesel cars in Britain by 2040. In 2018 the "Automated and Electric Vehicles Act 2018" came into force, as part of the Government's industrial strategy to promote the development and deployment of both automated and electric vehicles and in line with policies on climate change.

2.2.15 The electrification of vehicles and bikes, as well as the introduction of micro mobility^[1] vehicles will make transport more environmentally friendly and adds more modes of transport to the mix. An example being the rental e-scooter trial in Gloucester and Cheltenham which GCC is facilitating on behalf of the Department for Transport (DfT). The purpose of the trial is to support a 'green' restart of local travel and help mitigate reduced public transport capacity due to the Covid-19 pandemic.

^[1] Micro mobility describes the ways in which we get around in the 'first and last mile' of trips. Examples are bike share programs adjacent to train stations, or the Paris scheme of dock less GPS-enabled e-scooters is operated, that enables users to rent electric scooters just paying for the time they are used. The scooters are found and unlocked by app; the scooters can be left wherever riders want to leave them, as long as they take photos of the location to encourage responsible behaviour.



²⁰ Bus Open Data: Publication of Government Response to 2018 Consultation: On 26th March the DfT published the response to the bus open data consultation. Further information can be found here: www.gov.uk/government/consultations/bus-services-act-2017-bus-open-data and here: www.gov.uk/government/news/bus-revolution-to-put-power-in-passengers-hands The DfT intends to make the Regulations during Summer 2019 with the first set of requirements for route and timetable data to be openly published by bus operators to come into effect from 07 January 2020. Simultaneously the DfT will publish guidance for bus operators and local transport authorities explaining how to meet the new requirements; the guidance will be updated and released as a new version as new requirements are phased in



- **2.2.16** Electric scooters are not legal in the UK, however from 4 July 2020; the DfT has allowed people to use rental e-scooters as part of a strictly monitored 'geofenced' trial area, which means they will stop if the riders try to access an area off limits. This brand-new mode of low emission transport will be offering efficient, clean and inexpensive travel that can also help ease the burden on transport networks and allow for social distancing.
- **2.2.17** The move towards clean vehicle technology will reduce transport related emissions and make our city centres greener and quieter. The challenge for Gloucestershire will be to provide the infrastructure required to support these new vehicle technologies. A network of electric vehicle charging points as an example of this move is outlined in Overarching Strategy.
- 2.2.18 New vehicle technologies will allow us to use our existing transport infrastructure more efficiently. Vehicles capable of communicating with each other and with infrastructure have the potential to provide information to network operators and users in real time to optimise fleet and network management. Estimates suggest there are at least 3 million vehicles with internet connectivity on UK roads, with 50% of new vehicles expected to be connected by 2020. Looking further into the future, it is likely that the self-driving vehicles that are currently being developed and tested will become a reality. This will not only affect privately owned cars, but will also mean that we will see driverless bus and shuttle pod services and demand responsive, driverless ride sharing and taxi services. This will make these transport offers increasingly convenient and significantly reduce their operating costs. Similarly, it is likely that goods and freight transport will become more automated and drone technology will become available.

²¹ Transport Technology Forum Connected Roads, Vehicles and People A Key National Opportunity www.ttf.uk.net/wp-content/uploads/2018/03/Connected-VP.pdf



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2.2.19 While these innovations in vehicle technology open up exciting new opportunities for our future mobility, they will have to be well managed and integrated in a wider mobility offer, in order for them to reduce rather increase congestion and to make a positive contribution to the urban environment.

Shared Mobility

- **2.2.20** While fully autonomous vehicles will not be on our roads in the immediate future, already the global market for ride share services has grown significantly with an increasing number of people using their smart phones to catch a ride²². This is driven by new business models emerging as a result of increasing digital connectivity where data is used to directly market goods and services tailored to personal preferences. For example, the Uber business model works on these principles, a service that has revolutionised ride-sharing.
- **2.2.21** The potential to reduce congestion and transport related CO2 emissions by reducing the number of single occupancy car trips could be substantial. Gloucestershire will however, face particular challenges, as many of these ride-share services are currently only available in big urban centres and, like all public transport services, demand responsive services are more costly to operate in less densely populated areas.

- **2.2.22** Another shared mobility model focuses on sharing access to vehicles, including cars, bicycles and scooters. Car clubs have seen a rise in popularity in the UK as these provide travellers with the independence of a private vehicle, whilst not involving the high costs associated with ownership. In Gloucestershire, a number of car clubs are already operating, including 'Carshare Gloucestershire', which has over 3000 members ²³.
- **2.2.23** An increase in shared mobility will support Gloucestershire to reduce congestion on its road network and meet its environmental targets.

CarshareGloucestershire.com 3,000 members

²³ Lift share (2019). Carshare Gloucestershire: http://liftshare.com/uk/community/gloucestershire



²² DfT 2019: Future of Mobility: urban Strategy: "The proportion of 18-75 year olds owning or having access to a smartphone increased from 52% in 2012 to 87% in 2018. Nearly 9 in 10 smartphone users (87%) use their phones for travel purposes, with navigation and route planning being the most popular uses."

2.3. LTP Vision and Objectives

2.3.1 Gloucestershire's vision for transport is:

'A resilient transport network that enables sustainable economic growth by providing travel choices for all, making Gloucestershire a better place to live, work and visit'

- **2.3.2** The vision encapsulates the importance of journey time reliability, travel choice and access as the economy grows. It is important to move away from a culture where the car is the dominant mode of transport towards one where the car is one transport choice within a range of travel options. For some residents it may not be feasible to have a full range of transport choices, but there may be a choice for part of their journey.
- **2.3.3** The integration of travel modes providing travel choices is essential to reduce transport carbon emissions and to manage congestion in our urban areas. The resulting mode shift towards public and active travel options, combined with cleaner vehicle technology will allow Gloucestershire to achieve its CO2 reduction targets and conserve the environment. Information enables people to make decisions about how and when they travel. As technology advances during the plan period GCC will ensure travel information is provided in accessible, useful formats to raise awareness of, and confidence in using different travel options.

- **2.3.4** The key objectives for Gloucestershire's Local Transport Plan set out below align with the Integrated Sustainability Assessment objectives:
 - Protect and enhance the natural and built environment
 - Support sustainable economic growth
 - Enable safe and affordable community connectivity
 - Improve community health and wellbeing and promote equality of opportunity
- **2.3.5** The LTP objectives were developed by identifying the key challenges which the County Council and its delivery partners will need to overcome. The LTP vision and objectives will be delivered through policies, outlining how different parts of the transport network will overcome the identified transport challenges. The **logic map in Annex 2.0** summarises the transport challenges and links them to; key objectives, policies and the expected outcomes for each LTP objective.

Protect and enhance the natural & built environment Enable safe and affordable community connectivity LTP Objectives Support sustainable economic growth Improve community health and wellbeing and promote equality of opportunity





Chapter 3

LTP Policy Documents



3.LTP Policy Documents

3.1. Overarching Policy Document (PD0)



- **3.1.1** Transport investment can be both an enabler of environmental benefits (such as public transport reducing the use of private vehicles), but also a cause of dis-benefits, through issues such as air pollution, noise and carbon emissions. At the same time, climate change leading to increases in the occurrence of extreme weather events can also have a detrimental impact on the reliability of the transport network and the safety and wellbeing of its users. This chapter will discuss the impacts of transport on Carbon Emissions as well as its wider environmental impacts.
- **3.1.2** As a county with three Areas of Outstanding Natural Beauty (AONB), the protection n and enhancement of valued landscapes is important as well as the natural and historical environment, because these are vital to Gloucestershire's prosperity, attracting people to live, study, work and visit the area. Combined, the Cotswolds, Wye Valley and Malvern Hills AONBs cover just over 50% of Gloucestershire. They are areas for nature recovery and while they can be a constraint for transport schemes, some transport schemes may provide opportunities to create new habitat.
- **3.1.3** Transport infrastructure can help people access healthy environments, for example through the provision of, green infrastructure, which is a network of multi-purpose spaces that provide the opportunity for the co-ordination and delivery of environmental improvements, to support investment and improve quality of life. The Gloucestershire Local Nature Partnership has published a Green Infrastructure Pledge²⁴ which commits signatories to 'making Gloucestershire a pioneer of green infrastructure, creating a better, more attractive place to live, work and visit, as well as becoming an exemplar for the rest of the country.' These initiatives are usually inclusive of blue infrastructure such as rivers, ponds, ditches and canals.

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www.gloucestershirenature.org.uk/green-infrastructure-pledge

- **3.1.4** Furthermore, access to healthy, natural environments can help:
 - Support economic and social regeneration
 - Improve public health
 - Improve educational outcomes
 - Reduce crime and antisocial behaviour
 - Help communities adapt to climate change
 - Improve quality of life across an entire area
- **3.1.5** To ensure the impacts of the LTP are adequately addressed, the Planis subject to an Integrated Sustainability Assessment (ISA) which includes five assessment criteria; including Strategic Environmental Assessment and Habitats Regulations Assessment, but extends into Equalities Impact Assessment, Health Impact Assessment and Community Safety Assessment, which will be published alongside the LTP on the GCC website. The ISA objectives are set out in the Delivery chapter.

Reducing Transport Carbon Emissions and Adapting to Climate Change

3.1.6 In May 2019 the UK Parliament declared a climate change emergency, a decision endorsed by GCC Full Council. In 2018, transport accounted for 32% of all carbon dioxide (CO_2) emissions per capita in Gloucestershire.²⁵



32% of all CO₂
emissions
per capita are
transport related

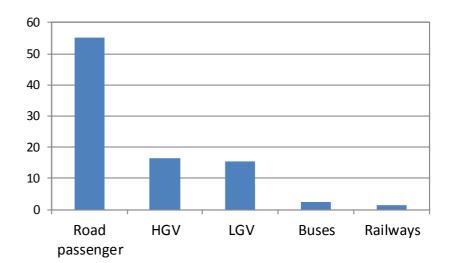
²⁵CO2 (ktCO₂)as the main greenhouse gas by end user (exclusions apply) https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-to-2018



- **3.1.7** Nationally, road passenger cars account for 55% of all transport related greenhouse gas emissions (GHG), HGVs 16.6%, LGVs 15.6% and buses 2.5%, as opposed to railways 1.4% (by source 2018) in Figure PDO (A). It is clear, that if GCC wants to deliver a carbon neutral county and work with partners to deliver a stepped target in carbon reduction by 2030, There needs to be a step change in the way we travel, including significant mode shift in combination with a dramatic rise in the use of clean emission vehicles.
- **3.1.8** Gloucestershire's LTP supports the Gloucestershire Climate Change Strategy, Gloucestershire Sustainable Energy Strategy and reflects Gloucestershire's ambition to be carbon neutral. The LTP target to reduce per capita transport carbon emissions (LTP PI-14), has been strengthened to reflect national commitment and GCC's declaration of a climate change emergency in 2019.²⁸ Furthermore, in 2020, GCC made a further consideration to sign up to the UK100 Pledge and follow the pledge guidance to be net zero by 2045.²⁹

3.1.9 At a corporate level GCC takes due regard of the strategic risk to climate change through the Corporate Risk Management Strategy, and specifically to a commitment to climate change through membership of the Local Adaptation Advisory Panel (LAAP), England. This panel advises the cross Government Adapting to Climate Change Programme on its priorities, particularly in relation to the Climate Change Risk Assessment (CCRA) and the National Adaptation Programme (NAP), helping to ensure national policies and structures are 'local-government friendly' going forward.

Figure PDO (A) – National Greenhouse Gas Emissions (by source 2018)



 $^{^{26}\}text{GHG}$ by source (MtCO $_2$ equivalent) - $\underline{\text{https://www.gov.uk/government/statistics/final-uk-greenhouse-gas-emissions-national-statistics-1990-to-2018}$

²⁸Carbon action plan motion (836) at County Council (15 May 2019)

https://glostext.gloucesters.hire.gov.uk/ieListDocuments.aspx?Cld=333&Mld=9141

²⁹ UK100 Pledge ambition making all cities/towns/villages in the UK 100% clean before 2050- https://www.uk100.org/pledge-fags



Response to Climate Emergency (Item 8) at Cabinet (20 Dec 2019) https://glostext.gloucestershire.gov.uk/ieListDocuments.aspx?Cld=117&Mld=9232 80% reduction by 2030 and carbon neutral by 2050

Figure PD0 (B) – Transition to Reducing Transport Carbon Emissions

Funding

- Thinktravel programme to promote sustainable travel modes to schools, businesses and the community
- •Sustainable transport proposals and identify bidding opportunities
- •Electric Vehicle Charge Points
- Highways
 Development
 Management's role
 in securing
 developer
 contributions

Supporting

- Pipeline of schemes to introduce; energy efficient LED street lighting, dimming & switch off
- energy efficient LED traffic lights
- reduction in fleet mileage
- installation of solar panelled parking meters

Engaging

- With local schools, local employers who have a keen interest in sustainability
- With local industry leaders in sustainability
- With utility services to find the most cost effective way to EV-Charge Points Network

- **3.1.10** GCC has already taken action to reduce transport CO₂ emissions (Figure PDO (B)). Further action will need to be taken by developing a 'Carbon Reduction Pathway' to deliver on carbon neutrality and climate change resilience, addressing risks to health, wellbeing, highway assets, energy supply and natural capital, including biodiversity, soils and ecosystems.
- **3.1.11** Gloucestershire looks to government guidance for decarbonising transport in order to work towards net zero transport emissions across each mode of transport.³⁰ However, radical changes are needed in the way we travel, for transport to play its part in achieving a net zero energy future for Gloucestershire by 2045. Our vision is to improve accessibility across Gloucestershire through low carbon modes. Promoting mode shift from the single private vehicle to sustainable modes of transport such as walking, cycling and using public transport will reduce CO₂ emissions and benefit public health through, increased physical activity levels and reduced air pollution.

³⁰Decarbonising Transport: Setting the Challenge, in which government sets out its ambitions to develop a Transport Decarbonisation Plan in 2020 before COP26. https://www.gov.uk/government/publications/creating-the-transport-decarbonisation-plan

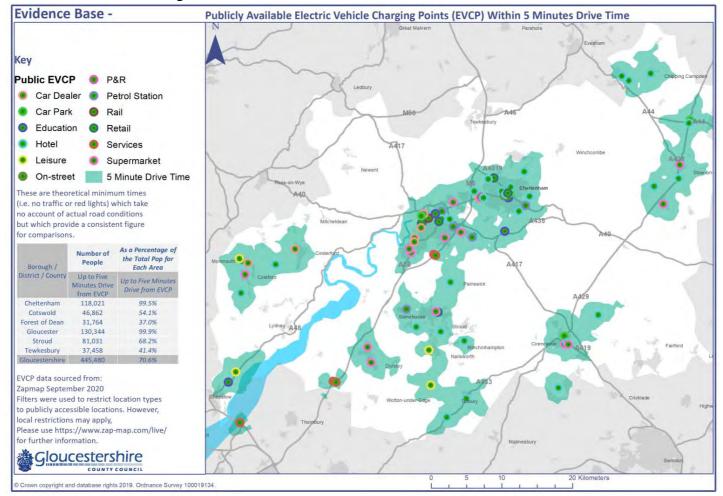


3.1.12 And for journeys that are unavoidable by motorised transport, we are committed to encouraging a switch to Ultra Low Emission Vehicles (ULEVs) and strive to facilitate this through enabling access to a charging infrastructure network. The Gloucestershire Sustainable Energy Strategy sets out how this ambition is to be a chieved, including decarbonised electricity and an ambition for half of all new vehicles to be electric by 2028. Along with implementing the actions in the strategy, GCC will begin to apply the methods set out in the EV Strategy to identify locations prioritise investment in ULEV charging infrastructure and produce an implementation plan. Prioritisation and implementation of ULEV charging infrastructure will require community engagement to further inform identification of locations due to the likely usage and to help encourage people to make a switch by talking through benefits of ULEV use. The challenge for Gloucestershire as a largely rural county will be to provide the infrastructure needed to support the uptake of low emission vehicles, to increase public understanding of ultra-low emission vehicles and to encourage their uptake. Figure PDO (C) illustrates the current access to the County's electric vehicle charge point network (within 5min drive) based on open data from ZapMap. It will be updated on periodic basis and linked to our LTP webpage.





Figure PDO (C) – Gloucestershire's EV Charge Point Network - access within 5min drive





3.1.13 Whilst a change to ultra low emission vehicles will be important to reducing transport related carbon emissions, it has to be seen in the context of a hierarchy of interventions to stabilise carbon emissions, as outlined below in Figure PDO (D): The integration between land use planning and transport determines the basis of our travel patterns and demand management is therefore at the heart of a more sustainable transport network, as set out in policy (LTP PD 0.3). In addition this planseeks to promote behavioural change to encourage people to use more sustainable and active modes of travel, as outlined in the Thinktravel approach to influencing travel behaviour (LTP PD 0.6) below and to minimising the need for travel, e.g. through major employers adopting agile working, localised travel initiatives and smarter supply chain practices.

Figure PD0 (D) – Interventions to stabilise carbon emissions

e.g. legislative controls, low emissions zones, AQMA restrictions

e.g. low emission vehicles, technological innovation, traffic flow management

e.g. land use planning, mode shift and behavioural change

Planning



Policy LTP PD 0.1 – Reducing Transport Carbon Emissions and Adapting to Climate Change

GCC will work with its partners to reduce transport carbon emissions by 2045 and improve air quality in the county by addressing travel demand, promoting the use of sustainable modes of transport and the uptake of ultra low emission vehicles to tackle climate change.

GCC will do this by implementing the following policy proposals:

- Work in partnership with District Councils, neighbouring authorities, the GFirst Local Enterprise Partnership, Western Gateway Sub-National Transport Body, Highways England, Homes England and Department for Transport and any other necessary government bodies, to seek investment in sustainable transport and active travel infrastructure as funding opportunities arise.
- Support digital connectivity and agile working to reduce travel demand.
- Ensure the public availability of infrastructure required for low emission vehicles, for example a network of electric vehicle charging points or alternative technologies.
- Work towards electric vehicle charging points being provided at interchange hubs and other key locations.
- Promote a cleaner public sector vehicle fleet.
- Work with public transport providers to accelerate the change to clean vehicles.
- Encourage behaviour change to reduce travel demand, promote sustainable transport modes and develop lower-emission driving. This will align closely with our policy of influencing travel behaviour change through the Thinktravel programme.
- Minimise energy usage of traffic signals and street lighting.
- Resolve to implement and strengthen the Gloucestershire Sustainable Energy Strategy and the Climate Change Strategy, by embedding the principles of a transition towards a circular economy.
- Resolve to deliver on the recommendations following the County Council's declaration of a climate change emergency, through the development of a 'Carbon Reduction Pathway', and by identifying a climate change resilience adaptation strategy including risk mitigation.
- Develop and maintain a comprehensive bus network supported by interchange hubs across rural and urban areas, to improve connectivity within and across the county boundary.
- Make a positive contribution towards a step change in sustainable land use planning to enable a priority towards sustainable travel choices and reduce travel demand, while supporting digital connectivity to improve agile working.
- Developers are required to design and implement their development to deliver sustainable transport, with appropriate connectivity to the existing transport network, good access to public transport, and a high permeability to walk, cycle and be mobility friendly.
- All overarching and mode policies will take this policy into account.



Local Environmental Protection

3.1.14 Interventions outlined in the previous chapter aim to reduce transport related carbon emissions and other air pollutants from transport including nitrogen oxides and particulate matter. Poor air quality is a significant threat to public health in the UK contributing to roughly 40,000 premature deaths every year.

3.1.15 Data based on a national model and applied to Gloucestershire shows that exposure to particulate matter air pollution is estimated to contribute to around 278 deaths a year.³¹ Poor air quality also has a large cost in terms of health and social care use, and lost productivity.

3.1.16 The National Institute for Clinical Excellence (NICE) has reported the most cost-effective interventions as: integration of air quality in local planning decisions; low emission zones (restriction of heaviest polluting vehicles); changing to emission-controlled diesel or compressed natural gas; driver training to address driving style (reduce idling); smoothing traffic flows through speed reductions; and specific interventions to support active travel. All of these interventions are considered within the policies in the LTP.

3.1.17 To help protect people's health and the environment, District Councils in Gloucestershire measure air pollution against national air quality objectives. Generally, air quality in Gloucestershire is relatively good. However, the county has seven areas declared as Air Quality Management Areas (AQMAs) which are all based upon congested highways. Gloucestershire Air Quality and Health Partnership has developed the Gloucestershire Air Quality and Health Strategy that sets out the strategic approach to improving air quality and mitigating its

impact on health. The strategy has been developed to be delivered through a partnership approach across agencies, professionals and members of the public who are active in Gloucestershire.

3.1.18 Noise can also have major implications for quality of life, health, economic prosperity and the natural environment. The government estimates that the annual social cost of urban road noise is up to £10 billion³³. Previous mapping prepared by DEFRA suggested those at greatest risk in Gloucestershire from noise pollution live along major transport corridors such as the M5, M50, A46 and A417.

3.1.19 As a local highway authority, GCC has a responsibility to adopt approaches to controlling the impact of noise from road traffic, including:

- Control of noise at source (including vehicle emission limit values)
- Planning controls through transport and land use planning mechanisms
- The use of Construction Management Plans or Quiet Delivery plans
- Compensation and insulation in the case of new or improved highways
- Road maintenance

3.1.20 Other factors which impact on the environment include severance, visual intrusion of traffic and transport infrastructure, and water borne pollution from highway drainage. These factors should be considered in the design and management of transport infrastructure, taking account of the Gloucestershire Highways and Biodiversity Guidance to meet its statutory duty to conserve biodiversity³⁴.

³⁴https://glostext.gloucestershire.gov.uk/documents/s52324/Gloucestershire%20Air%200 uality%20and%20Health%20Strategy%20v.%204.pdf

 $[\]frac{\textbf{34}}{\textbf{www.gloucestershire.gov.uk/media/19592/hbg-highways-biodiversity-guidance-final-v12.pdf}}$



http://glostext.gloucestershire.gov.uk/documents/s44845/Appendix%20A%20-%20Air%20Quality%20and%20Health%20in%20Gloucestershire%20Report.pdf https://glostext.gloucestershire.gov.uk/documents/s52324/Gloucestershire%20Air%20Q

³³ www.gov.uk/guidance/noise-pollution-economic-analysis

Policy LTP PD0.2 – Local Environmental Protection

GCC will work with District Councils and other partners; to minimise the impact of transport on landscapes, townscapes, heritage assets and the wider historic environment; to protect and enhance the water environment, air quality, soils and agricultural resources; to reduce the risk of flooding and the levels of noise pollution; to achieve biodiversity net gain and conserve geodiversity and the historic environment, from traffic or improvements on the highway network.

GCC will do this by implementing the following policy proposals:

- Work with District Councils to improve air quality, levels of noise and light pollution, including reducing severance and visual intrusion by adopting the latest good design practice (e.g., Building with Nature) and to develop, adopt and deliver Air Quality Action Plans required where Air Quality Management Areas have been declared, in relation to transport emissions. This should include plans for decreasing solo car use and the promotion of walking and cycling active modes of travel.
- Ensure that developers or scheme promoters, through the planning process, undertake assessments to determine if their develop ment or scheme will be subject to or create poor air quality or noise in excess of the thresholds as a dvised by Government and to commit to mitigating those effects that address traffic impacts on the natural environment and designated sites, in particular those within 200m of a main road.
- Protect and avoid harm to geodiversity and biodiversity associated with transport infrastructure in addition to taking opport unities to enhance the natural environment wherever practicable.
- Comply with Gloucestershire Highways Biodiversity Guidance or subsequence guidance and the Green Infrastructure Pledge.
- Seek contributions from industry, government and developers towards the costs of installing electric vehicle and bike charging points where such facilities will help to ensure that the opportunities for sustainable transport modes are taken up.
- Promote energy saving, water conservation, improvements in surface water run-off and provision of Sustainable Drainage Systems (SuDS), in both new schemes and retrofitting of existing schemes (where opportunities arise), recycling and use of sustainable materials in construction and operation of transport projects encouraging whenever possible local suppliers that use sustainably-sourced and locally produced materials.
- Promote the use of increasingly more sustainable waste management practices with transport-related infrastructure projects in line with the waste hierarchy.
- Align with the Gloucestershire Air Quality and Health Strategy.
- Tackle air quality issues in the county by promoting agile working and reducing the need to travel and by enabling active travel and low emission vehicles and the supporting infrastructure.
- Where developers produce Health Impact Assessments as part of their application, these consider the impact of travel and transport both positive and negative on health and wellbeing of residents and communities.



- Support environmentally sustainable transport access to the natural environment for both local residents and visitors.
- Work with Parish Councils and communities to identify and seek solutions that minimise the impact of proposed developments.
- Transport development proposals will need to demonstrate that significant adverse impact upon public rights of way, other routes with public access and recreational highways will be minimised, and suitable permanent diversions or alternative routes are provided, if necessary. Temporary diversions or alternatives may be required during construction.
- Working with partners and other statutory bodies, such as Historic England, the council will aim to minimise the impact of transport on heritage assets and protect and enhance the quality environment including buildings, structures, landscapes, townscapes and archaeological remains and their settings and ensure that due regard is given to the need to undertake archaeological investigations.
- Promote transport schemes which tackle traffic congestion in Gloucestershire's historic villages, towns and city.
- Improve physical access and/or interpretation, understanding and appreciation of the significance of heritage assets as part of transport development where appropriate.
- Mitigation will be considered for the transport interventions that have significant adverse impact on water availability or quality or fail to achieve the targets of the Water Framework Directive.
- Measures will be taken to prevent soil from being adversely affected either physically or by pollution during transport inter vention development.
- Working with its partners and other statutory bodies, such as the Environment Agency and Natural England, Gloucestershire will use natural processes to promote greater flood resilience to the highway network, ensuring SuDS and Natural Flood Management (NFM) are employed wherever possible.
- Realise opportunities for green infrastructure enhancement associated with transport infrastructure resilience and performance through both the integration of green, blue and grey infrastructure, and the delivery of green naturally-based solutions to aid mitigation requirements. The latter includes carbon, nutrient and water capture to provide cleaner air, improved water quality, more sustainable flood risk management and increased resilience to climate change, as well as other place-making and visitor economy objectives. The latter includes carbon reduction, clean air, flood risk management and increased resilience to climate change, as well as other place-making and visitor economy objectives.
- Maximise the opportunities for transport interventions to contribute towards major new initiatives, including Nature Recovery Networks and large-scale woodland creation and other similar measures that would help to achieve biodiversity net gain targets.
- Support Natural England's work on the Green Transport Corridors and Green Infrastructure Agreements, as well as their recommendations of the Linear Infrastructure Network, ensuring that within or adjacent to the rail network and Major Road Network, green infrastructure can deliver biodiversity gains, ecological connectivity and ecosystem services.
- Where possible, protect geological sites from degradation and removal caused by transport interventions and where practicable provide enhancements to the geological site and to its accessibility.
- Any potential direct or indirect impacts that may arise from new or upgraded transport interventions will be appropriately as sessed, mitigated, and/or compensated for, in line with existing best practice and relevant legislation on statutory and non-statutory designated sites that are protected for their importance for nature conservation.



- Commit to following the Habitats Regulations Assessment process for the protection of the Natura 2000 (European) sites and Ramsar sites.
- All overarching and mode policies will take this policy into account.

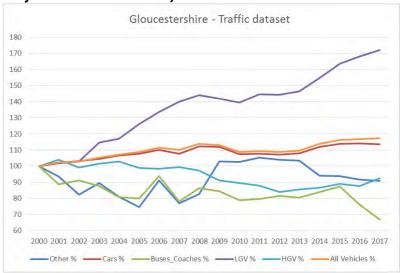
Maximising Investment in a Sustainable Transport Network

3.1.21 Improving connectivity to support the County's economy is at the heart of any ambitions to invest in transport infrastructure and services. A recent report commissioned by GCC discussed the potential GDP uplift of improved transport connectivity to our neighbouring authorities, based on improved business to business connectivity only. ³⁵ Gloucestershire, with Local Plans in combination is seeking to provide around 60,000 new homes to 2031, and to support a similar number of new jobs through the allocation of approximately 300 ha of employment land.

3.1.22 Over the period 2016 to 2031, the population of Gloucestershire is expected to increase by almost 63,000 people (10.1%). By 2041 the population will have increased by 92,200. The dominating feature of these projections (above the national average) is the sharp increase in the population 65 years and above. The proportion of those in that age group will have risen from 20.8% (2016) to 28.9% (2041) of the population of Gloucestershire. Gloucestershire's LTP will need to reflect the mobility needs for people over the age of 65.

3.1.23 Along with population growth, annual average daily flows (AADF) in Gloucestershire for all major roads has increased by 17% between 2000 and 2017³⁶ as illustrated in Figure PDO (E).

Figure PD0 (E) – Gloucestershire Annual Average Daily Flow Profile (all major Roads 2000 – 2017)



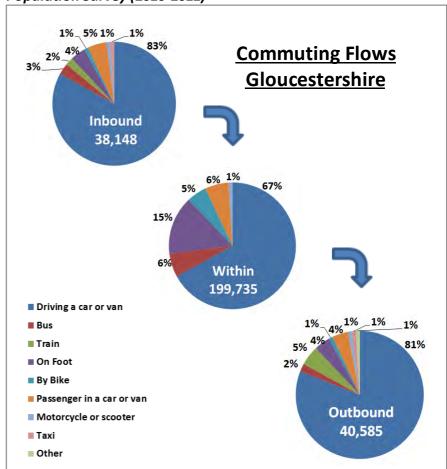
 $^{^{\}rm 35}$ Gloucestershire Connects: the role of strategic road and rail connectivity in Gloucestershire by 2050





3.1.24 More than 80% of journeys to work for people residing in Gloucestershire are made within the County, as seen in Figure PDO (F). This is a reflection of Gloucestershire's strong local economy and high levels of employment. This self-containment highlights the potential for short distance trips to transfer where appropriate to non-car modes, such as active or public transport.

Figure PD0 (F) – Gloucestershire County Commuting – Annual Population Survey (2010-2011)

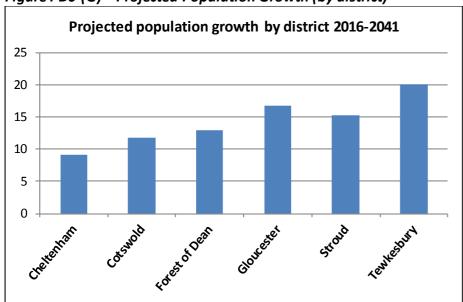


³⁷ Based on 2011 Census data



3.1.25 Population growth will be focused in and around the Joint Core Strategy (JCS) area. Figure PDO (G) shows Tewkesbury and Gloucester are projected to have the largest percentage increases over the 25 years to 2041 (21.05% and 17.5% respectively), whilst Cheltenham is projected to have the smallest increase (9.2%).³⁸

Figure PD0 (G) – Projected Population Growth (by district)

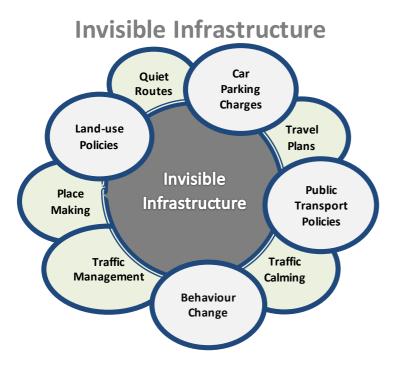


- **3.1.26** GCC's strategic highway network must be resilient to growth opportunities and new development should be allocated and supported at sustainable locations, with easy and cost effective access to public transport and a high propensity to walk and cycle. New development offers both a challenge and opportunity to improve local transport networks, better mobility for non-car users and active travel practices by overcoming barriers and improving connectivity, whilst taking due regard for vulnerable users and compliance with the Equality Act.
- **3.1.27** Diversion of traffic from the strategic road network onto inappropriate local roads, can erode the attractiveness of some informal routes used by people walking and cycling, so that highly valued undesignated routes simply disappear. As a result, the car can become the preferred mode of travel. If direct, quiet links through and between places are identified and safeguarded, non-motorised trip rates may increase without the provision of extensive dedicated walking and cycle-specific infrastructure. 'Invisible infrastructure' is a term applied to infrastructure and measures which are not specifically active travel but which contribute to the creation of a walking, mobility friendly and cycle-friendly highway environment. This infrastructure can include:
 - Land-use and development policies that reduce the need to travel and decrease reliance on private car use
 - Discourage motorised traffic within the central areas of towns and cities, such as physical restraint or charging
 - The management of car parking through cost and availability, workplace parking charges and residents' parking
 - Traffic management and calming measures including vehicle exclusion, home zones, 20 mph zones & 20 mph speed limits
 - Public transport policies, infrastructure and services that create a viable and sustainable alternative to car use and facilitate multimodal journeys

https://inform.gloucestershire.gov.uk/media/2082298/overview - population projections for gloucestershire 2016-41-2.pdf



- Workplace and school travel plans, and individualised travel marketing, encouraging alternative modes to the car
- Introduce environments that are tailored to non-car modes
- The informal pedestrian and cycle network of quiet routes and 'cut throughs'.



- **3.1.28** Funding streams will be identified to support the delivery of core strategies and transport schemes including developer funding, the Community Infrastructure Levy (CIL), central government grants and local capital funding for transport infrastructure.
- **3.1.29** Investment in transport infrastructure is crucial to provide a modern reliable transport network that meets travel demand whilst reducing transport related carbon emissions and ensuring communities are well connected. There are, however, challenges to maximising investment in Gloucestershire's transport infrastructure. These are:
 - Rural areas do not have the population density to help generate the critical mass needed to attract and secure transport investment
 - The County Council does not necessarily have control over the times cales for s 106 agreement contributions which are normally dependent on the progress of the development. Other factors such as the size and complexity of the development may be relevant
 - There is an infrastructure funding shortfall identified in Infrastructure Delivery Plans (IDPs) which underpin all Core Strategies and Local Plans. IDPs are regularly reviewed and updated, and where infrastructure is identified within them as a requirement of development, such appropriate funding will need to support the development
 - The need to ensure efficiency and value for money
 - GCC needs to cooperate closely with the District Councils to ensure that strategic transport priorities are reflected within and paid for by CIL, and s106 agreements.



Policy LTP PD 0.3 – Maximising Investment in a Sustainable Transport Network

GCC will work with partners to ensure the delivery of a financially sustainable transport network, through maximising opportunities for inward investment.

- Work with our partners, the District, Parish and Town Councils, GFirst Local Enterprise Partnership, Western Gateway Sub-national Transport Body, Highways England, Homes England and Department for Transport and any other necessary government bodies, to provide relevant information on transport issues to inform Development Plans and support the delivery of the Local Enterprise Partnership's Strategic Economic Plan and Local Investment Strategy.
- Work in partnership with District, Parish and Town Councils, neighbouring Highway Authorities, the GFirst Local Enterprise Partnership, Western Gateway Subnational Transport Body, Highways England, Homes England and Department for Transport and any other necessary government bodies, to maximize opportunities for inward investment as funding opportunities arise, in order to develop the County's transport network.
- Secure contributions from developers towards priorities and schemes contained within the Local Transport Plan in line with the policies and tests outlined in the National Planning Policy Framework (or any subsequent legislation).
- Where the Community Infrastructure Levy (CIL) or similar approach is introduced by Local Planning Authorities in Gloucestershire, GCC will work with District Councils to ensure strategic transport priorities are reflected within and paid for by CIL, and s106 agreements.
- Where possible, transport strategies arising in support of development should have regard to the potential to achieve betterment for trips originating near the development, and facilitate or synergise with priorities for investment with neighbouring authorities and transport providers including; Highways England, bus operators and Train Operating Companies. This should be considered on the basis of travel corridors, such as the M5, A46 or other locally-strategic corridors.
- Work with District Council, partners and stakeholders to seek to ensure that land or routes that may be required for transport uses during the LTP period are protected from any development that may compromise the use of that land in future for transport purposes.
- Explore opportunities to generate revenue through advertising on highway assets (roundabouts, street lights etc.).
- Promote schemes that encourage and enable active and sustainable travel options, whilst taking due regard for vulnerable users and the Equality Act.
- Developers are required to contribute financially and/or to the design and implementation of sustainable transport, in order to mitigate against the impacts of proposed new development on the transport network. Through including at the design stage facilities, routes and infrastructure for electric vehicle charging, homeworking, connectivity for walking and cycling, provision of local amenities and access to public transport, so sustainable trips are increased and dependence on motor vehicles reduced.
- New development is required to contribute financially and/or to design to facilitate and encourage active travel (walk/cycle and mobility use)) through ensuring seamless connectivity to local amenities and public transport.
- New development is required to contribute financially and/or to the design for the provision of; mass public transport provision between urban conurbations, and



- community transport or any other form of mass transport provision and/or infrastructure where there is a current or potential demand where a standard bus service is not a viable long term solution.
- Large/medium scale developments are required to contribute financially and/or to the design for the provision of proposals to ensure bus priority (and bus stops) and for the provision of Strategic Transport Interchange Hub(s) or Local Interchange Hub(s), for the betterment of all public transport users. Bus priority on new development and accessing core bus corridors should be for the efficiency of buses and other appropriate priority users, over car trips.
- Developers are required to contribute financially and/or in the design of their proposals, to provide high quality interchange facilities (e.g. secure cycle parking, bus priority) and passenger facilities at rail stations, segregated active travel routes (walk/cycle and public transport) for new development to access to the nearest mainline rail station by the most accessible direct route, that serve their development.
- Under the Highways Act 1980, any developer or scheme promoter, that delivers highway infrastructure to be adopted by GCC, must fully comply with the Council's Enhanced Materials and Commuted Sum Policy (MfGS), whereby appropriate materials are specified and the full costs of implementation and future maintenance are factored in to the scheme budget.
- All overarching and mode policies will take this policy into account.

Integration with Land Use Planning

3.1.30 Development patterns that reduce the need to travel long distances and encourage active travel modes are an essential element of sustainable development. The location and nature of all new development, commercial and residential, has a major bearing on both the need to travel and how people choose to travel. Digital connectivity will also be central to future transport patterns with the potential to reduce the demand for travel. Fastershire is a partnership to bring faster broadband which extends beyond technology, to include social and digital inclusion and a business support programme, FasterBusiness.³⁹

3.1.31 Gloucestershire's housing and employment growth, will be in the majority in and around the urban centres of Gloucester and Cheltenham. The housing requirement for Gloucester, Cheltenham and Tewkesbury is set out in

the JCS, which was adopted in December 2017. Local Plans identify further housing requirements for the other districts: Cotswold (8,400), Forest of Dean (6,600) and Stroud (11,400). The agreed provision for the county is therefore 61,575 houses by 2031. The JCS identified a need for additional housing and employment consisting of 35,175 new homes and 192 hectares of employment land creating 39,500 new jobs to 2031, however it was adopted with a commitment for immediate review and as such these totalsmay increase. Local plans for Cotswold, Forest of Dean, and Stroud have approved employment land of 24 hectares, 25-30 hectares, and 50 hectares respectively. Figure PD0 (H) shows the anticipated projections for growth to 2031. In addition to the significant growth already identified in the existing Local Plans, the Stroud Local Plan is currently under review and aims to provide for at least 638 new homes per year compared to 456 homes per year in the adopted Local Plan, a 40% increase⁴⁰.

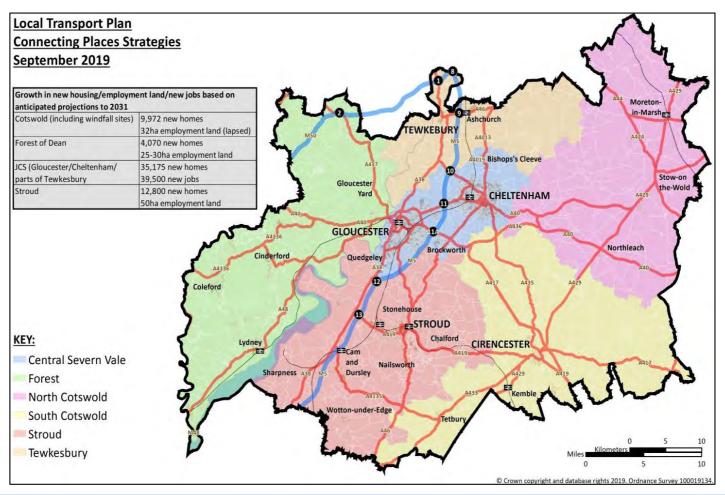


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- **3.1.32** Coordinated approach to working with our partners and developers is essential to secure improvements to local, multi modal, transport networks to mitigate the impact of new development on the transport network and the environment. Developments are to be designed as walkable environments to encourage sustainable travel. Extending, diverting or creating new bus routes to serve new development sites is difficult to implement, but where applicable developer contributions will be sought. Where it may not be appropriate to divert a bus service through a development, instead, the provision of good, direct pedestrian access from the development to the existing route might be the most effective solution. Where there is no existing nearby bus service, it may be appropriate to consider alternative demand responsive solutions, such as community transport, taxis & private hire vehicles, especially in the early stages of a development, before it reaches a point where a conventional service can be introduced and sustained.
- **3.1.33** Re-development of strategic sites close to urban centres offers opportunities for the encouragement of active travel through the provision of convenient routes, which increase permeability. This will be achieved by designing in walking, mobility scooter and cycle-friendly measures from the outset. Distance is a significant factor in deciding how to make a journey, the longer the perceived or actual triplength or journey time the less likely it is that cycling or walking will be chosen over the car. One way of providing a 'walking and cycling advantage' is to increase permeability by allowing people walking and cycling to use routes not permitted for motorised vehicles. Journey times may be significantly reduced by opening up 'cut-throughs' from one road to another or by providing paths across green spaces. These small schemes provide value for money, giving significant gain for comparatively little investment. New development can help fund or strengthen these linkages.
- **3.1.34** Integration between land use planning and transport is central to achieving the sustainability goals of the LTP and the LTP has been informed by the Infrastructure Delivery Plans (IDPs) of the adopted Local Plans as well as the latest available transport evidence for the emerging reviewed Local Plans.



Figure PD0 (H) – Gloucestershire Growth to 2031 (proposed)





Policy LTP PD 0.4 – Integration with Land Use Planning and New Development

GCC will work with local planning authorities and developers to develop a clear spatial strategy for Gloucestershire based on our long term sustainable transport and growth ambitions, which will deliver large scale development, designed and developed in a sustainable manner, ensuring that sustainable transport principles are embedded into the planning, design and future development of these strategic sites as a core fundamental feature from the outset. This will deliver a step change in sustainable land use planning, ensuring that all new development is located in places with high levels of sustainable transport accessibility and services, and reduces car dependency. GCC will support development that enables sustainable travel choices and will require that developers of new medium/large sites submit site master plans and ensure that transport considerations are integral to the design of schemes and contribute to making high quality places, in accordance with Gloucestershire's Climate Change Strategy and the emerging Spatial Strategy, Carbon Reduction Targets, NPPF and MfGS.

- Development will be resisted where the impact on the transport network requires retrofitting or where safe and suitable access is not provided. GCC will support new compact, high density mixed use development of new sites already served by public transport over other more remote and inherently less sustainable locations.
- Collaborate with District and Parish Councils to ensure that new development is appropriately located next to the existing transport network and ensure permeability within the development to inclusive public transport with a high propensity to walk, cycle and be mobility friendly. Seek solutions that mini mise the impact of proposed developments, (e.g. through Parish and Neighbourhood Development Plans).
- Support multi-functional green and blue infrastructure to underpin the overall sustainability of new development to perform a range of functions including flood risk management, accessible green space transport corridors, climate change adaptation and supporting biodiversity net gain.
- Where developers produce Health Impact Assessments as part of their application, these should consider the impact of travel and transport both positive and negative on the health and wellbeing of residents and communities in the broadest sense..
- Developers of medium/large scale new development are required to submit to GCC at outline or masterplan stage, full details of highway and access proposals. And, encouraged to consult early with GCC to agree design principles at pre-application.
- Developers are required to provide digital connectivity infrastructure suitable for future proofing to promote agile working in order to reduce the need to travel.
- Developers are required to provide an electric vehicle charge point network or alternative that complies with MfGS and Technical Specifications.
- Developers are required to assess the needs of all vulnerable road users within and associated with their development, in line with the government Road User Hierarchy, to substantially improve; the County's cycle and pedestrian network and the delivery of Local Walking & Cycling Infrastructure Plans (LCWIP) and where



- appropriate PRoW or multi-tracks, and meet improved design standards and audits; for example MfGS, LCWIP and other Context Reports and DfT LTN1/20 cycle design guidance and best practice, as well as addressing the needs of those with mobility impairments.
- Developers are required to identify, protect and exploit opportunities for sustainable transport measures ahead of measures to address highway capacity deficit. This should be based on both green infrastructure principles and active design principles including 'invisible infrastructure', whereby the spatial grain and layout invites slow speeds and direct route priority with natural surveillance and lighting for active travel (walk, cycle, mobility friendly & public transport) over other modes.
- Developers are required to use innovative design (including meeting with Building with Nature standards) to enhance the aesthetic appeal and desirability of using high quality multi-modal interchange facilities (e.g. inclusive public transport facilities).
- Developers are required to identify and safeguard existing and potential quiet highway routes and connections, within and between settlements, where walking /cycling and mobility use are to be promoted to support community connectivity and permeability, supporting multi-functional green and blue infrastructure.
- Ensure developers promote existing public transport infrastructure and realistic opportunities for travel choice are consistently and comprehensively promoted to residents, employers and visitors. Promote Mobility as a Service (MaaS), such as electric vehicle car clubs or car sharing, in order to encourage sustainable car use within new housing and employment developments and in association with businesses within Gloucestershire.
- All overarching and mode policies will take this policy into account.



Community Health and Wellbeing

3.1.35 In general, Gloucestershire's residents enjoy good physical and mental health and wellbeing. However, this overall picture hides health inequalities, where poor socio-economic circumstances lead to poorer health outcomes and impact on community safety. This can be seen, for example, in the gap in life expectancy between people living in the most and least deprived parts of the county ⁴¹. Gloucestershire's current level of accessibility of key services is measured and mapped through **Inform Gloucestershire**.⁴²

3.1.36 Alignment of transport and health strategies, play a key role in securing health objectives through:

- Improving access to income, employment, housing, education, services, amenities, facilities and social networks crucial to maintain a healthy vibrant and cohesive community. Gloucestershire's current level of accessibility of key services is measured and mapped through Inform Gloucestershire.⁴³
- Influencing the quality of the urban environment (air quality, noise, severance and risk of collision) to achieve social, mental and physical health outcomes.
- Influencing lifestyle and travel behaviour to address many of the UK's key economic, environmental, social, mental and physical health issues, and associated care costs.

- **3.1.37** Inclusive transport is a national strategy (DfT 2018) and a priority for this Plan. GCC supports rail, bus and community transport operators serving Gloucestershire's vulnerable and disabled passenger users to provide easily accessible, convenient and affordable transport. GCC has invested in Real Time Passenger Information and more recently in GlosTalk a mobile phone application designed to assist bus passenger users, withinformation provided in accessible formats. Gloucester Bus Station provides an accessible interchange hub and access is being improved at both Gloucester and Cheltenham Railway Stations through 'access for all' and GFirst LEP growth deal funding.
- **3.1.38** A switch to more active modes of travel (walking and cycling) and away from the private car usage can provide opportunities for physical activity as an integral part of daily activities. Heart disease, respiratory disease, stroke and cancer are amongst the most common causes of death in the UK. Adults who are physically active have a 20-30% reduced risk of premature death and up to 50% reduced risk of developing major chronic diseases such as coronary heart disease, stroke, diabetes and cancer.

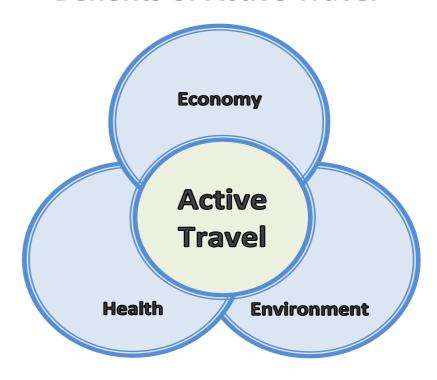
https://inform.gloucestershire.gov.uk/



⁴¹ https://fingertips.phe.org.uk/profile/health-profiles/area-search-results/E10000013?place name=Gloucestershire&search type=parent-area

3.1.39 Increasing levels of physical activity across the whole population are an explicit goal of transport planning and investment. Both have health and wellbeing benefits. Active travel and high quality public transport services should be prioritised and walking and cycling routes should be safe and form a continuous accessible network⁴⁴. Planning for active travel will provide 'triple wins' for the economy, health and the environment. Environments promoting and supporting physical activity as an integral part of daily activities will achieve and sustain better health outcomes and narrow the gap in health inequalities. This policy therefore has strong links to the walking and cycling policy documents, supported by DfT's vision for walking and cycling – Gear Change.⁴⁵

Benefits of Active Travel



⁴⁵ DfT - Gear Change -

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/904146/gear-change-a-bold-vision-for-cycling-and-walking.pdf



⁴⁴ www.theguardian.com/society/2007/aug/13/health.schools

Policy LTP PD 0.5 Community Health and Wellbeing

GCC will work with partners to improve community health, wellbeing and safety by encouraging greater numbers of people from all social and economic groups and including those with disabilities, to use safe and affordable multi-modal travel options (e.g. by walking, cycling or by public transport) for short distance trips; helping children and adults, including families and those economically and physically disadvantaged to enjoy more independent, physically active lifestyles; improving air quality; and connecting people to services, employment, housing, education, health services, social and leisure amenities to allow equality of opportunity to health, social and economic wellbeing and remove barriers that can create social isolation.

- Identify opportunities for transport and health outcomes and resources to be aligned to attain cross -sector health benefits and cost savings.
- Ensure Health Impact Assessments (HIAs) are used where appropriate either within a Strategic Environmental Assessment (SEA) or as a standalone exercise to understand the impact on health and wellbeing (and on health inequalities) in its broadest sense and mitigate negative impacts and enhance positive impacts where possible.
- Align with; the emerging Climate Change Strategy, the Gloucestershire Sustainable Energy Strategy, the Air Quality & Health Strategy for Gloucestershire, the County's Joint Health and Wellbeing Strategy and the strategic priorities set out the Police & Crime Commissioners' Plan.
- Support 'Safer Gloucestershire' to create a safer county.
- Investigate community based vehicle restriction zones that will benefit communities and protect vulnerable highway users from a safety and health perspective, during peak congestion periods.
- Improve inclusive public transport accessibility, including demand responsive public and community transport options.
- Deliver campaigns to increase cycling, walking and use of public transport across all segments of the population and target those with the greatest propensity to use alternatives to the car.
- Reduce both actual and perceived risk to personal safety by encouraging the adoption of safeguarding policies by transport operators and by improving pedestrian and cycle infrastructure by making it feel safe to use and visually appealing.
- Integrate pedestrian, cycle and horse riding routes with the road network where it is safe to do so to promote a cohesive path network and, where a route has to cross a busy road, provide a safe crossing point.
- Ensure walking and cycling routes are safe and form a continuous accessible network accessing town centres, residential areas, employment areas, and routes to schools.
- Support the Rights of Way and Countryside Access Improvement Plan where there is an identified need to accommodate; less mobile users, people walking and cycling, and horse riders, within the existing Rights of Way network and Other Routes with Public Access.



- Encourage people away from busy routes, where traffic flows or speeds cannot reasonably be reduced, by agreeing measures to s afeguard quieter and safer routes and improve inclusive accessibility to and within green space, rural and inter-urban settlements.
- Encourage the use of the rights-of-way network for utility journeys, particularly in the urban fringe and between some villages by ensuring their safety and accessibility.
- Encourage developers to include both informal and formal inclusive playable space in new development and engage children and the local community in the design process to ensure streets are safe for children to play, and those walking, cycling and other mobility users are encouraged and supported through inclusive street design and development layout.
- Identify and exploit opportunities to a lign active travel objectives with wider stakeholders' priorities e.g. Gloucestershire Healthy Living and Learning (healthy schools programme), healthy lifestyles service priorities, Active Gloucestershire 'we can move' social movement, workplace health & wellbeing and productivity.
- Investigate community based vehicle restriction zones that will benefit communities and protect vulnerable highway users from a safety and health perspective, and introduce speed limits in accordance with the current national guidelines and prioritise them based on available evidence, including 20mph zones.
- Recognise the benefits to health and wellbeing from other policies that protect and enhance; biodiversity net gain, blue and green infrastructure, landscapes, townscapes and the historic environment from the adverse effects of transport.
- All overarching and mode policies will take this policy into account.



Influencing Travel Behaviour Change

- **3.1.40** Travel behavioural change is at the heart of the aims and objectives set out in this Plan. Gloucestershire's <u>Thinktravel</u> initiative aims to inform, educate and inspire people to make journeys in a smarter, more sustainable way and therefore reduce single occupancy car journeys on the transport network. The <u>Thinktravel</u> initiative is supported by an online information portal providing information about sustainable travel options such as walking, cycling, using public transport and car sharing aimed at individuals, communities, schools and businesses.
- **3.1.41** As part of the Local Sustainable Transport Fund (LSTF) delivery, segmentation analysis was used to determine, street-by-street (in Cheltenham and Gloucester), people's probable propensity to change travel habits and to what modes. ⁴⁶ This is particularly relevant in a county with large rural areas and an urban core, which will require very different approaches to the challenge of convincing people to travel more actively and sustainably.
- **3.1.42** Transfer from car to other modes is most likely in larger urban settlements with high quality, reliable and frequent public transport. Levels of walking and cycling are also strongly influenced by feelings of personal safety. To enable greater awareness of travel choice, each CPS area will require its own bespoke approach to behavioural interventions covering local cultural, social and economic factors. As these types of measures rely so heavily on human choice and perception, it will be essential for Local Plans and, importantly, Neighbourhood Plans to embed smarter choices tools within these localised strategies.

- **3.1.43** Reliable, up to the minute travel information on travel conditions can influence travel behaviour. GCC will increase the role of technology to assist in the dissemination of journey information. There are several tools available to support this and, as funding becomes available, GCC will aim to upgrade its travel information offer through the <u>Thinktravel</u> web portal.
- **3.1.44** GCC will also continue to work with schools on their travel plans whilst promoting and encouraging young people through our <u>Thinktravel</u> programme to take up active travel modes as an alternative to car travel, where safe to do so.



⁴⁶ Segmentation or mosaic analysis considered propensity for mode shift at a street level; Propensity is affected by the extent to which residents can use a mode other than the private car to make some of their daily journeys combined with the extent to which they might want to.



Policy LTP PD 0.6 Thinktravel - Influencing Travel Behaviour Change

GCC will continue to use the '<u>Thinktravel'</u> brand and associated marketing and information tools to ensure we carry out a range of travel awareness initiatives to influence travel behaviour change and promote the benefits and use of sustainable modes of transport.

- Work with its partners to reduce single occupancy private caruse by promoting alternative travel choices to individuals through a variety of media channels.
- Deliver campaigns to increase cycling, walking and use of public transport across all segments of the population and target those with the greatest propensity to use alternatives to the private car.
- Work with local businesses, educational establishments and housing developers to secure appropriate travel plans to encourage sustainable travel and to investigate and implement measures to overcome specific barriers.
- Within Travel Plans, support the promotion of walking & cycling for journeys under 2km and 5km respectively. Promotional material will be issued alongside infrastructure improvements using methods that have been tested nationally and applied through the <u>Thinktravel</u> programme.
- Encourage operators to provide discounted fares for young people, families and regular travellers, and other incentives to increase patronage.
- Ensure accurate service availability, timetable information and location information is available at all bus stops and railway stations within the county and through the Thinktravel website (www.thinktravel.info).
- Introduce Real Time Passenger Information systems, and improve the quality of information provided at passenger waiting facilities in conjunction with Thinktravel travel information apps and other mobile phone based technologies.
- Work with partners and providers to embrace technologies which support <u>Thinktravel</u> objectives such as charging points for electric vehicles, bike share schemes and SMART ticketing.
- Recognise the benefits to influencing travel behaviour from other policies that support health and wellbeing and protect and enhance biodiversity net gain, blue and green infrastructure, landscapes, townscapes and the historic environment from the adverse effects of transport.
- All overarching and mode policies will take this policy into account.



3.2. Public & Community Transport Policy Document (PD1)



3.2.1 Public and community transport services play a key role in enabling communities to function and will be at the centre of Gloucestershire's ambitions to reduce emissions. National data in 2018 showed that buses accounted for just 2.5% of greenhous e gas emissions (GHG), as opposed to cars which caused 55%. They provide access to facilities and services, as well as offering an alternative to car use. In this document public transport refers to bus and coach transport, private hire vehicles, community transport and home to school transport. A separate rail policy document is covered in the Rail Policy Document (PD5).



Buses account for just 2.5% GHG emissions

- **3.2.2** Gaps in the bus network, access to public transport information and the value of bus travel in reducing carusage and congestion continue to be key issues. There is a prevailing sense that more investment is required to improve public transport networks to avoid Gloucestershire becoming disadvantaged economically, socially and environmentally; through unsustainable traffic congestion, under-utilised rail capacity; and inadequate bus services.
- **3.2.3** GCC recognises the need to improve rural and inter-urban connectivity and the LTP seeks to strengthen the overall mobility offer in rural areas, including conventional bus services on key routes, demand responsive bus services and wider mobility solutions. The identification of local Interchange Hubs will be a central component of a rural mobility strategy, as a focal point, where these mobility solutions come together and passengers can interchange.



- 3.2.4 New thinking will also be needed in urban areas, as town and city centres start to adjust to new roles, with less emphasis on being retail centres. It will be vital to ensure that new residential and commercial centres are located on or close to the existing bus network, such that they support and strengthen the commercial network, rather than dilute it. Tackling congestion and enabling modal shift to sustainable travel choices will be important to ensuring efficient and effective bus operations and the provision of services that are attractive to car users. Good quality bus priority measures will be central to this.
- **3.2.5** Congestion on the highway network disproportionately impacts on bus travel, not only by imposing substantial increases in journey times and reducing service reliability but also with the practicalities of stopping at, and pulling away from, bus stops in queues and heavy traffic. This creates i nefficiencies in the operation of bus services, in that more buses are required to maintain the same level of service. With congestion expected to worsen, a key expectation of this LTP Public and Community Transport Policy will be to help deliver secure sustainable transport networks in the face of forecast traffic growth, congestion and the climate change challenge.
- **3.2.6** The objective of the LTP Public and Community Transport Policy is to provide an attractive, reliable alternative and choice to cartravel. Achieving this will involve reviewing highway designations and working with bus operators to provide attractive services that benefit from measures that give priority over private transport as well as exploring technological opportunities to increase the attractiveness of demand responsive transport services.

Gloucestershire's Bus Network

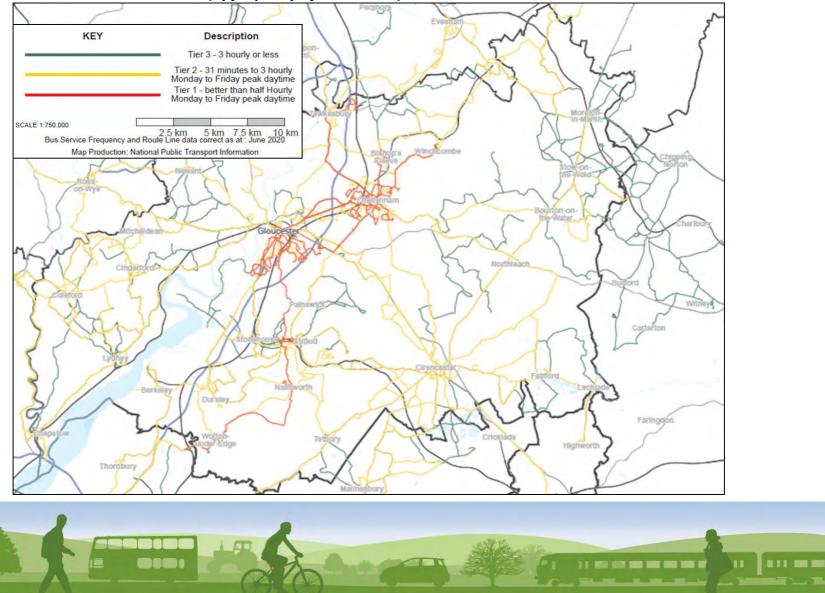
- **3.2.7** Local bus services play a key role in enabling communities to function and the local economy to prosper.
- **3.2.8** Figure PD1 (A), shows the basis of Gloucestershire's Bus Network and informs future investment decisions regarding the quality of bus infrastructure required on higher frequency routes to increase demand for these services. Conversely this map also highlights those parts of the county where infrequent services operate and reliability may be factor for people not choosing to use the bus.
- **3.2.9** The purpose of continuing to maintain and develop the bus network is three-fold:
 - To support the economy and growth by providing access to facilities and services for people with no alternative.
 - To support efficiency within society and the economy by offering travel choice for people with private transport.
 - To support measures to promote health and fitness and care for the environment.
- **3.2.10** Interchange between bus and rail is likely to be an opportunity for improvement in the future. Improved bus rail interchange is of particular value for residents that gravitate to centres outside of the county, such as Bristol, Birmingham and Oxford. GCC will also continue to work with neighbouring authorities to ensure that cross-boundary bus links are developed and maintained.
- **3.2.11** A large proportion of Gloucestershire's population is able to access the main urban centres during core commuting hours. The key challenges are ensuring that bus services provide coverage of both urban and rural areas in the county, providing connectivity with key services and employment and educational opportunities whilst being affordable and financially sustainable.



- **3.2.12** Travel provision in the county is also not always sufficiently flexible to cater for the range of travel demands outside of the 9am to 5pm day. Limited travel provision outside core business hours has implications for night time economies, shift workers and evening hour hospital access. This can undermine economic growth opportunities and drive social inequality issues if communities do not have equal opportunities to access employment, goods and services.
- **3.2.13** In addition to conventional bus services, community transport; private hire vehicles and taxis provide additional demand responsive provision where required. District Councils are the licencing authorities for taxis and private hire vehicles and GCC will workin partnership with them to bring about a uniform policy standard of service provision across the county, including support the ambition for ultra-low emission vehicles. Currently, private hire platforms such as Uber only operate in limited towns in Gloucestershire however, it is likely that these platforms will continue to grow in the future and GCC will investigate the impacts this will have on the counties transport system.
- **3.2.14** Looking into the future, bus and demand responsive transport services have an important role in the provision of MaaS applications, being the integration of various forms of transport services into a single mobility service accessible on demand, online or through smart cards and apps, which are able to offer contactless ticketing journeys, journey planning and integration with travel hubs including bike hire, taxis and car sharing schemes.
- **3.2.15** As we move towards a new model of provision, it will require significant resource, both interms of staff to carry out reviews and work closely with communities and other interested parties, and funding for technology to facilitate the provision of more on-demand types of service. A pilot "demand responsive" minibus service is currently proposed for two of the more remote areas of the county targeting both young people, for example college students, and older and disabled people, as well as commuters.



Figure PD1 (A) – Gloucestershire Bus Network (by frequency of bus services)



3.2.16 It's important for GCC to direct its financial resources effectively with the aim of improving the commercial viability of the network through the provision of complementary services and specific services that meet particular policy objectives, such as avoiding social exclusion or isolation. Access to education and training, employment, non-emergency health care and essential (food) shopping are considered priorities.

3.2.17 The Bus Network Standards in <u>Table PD1 (a)</u> sets out where subsidy and investment will be targeted. Tier 1 do not receive subsidy, this is targeted where most needed in Tier 2 & Tier 3 that serve inter-urban and rural areas of the county. The 'core' bus network is entirely within urban areas, and should be expected to run commercially every 30 minutes or less, where the existing and potential high frequency 'core' bus network, would be the priority for bus priority investment. As a result this is likely to involve a higher minimum peak frequency of every 15 minutes or better.

Table PD1 (a) - Bus Network Standards – towards an effective network

Core Services (Tier 1)	 High frequency core bus services (mostly commercial), on a route that is one or more of: Commercially operated (i.e. no GCC subsidy) High frequency (one bus every 30 minutes or less) High use (a minimum of 250,000 passenger trips per year) Inter-urban (operating between 2 urban areas of at least 20,000 population) Intra-urban (operating entirely within an urban area of at least 20,000 population)
Intermediate (Tier 2)	Frequent bus services (mixture of commercial and subsidised), on a route that is one or more of: Partially commercial (GCC subsidises a maximum of 50% of the route) Medium frequency (one bus every 31-180 minutes) Medium use (50,000-250,000 passenger trips per year) Part urban (serves at least one urban area of at least 10,000 population)
Supported Services (Tier 3)	Supported bus services (infrequent and mostly subsidised), on a route that does not meet any tier 1 or 2 criteria, likely to include: • Majority or entirely subsidised • Low frequency (2 buses per day or less) • Low use (under 50,000 passenger trips per year) • Rural (no urban centres of at least 10,000 population)



Policy LTP PD 1.1 - Gloucestershire's Bus Network

GCC will work in a concerted and focused way, across all functions, and in collaboration with commercial bus and coach operators in particular, to develop and maintain a comprehensive bus network across both urban and rural areas, in-line with the bus network standards. GCC will work with partners and communities to provide attractive and relevant opportunities for travel choice by bus and coach for residents, employers, and visitors, and work collaboratively to promote them as an alternative to the car to encourage increased levels of use.

- Collaborate with transport providers to provide an appropriate level of service throughout the day, evening and at weekends to link communities with employment, education, health services, retail centres and social/leisure opportunities and enable high levels of connectivity between bus and rail services.
- Work with neighbouring authorities and bus operators to provide attractive cross-boundary services to key local and longer-distance destinations outside the county, in particular seeking to provide relevant travel choices as an alternative to the car.
- Where services cannot operate on a commercial basis GCC may choose to subsidise those which are socially necessary, subject to the funding available.
- Support improved linkages between urban centres on key bus corridors, sufficient to offer a relevant choice. For locations not served by these corridors, access should be to the nearest Local Interchange Hub.
- Support Gloucestershire's most vulnerable and physically isolated residents and communities by providing the means for them to access the services they need including leveraging 'Total Transport' and wider flexible and demand-responsive service approaches to ensure that the maximum value is achieved relative to known expressed requirements.
- Develop the 'Total Transport' approach to utilise all appropriate forms of transport available in Glouces tershire before procuring individual transport solutions and encourage travel behaviour change.
- Encourage transport operators to invest in ultra-low emission vehicles and maintain the quality of their vehicles to ensure high quality bus fleet, VOSA compliant, has CCTV in operation, and where necessary on dedicated school & community bus services drivers must be DBS checked.
- Maintain the phased introduction of traffic signal based bus priorities measures at highway network pinch points.
- Deliver bus lanes and other bus priority infrastructure in alignment with <u>Thinktravel</u> cycling and walking objectives where this can be justified.
- All overarching and mode policies will take this policy into account.



Improving the Quality of Road Based Public Transport

- **3.2.18** Investing in Gloucestershire's bus network is critical, as poor bus connections, services and network efficiency undermines links between people, places and businesses.
- **3.2.19** Though buses already have low carbon emissions per passenger, investing in an ultra-low emission vehicle fleet for all public and community transport services will reduce the impact on climate change further and also prevent buses from contributing to air quality problems.
- **3.2.20** There is an increasing understanding of the value of investing in bus technology in terms of raising awareness of services being provided and the ease of use when customers access services. The use of smart phone apps and Real Time Passenger Information (RTPI) and public transport apps will increase awareness and confidence in the reliability of services, whilst the introduction of multi-operator SMART ticketing can reduce the barriers for existing passengers and attract new ones. Some 90% of the County's public service buses are equipped with contactless ticketing technology that has an influence on reducing barriers to bus travel, but 10% still have no contactless payment mechanism on bus. GCC will work with our major operators to seek to address this gap.



- **3.2.21** Continued investment in bus infrastructure is also essential for a functioning bus network. Gloucester Transport Hub is a recent example of bus infrastructure investment through GFirst LEP that has dramatically transformed bus users' experience, connecting rail and bus interchanges, and making improvements for people walking and cycling. The maintenance and upgrade of passenger waiting facilities providing RTPI, attractive shelters, clear stop flags and accessible information needs to continue to make bus travel an attractive travel option.
- **3.2.22** Bus Network Standards (<u>Table A</u>) focuses on where investment is required by targeting investment on high frequency routes and identifying those areas that have limited service availability.



Policy LTP PD 1.2 – Improving the Quality of Road Based Public Transport

GCC will encourage investment in public and community transport to increase patronage, improve safety and promote bus travel as a viable alternative to the car.

GCC will do this by implementing the following policy proposals:

- Work in partnership with local communities to maintain the quality of waiting facilities and their surrounding environment
- Encourage transport operators to invest in ultra-low emission vehicles and maintain the quality of their vehicles to ensure high quality public and community transport fleet. To maintain the phased introduction of traffic signal based bus and cycle priority measures at highway network pinch points along strategic corridors.
- Maintain the phased introduction of Real Time Passenger Information systems where it is technically and financially viable to do so and; improving the quality of information provided at passenger waiting facilities, the Thinktravel website and other travel applications that may be provided through mobile phone based technologies. Real time displays will be prioritised for stops in market towns and interchange Hubs.
- Work in partnership with District Councils, Highways England, the Local Enterprise Partnership, developers and Department for Transport to seek investment in the County's transport network as funding opportunities arise.
- Work with our major operators to address the gap in contactless ticketing and help create seamless transfer between public transport modes.
- Reduce both actual and perceived risk to personal safety by encouraging transport operators to adopt safeguarding policies and by improving public transport infrastructure so that it feels safe to use and visually appealing.
- All overarching and mode policies will take this policy into account.

Bus Priority

3.2.23 Bus priority facilitates the movement of buses along congested routes, helping to maintain punctuality. Gloucestershire continues to promote bus priority in terms of bus lanes and bus gates. Other bus priority measures include giving buses priority at junctions. All such measures provide some advantage to buses over the car in terms of travel time, which can increase their attractiveness. Consequently, bus priority measures and improvements in bus technology will not just improve bus journey time reliability, but also the efficiency of the highway.

3.2.24 While there are benefits to extending the user groups that have access to bus lanes, there are a number of implications and safety issues that result from this. Consideration must be given to the interaction that all the exempted vehicles have on each other and also any pedestrian and bike movements adjacent to or across the bus lane. A review of other local authorities' approaches to the use of bus lanes has found that there is no national or consistent approach, although the majority of authorities reviewed have tended to keep the use of bus lanes to local buses, taxis and pedal cycles only. Some authorities also allow motorcycles. A balance needs to be struck on the number of vehicles permitted to use bus lanes as the more vehicles permitted, the more



chance for delays to be incurred by the buses that the lanes were intended to assist. Consideration of bus lane width can be a contributing factor to multi use of bus lanes.

Policy LTP PD 1.3 – Bus Priority

GCC will manage and develop bus priority to facilitate the free movement of buses along congested routes, ensuring the safe movement of all highway users.

- Consider locations where it would be beneficial to introduce further bus priority measures, including the removal of general highway capacity, in order to improve the attractiveness of public transport over the car.
- Restrict the use of bus lanes to the following users:
 - Buses and coaches
 - Taxis (Hackney carriage) and Private Hire Vehicles may be permitted to use bus lanes on County Council maintained highways, where local circumstances allow and the impact on other users is minimal.
 - o Pedal cycles
 - Emergency service vehicles
 - o Motorcycles, where it is possible to provide a consistent route approach and following a robust risk assessment and the use of guidelines.
- Investigate appropriate multiple occupancy vehicle users of bus lanes.
- Investigate bus priority on 'core' bus corridors using 'invisible infrastructure', giving priority to sustainable travel modes on direct routes over other vehicles.
- Adhere to the standard width of 4m for the implementation of new bus lanes where feasible, to minimise the risk of incidents with other road users. The minimum bus lane width should be 3m, where buses should follow a cyclist until there is space in the adjacent lane to overtake.
- The use of bus lanes will be managed by Traffic Regulation Orders (TROs) and enforced by the police or by the use of Automatic Number Plate Recognition (ANPR) cameras operated by GCC. Where TROs are broken by road users GCC will use a civil enforcement process to administer fines.
- All overarching and mode policies will take this policy into account.



Coach Travel

3.2.25 Coach travel plays a key role in providing long distance road based public transport options and can support the County's bus network, connect to interchange hubs intowns and cities, and provide for tourism into the county. The majority of long distance services, which provide an alternative travel choice to the car and train mainly for leisure and recreation purposes, are provided by National Express and Megabus, linking Gloucestershire with destinations such as Bristol, Hereford, the West Midlands and London as well as to airports and rail connections to Europe and Ireland.

Policy LTP PD 1.4 – Coach Travel

GCC will work with coach operators to provide a reliable and efficient coach network that supports the County's bus network, connects interchange hubs in towns and cities, and provides for tourist day trips to key locations in and to Gloucestershire.

- Work with coach operators and partners to enhance the role of coach travel to service transport interchange hubs and provide long and short distance connectivity between key destinations, such as towns, cities and areas of key employment.
- New large/medium scale development that generates significant coach trips, are required to include sufficient coach parking, to be determined by GCC in agreement with Local Planning Authorities.
- Work with transport providers to provide an appropriate level of service throughout the day and at weekends.
- Improve connectivity between bus and rail services by allowing bus services longer waiting times at stations where feasible.
- Encourage transport operators to invest in ultra-low emission vehicles and maintain the quality of their vehicles to ensure high quality fleets.
- All overarching and mode policies will take this policy into account.



Community Transport including Voluntary Car Scheme

3.2.26 Community transport operates within the voluntary sector and plays an important role in filling gaps in services not provided by local buses and trains (the mainstream public transport network), as well as meeting the more specific needs of particular groups or individuals in the community. It includes the provision of transport for those unable to use conventional bus services, such as through dial-a-ride or volunteer car services. Minibuses may also be available for community groups to use for outings. Some operators also provide local bus services that are open for all to use.

3.2.27 GCC provides £0.5 million per year in annual grants to support community transport providers, as this is often the last line of access to public transport for vulnerable people. There may be opportunities to protect and enhance community transport through a Total Transport approach. This would draw together the resources deployed on various types of specialist provision, including non-emergency patient transport and school transport⁴⁷. Such integration will provide economies of scale by linking together different passenger demands and increasing utilisation of existing vehicles. GCC is progressing this idea through the Thinktravel Total Transport portal which will bring community, voluntary and public transport together under one platform, making accessible transport available to a wider audience, that previously have not considered these options as a travel choice. This could include better integration of the funding and delivery of patient care transport, demand responsive community transport services and car or lift-share schemes. There is a need to clarify the training and permit requirements for those providing shared services.



⁴⁷ Please note that non-emergency patient transport (NEPT) and school transport would be part of phase 2, currently unfunded.



Policy LTP PD 1.5 – Community Transport including Voluntary Car Schemes

GCC will support those with limited travel choice and local communities to develop innovative responses to local transport need.

GCC will do this by implementing the following policy proposals:

- Develop the 'Total Transport' project to strengthen the community and voluntary transport offer to a wider user base.
- Work with community transport providers including voluntary car schemes to deliver a step change in the way community transport is perceived, u sed and delivered in Gloucestershire, particularly in rural areas
- Work with public transport operators (Bus, Community Transport and Rail) to encourage service timetables which complement one another, where it is operationally feasible
- Encourage communities to recognise the role of Community Transport when writing their Neighbourhood Development Plans.
- Monitor developments from the DfT with regards to the section 19 and 22 permit issue and to support community transport providers where possible.
- Encourage transport operators and voluntary carschemes to investinultra-low emission vehicles and maintain the quality of their vehicles to ensure high quality fleet.
- All overarching and mode policies will take this policy into account.

Transport Interchange Hubs

3.2.28 Gloucestershire plans to move towards an interchange model, which is multi-modal and encompasses; car share, community transport demand responsive services, bus, rail and bike interchange facilities. These Transport Interchange Hubs will replace existing Park & Ride facilities and consider additional locations. These hubs should be located on strategic rail or bus corridors where existing commercial super high frequency services (core super routes) and frequent services (high frequency) are in place. In addition, Strategic Interchange Hubs will become a vital transport strategy at interchange points on

the highway network, e.g., at motorway junctions, such as M5 J10 & J12 where the opportunities to remove traffic from the highway network is greatest and the potential to attract commercial bus services is viable in the long-term.

3.2.29 Transport Interchange Hubs will allow people to undertake their journey part-way by car, transferring to sustainable modes of transport to their final destination. Interchanges Hubs can provide connectivity with inter-urban and rural communities, link demand responsive services such as community transport with public transport and active travel opportunities for improved connectivity to a wider transport user group.



- **3.2.30** Existing site facilities will be reviewed as part of the overall policy update and opportunities for new sites will be considered subject to; their location to existing commercial high frequency bus corridors 'core super routes', satisfactory business case and support from the local planning authority. Very high frequency bus corridors serving Transport Interchange Hubs should prioritise the provision of bus priority measures to enable competitive journey times and the long term viability of hubs. Interchange facilities should ideally include upgraded passenger waiting facilities, Real Time Passenger Information (RTPI), safe and secure parking for cycles, accessible parking, electric vehicle charging and good quality cycling and walking access, segregated where necessary.
- **3.2.31** Transport Interchange Hubs and Local Interchange facilities link with parking policies, as it provides additional parking for people travelling to town centres. Consequently, Interchange parking needs to be managed alongside town centre off-street and on-street parking facilities, in terms of overall capacity, charging and parking duration.
- **3.2.32** Local Interchange Hub facilities differ from strategic hubs in so far as they don't have dedicated car parking constructed and maintained by the County Council, but are likely to be located near smaller parking facilities in key locations in or near rural towns or in urban areas, utilising existing private or on road parking facilities. Local Interchange sites also provide an opportunity to encourage increased levels of physical activity amongst transport users by providing cycle parking facilities and some may also be located near cycle routes where sufficient transport demand and commercial viability exists.





Policy LTP PD 1.6 – Transport Interchange Hubs

GCC will work with our partners to provide realistic opportunities for travel choice for residents, employers, and visitors through the delivery of Strategic Transport Interchange Hubs and Local Interchange facilities.

- Strategic Transport Interchange Hubs are defined as located on, or have the potential to attract, very high frequency transport corridors 'core super routes' and having significant parking for cars and bikes.
- All railway stations should be enabled to fulfil interchange hub functions for maximum integration with all modes and onward connectivity.
- Local Interchange Hubs are defined as; in key locations in/near rural towns or on urban residential roads or situated on dedicated cycle routes or near private car parking where sufficient demand and commercial viability exists. Some local Interchange Hubs may be focused on interchange be tween public transport and active travel modes only, without the provision of dedicated car parking.
- Transport Interchange Hub facilities should ideally include upgraded passenger waiting facilities, RTPI, electric vehicle and bike charging points, safe and secure parking for cycles and accessible car parking, along with fit for purpose and safe segregated good quality cycling and walking accesses.
- Work with local planning authorities, communities and developers and bus operators to identify Strategic Transport Interchange Hub facilities located on existing very high frequency commercial 'core super routes' bus corridors, or have the potential to attract very high frequency routes, which encourage mode transfer onto a bus for part of the journey.
- Where developer funding can be gained towards such sites the County Council will take a lead role in ensuring facilities and infrastructure can be established to help to mitigate traffic growth.
- Continue to promote and where necessary work towards the further development of existing commercially operated Strategic Transport Interchange and will consider opportunities for new sites, subject to a satisfactory business case and support from the local planning authority.
- Seek third party funding to support the construction and maintenance of new Strategic Transport Interchange Hubs and endeavour to identify locations that ensure that the bus service has potential in the medium term to be operated on a commercial basis.
- High frequency bus routes serving Transport Interchange Hubs should be prioritised for the provision of bus priority measures .
- Support multi-modal integration at Transport Interchange Hubs with demand responsive transport options, as well as walking and cycling infrastructure where viable.
- Work with District Councils to align on and off street parking policies and tariffs in central areas to encourage the use and viability of interchange hubs and to support measures to improve air quality in urban areas.
- Work towards the provision of Local Interchange Hub or similar in all town centres for integration with all modes and wider connectivity.
- All overarching and mode policies will take this policy into account.



Communicating Travel Information

- **3.2.33** Information enables individuals to make decisions about how and when they travel. The availability of good quality travel information is therefore fundamental in supporting the use of buses and enabling travel choice. Alack of information can lead to a reliance on private transport modes increasing demand placed on the highway network. A key challenge for public transport in the county is finding ways to improve people's access to travel information. Mobile digital connected platforms are providing bus information in real time to many bus users.
- **3.2.34** The LTP objective on information is to provide clear and accurate information on services for passengers through a variety of mediums, reaching every individual in everylocation. The main challenges to meeting this objective are being able to provide information (access) in a range of ways, both before and during the journey and ensuring all information is comprehensive and straight forward to interpret (clarity).
- **3.2.35** There is a significant opportunity to incorporate technological advances and Intelligent Transport Systems (ITS) into the fabric of the transport network, particularly in the Central Severn Vale. Using systems such as linked intelligent signals, advertising information displays and a live travel information feed through the Thinktravel website would all serve to allow better use of the existing network to be made.
- **3.2.36** Real Time Passenger Information (RTPI) is an electronic information system which provides expected arrival time and destination of next bus. It is provided on a range of electronic media including phones and displays at bus stops and stations. RTPI has the potential to increase public transport use through the highly visible promotion of service updates direct at bus stops aiding an individual's decision making process to wait and use a bus.





Policy LTP PD 1.7 - Communicating Travel Information

GCC will provide clear and accurate travel information on services for passengers through a variety of outlets, reaching every individual in every location.

- Encourage public and community transport operators to use the <u>Thinktravel</u> website (<u>www.thinktravel.info</u>) to provide up to date information on fares and services.
- Optimise the use of PTPI by ensuring existing displays are located in key stops and interchanges, to add to this network of displays where financially and technically feasible, and to continue the support of mobile based technologies, such as GlosTalk, for those with access to them. RTPI displays will be prioritised for stops in market towns and interchange hubs.
- Support mobile applications and develop the Total Transport platform to extend travel options to a wider audience.
- To support the marketing of bus services and ticketing options for journeys within travel corridors where there is a greater propensity to influence travel choice.
- Ensure accurate service availability, timetable information and location information is available at all bus stops and railway stations within the county and through the Thinktravel.info). And explore the use of social media to disseminate information using the Thinktravel brand and provide it in a variety of formats to meet customer expectations.
- All overarching and mode policies will take this policy into account.



3.3. Cycle Policy Document (PD2)



- **3.3.1** Cycling supports each of the overarching economic, social, environmental and health objectives of the LTP. It can also provide a highly inclusive mode of transport across all abilities and ages. Economic benefits can be achieved with high benefit: cost ratios, as cycle schemes help meet cost savings through more efficient use of the highway network, and a cascade of knock-on health, environmental and economic benefits. Increased connectivity, quicker journey times and better access to newlocations allows businesses to access labour pools and distribution by low-carbon means. For commuters, better network connectivity further results in greater employment and key service choices by a low carbon mode of transport.
- **3.3.2** Whilst evidence indicates that Dutch style levels of investment could lead to 20-24% of all commuter trips being made by cycle in Gloucestershire. The DfT Propensity to Cycle Tool reveals that the potential for cycling to increase mode share is particularly high in parts of Cheltenham and Gloucester and especially under a scenario where Dutch levels of investment are applied.
- **3.3.3** Of course, real increases in cycling cannot be sustained through only investing in parts of the network where potential is high as people's cycle journeys are complex and mixusing major cycle corridors with the fine grain of permeable neighbourhood networks. However, evidence shows that creating high quality spinal networks into which other networks mesh can recoup huge increases in cycle flows as a percentage of all modes. GCC tries to achieve this through its Local Cycling and Walking Infrastructure Plans (LCWIP) which were developed as part of the Government's National Cycling and Walking Investment Strategy⁴⁸.

 $^{{}^{48}\,\}text{LCWIP-https://www.gloucestershire.gov.uk/transport/gloucestershires-local-transport-plan-2015-2031/local-cycling-and-walking-infrastructure-plans/}$



- Cycling investment should cater for people of all ages and abilities, 3.3.4 including people who do not currently cycle. Gloucestershire's 'Thinktravel' initiative aims to inform, educate and inspire people to make journeys in a smarter, more sustainable way, including cycling.
- 3.3.5 Land use planning also has a major bearing on both the need to travel and how people choose to travel. As set out in the Overarching Policy Document (see LTP PD0.2), integrating new development with sustainable travel options provides an excellent opportunity to create better cycling opportunities and travel practices by overcoming barriers and improving connectivity.

Gloucestershire's Cycle Network

- Figure PD2 (C) shows the proposed strategic cycle desire lines across 3.3.6 the county. The aim is to link the main urban settlements and areas growth through a combination of quiet ways and dedicated cycle facilities. Investment in cycle facilities will be targeted at these desire lines, as opportunities arise.
- 3.3.7 In addition to connecting the strategic county cycleway desire lines, the LCWIP illustrated in Figure PD2 (D), has developed cycle network maps for Cheltenham and Gloucester that set out the strategic desire lines as well as the primary and secondary cycle network (see Figure PD2 (D)). This is the starting point of a rolling programme of cycle route assessments for the county.
- In providing new or upgraded cycle infrastructure approaches which 3.3.8 will reflect site and route specific conditions and opportunities. The DfT has recently issued LTN1/20 cycle guidance. This unequivocally reinforces the role of cycling in meeting economic, social and environmental objectives. It reiterates the importance of a dhering to the 'Hierarchy of Road Users' whereby pedestrians and then cyclists are considered foremost, this is further backed in the revised Highway Code. Vitally, if cycling is to become a mainstream mode, there is emphasis on inclusivity. People of all ages, shapes, sizes and abilities should feel able to safely cycle to meet some of their daily trips. It is also clear that cycling and walking – as two vital active travel modes – should not conflict with each

other. We are therefore at the beginning of a 'sea change' in approach. The new DfT'Gear Change'⁴⁹ document and the DfT LTN1/20⁵⁰ will influence how cycle infrastructure is designed in Gloucestershire going forward. In addition. consultation for previous studies undertaken by GCC, reveal a high level of support for segregated cycling facilities.

- A blanket approach cannot be applied for all cycle infra-structure, for 3.3.9 example, a key concept is 'invisible infrastructure' where careful street space design and management counter the need for heavily engineered cycle-specific infrastructure. Cycle friendly streets, free of cycle specific infrastructure, can be interspersed with route segments which correspond with cycle lanes (on / off road), signage, cyclist priorities at lights, segregated routes, bus lanes, controlled crossing points and grade separated crossings. The end result needs to be a coherent network of good quality routes, which should help to make cycling more convenient, safe and inclusive for all.
- In developing cycle networks and infrastructure the following principles will be adopted, illustrated in Figure PD2 (E). This is taken from Government guidance, LTN1/20.

https://www.gov.uk/government/publications/cycling-and-walking-plan-for-england

Cycle infrastructure design (LTN1/20) -

https://www.gov.uk/government/publications/cvcle-infrastructure-design-ltn-120



⁴⁹ Gear Change: a bold vision for cycling and walking -

Figure PD2 (C) – Countywide Strategic Cycleway Network (desire lines)

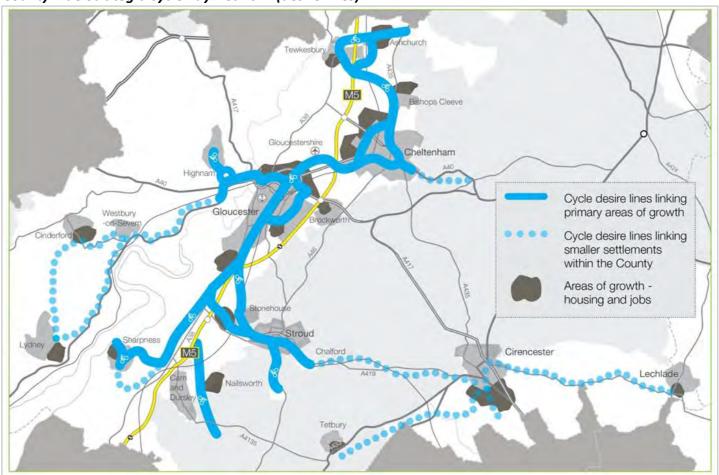




Figure PD2 (D) – LCWIP Cycle Network Map for Cheltenham & Gloucester

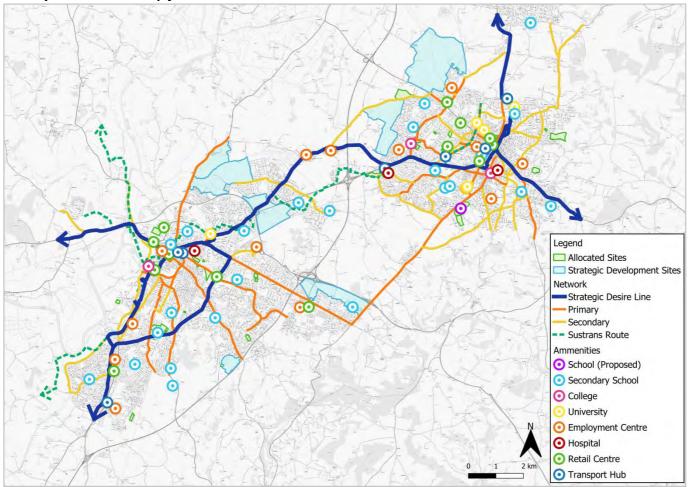




Figure PD2 (E) – Principles of Cycle Network & Infrastructure Guidelines (DfT LTN1/20)

Accessibility for all



DO plan and design cycle networks to allow people to reach their day to day destinations easily, along routes that connect, are simple to navigate, and are of a consistently high quality.

DON'T design cycle infrastructure that puts cyclists in unexpected places away from the carriageway. Neither cyclists nor pedestrians benefit from such unintuitive arrangements.



DO plan and design cycle routes to be at least as direct – and preferably more direct – than those available for cars.

DON'T design cycle routes that require cyclists to give way at each side road they cross.
Routes involving extra distance or lots of stopping and starting, will result in some cyclists choosing to ride on the main carriageway because it is faster, more direct, even if it less safe.



DO ensure cycle infrastructure is safe and perceived to be safe, so that more people feel able to cycle.

DON'T place a narrow advisory cycle lane on the main carriageway next to a narrow traffic lane and guardrail at a busy junction. This is not an acceptable offer for cyclists.



DO plan and design comfortable cycle routes, avoiding steep gradients, where conditions for cycling are of good quality, well maintained with smooth surfaces, have adequate width for the volume of users and with minimal stopping and starting.

DON'T design uncomfortable cycle infrastructure with transitions between on and off carriageway facilities, particularly at locations where conflict with other road users is more likely.



DO plan and design cycle infrastructure that helps to deliver public spaces that are well designed and attractive so that people want to spend time using them. *Use the Council's Enhanced Materials* Policy (MfGS).

DON'T design and install signs and road markings for cyclists that are difficult and uncomfortable to use, and are also unattractive additions to the street scape.



Policy LTP PD 2.1 – Gloucestershire's Cycle Network

GCC will deliver a high quality coherent, direct, safe, comfortable and attractive cycle network by improving cycle routes and reinforcing quiet highway connectivity.

- Promote Gloucestershire's cycle network through <u>Thinktravel</u>.
- Work with delivery partners, other agencies, and community stakeholders to identify and address barriers (physical and psychological) to cycling and make cycling a more inclusive activity for all.
- Improve cycle links between and within settlements throughout Gloucestershire.
- Focus investment in cycling in more developed areas and especially where new development is planned where the propensity is greatest.
- Recognise the role and function of the existing quiet lane network and seek to expand this where possible to provide safe cycle linkages.
- Ensure developers assess the needs of all pedestrians and cyclists within their development design and any improvements associated with the development, schools and supported with cycle parking/storage.
- Ensure all cycle infrastructure will meet approved design standards; for example Manual for Streets (MfS), LCWIP and DfT cycle design guidance LTN1/20 and best practice, as well as addressing the needs of those with mobility impairments.
- Ensure cycle routes are safe and form a continuous accessible network accessing town centres, residential areas, employment areas, and routes to schools.
- Ensure all schemes on the local highway network will be subject to appropriate context reports and audits (including the Countywide Cycleway, LCWIPs, green infrastructure pledge, road safety, non-motorised users, walking, cycling and quality audits, Building with Nature standards) before design approval.
- Support the development and promotion of the leisure cycle network, Public Rights of Way network and Other Routes with Public Access in order to encourage greater use, linking both communities and leisure attractions, including findings from the latest <u>National Cycle Network Review</u>.
- Work in partnership with communities in identifying local transport needs and solutions (such as through Parish and Neighbourhood Plans, Travel Plans, JCS, health & wellbeing strategies and plans).
- Work with District Councils to ensure that new development is well connected to the existing transport network and walk, cycle and mobility friendly.
- Ensure development sites connect to the strategic and LCWIP desire lines.
- Developers are required to make an assessment needs of all pedestrian/mobility user/cyclist in line government Road User Hierarchy within and associated with their development, to substantially improve the County's cycle network and meet improved design standards and audits; for example MfGS, LCWIP and other Context Reports and emerging DfT cycle design guidance and best practice, as well as addressing the needs of those with mobility impairments.
- Under the Highways Act 1980, any developer or scheme promoter, that delivers highway infrastructure to be adopted by GCC, must fully comply with the Council's

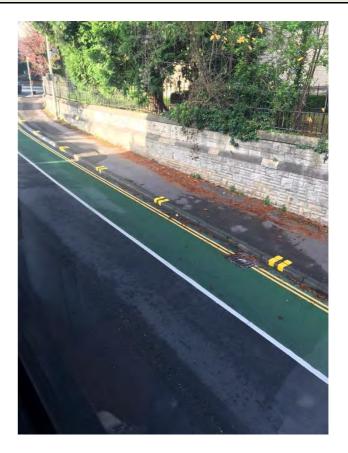


Enhanced Materials and Commuted Sum Policy (MfGS), whereby appropriate materials are specified and the full costs of implementation and future maintenance are factored in to the scheme budget, to limit the long term burden on pedestrian highway asset.

• All overarching and mode policies will take this policy into account.

Cycle Asset Management

3.3.11 Maintenance of the carriageway and segregated cycle routes contributes to cycles afety. Cyclists are disproportionately affected by debris in the gutters, where they may need to take up their road position, and the prevalence of potholes, which can present serious safety risks. Similarly, issues of standing water and surfacing materials all impact them directly. Not only are cyclists dependant on the maintenance of the highway asset, they will be affected by the maintenance schedule that is applied to the main, secondary and tertiary transport networks. As the network consists of highway, shared use footways and bridleways, as well as bespoke cycle routes, it needs a co-ordinated approach to maintenance across all these assets. Developing an asset management plan only for bespoke routes would have little value (although these do need to be maintained and footway and cycle track lifecycle planning needs to be considered). Some of the best and most frequently-used cycle routes do not include much, if any, cycle infrastructure. This is because they offer quiet, direct, cycle-friendly conditions through what is sometimes called 'invisible infrastructure' or simply through traffic-restricted side streets.





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Policy LTP PD 2.2 Cycle Asset Management

GCC will manage cycle infrastructure in line with the Highways Asset Management Framework and other guidance or policies such as the Codes of Practice for Well Managed Highway Infrastructure.

- Work with the Highways Maintenance supplier to deliver the works and services outlined in the Transport Asset Management Framework.
- Manage the street lighting network to minimise environmental impact without compromising on road safety and personal security.
- Continue to deliver the GCC 'Highways Local Initiative' and the highway 'Big Community Offer' to prioritise highway services that deliver cycle improvement measures for the community.
- Regularly review the winter maintenance and vegetation clearance procedures and policies and in line with the Gloucestershire Highways Biodiversity Guidance or subsequent guidance.
- Work with partners to maximise investment in the County's cycle network as funding opportunities arise. This will include working in partnership with the Local Enterprise Partnership, District Councils, Parish and Town Councils, developers, Sustrans, Gloucestershire Local Nature Partnership, Highways England, and Department for Transport.
- Follow green infrastructure principles in the design, maintenance and operation of cycling infrastructure as set out in the Gloucestershire Green Infrastructure Pledge. 51
- Deliver cycle path maintenance works outlined in the Transport Asset Management Framework.
- Ensure development sites contribute towards the improvement of the strategic and LCWIP desire lines.
- Under the Highways Act 1980, any developer or scheme promoter, that delivers highway infrastructure to be adopted by GCC, must fully comply with the Council's Enhanced Materials Policy (MfGS) and Commuted Sum Policy, whereby appropriate materials are specified and the full costs of implementation and future maintenance are factored in to the scheme budget, to limit the long term burden on cycle highway asset.
- All overarching and mode policies will take this policy into account.





Active Travel: Safety, Awareness and Confidence

- **3.3.12** People on bikes may use the public highway, designated shared use paths and bridleways. However, due to perceptions, habits and genuine concerns many people are deterred from cycling.
- **3.3.13** About half the households in England own bicycles, but a much smaller proportion of households use them. For cycling to be a credible alternative to other modes, better awareness is needed alongside physical infrastructure improvements. The Marketing Cycling Handbook⁵² makes this point well:

"It's easy to think of persuasive arguments in favour of cycling. The challenge is communicating them effectively to the people who are most likely to try it for themselves. That means thinking, and taking action, at a local level".

- **3.3.14** There is a groundswell of evidence that shows that marketing and promotion increase levels of cycling. The LTP aims to increase the mode share of cycling with carefully targeted marketing and promotion, continuing under the Thinktravel banner that was established through the LSTF programme.
- **3.3.15** It is also necessary to address people's safety concerns. Those who already cycle, or who are contemplating cycling for some of their trips, need to both feel safe and be safe. This can be supported through direct cycle and driver training and promotional material which emphasises behaviours and actions to promote safety. The LTP supports the provision of cycle training for both children and adults, including school and workplace training.

- **3.3.16** Training school children to cycle safely will enable them to gain personal mobility and independence, improve physical and mental health and their social skills. It will help to embed cycling as 'normal' behaviour in later life. Adults too can benefit from cycle training. Offering suitable training as part of a workplace travel plan may encourage employees to cycle to work. Cycle training schemes are available to all primary and secondary schools in the county. They can also be directly booked for any a dults or children. Training is provided to the national Bikeability standard.
- **3.3.17** Other safety initiatives includes the recent cooperation between Gloucestershire police and GCC road safety team for Operation Close Pass (persuading drivers to give cyclists room when passing), and ongoing speed awareness and enforcement campaigns.⁵³



⁵³ Road Safety Community Hub - https://www.gloucestershire.gov.uk/highways/road-safety/road-safety-community-hub/



Policy LTP PD 2.3 Active Travel: Safety, Awareness and Confidence

GCC will contribute towards better safety, security and health (and thereby longer life expectancy) by reducing the risk of death, injury or illness arising from journeys travelling by bike and other forms of transport. GCC will also work with partners to improve personal safety perceptions when using the transport network and promote the use of inclusive public transport and active travel options to contribute to enjoyment and psychological wellbeing.

- Ensure a co-ordinated approach to road safety with partners that include proactive highway design guidance, delivery of reactive engineering solutions to highway issues, delivery of educational or campaign materials and support to assist in the monitoring and enforcement of traffic regulations.
- Reduce the rate of pedestrian and cycle casualties within Gloucestershire by providing an environment that reduces both actual and perceived risk to personal safety and enable more people to walk, cycle and be mobile everyday. The choice to walk and cycle is strongly influenced by the urban setting, for example in terms of available inclusive infrastructure, aesthetics and perceived safety.
- Deliver cycle path maintenance works outlined in the Transport Asset Management Framework.
- Ensure developers identify, protect and exploit opportunities for cycling through applying design principles including 'invisible infrastructure' whereby the spatial grain and layout invites slow speeds and direct route priority for active travel over other modes.
- Recommend the use of designated cycle routes where they provide attractive and safe alternatives to routes carrying high volumes of motorised traffic.
- Ensure children, young people and adults are equipped with knowledge, skills and training to become more confident at cycling on the road.
- Work collaboratively with Gloucestershire police, relevant agencies and campaign groups on education training programmes to target young drivers, motorcyclists, distraction and alcohol and drug related driving.
- Support communities to deliver local speed campaigns through the Safer Community Teams.
- Introduce speed limits in accordance with the current national guidelines and prioritise them based on available evidence, in cluding 20mph zones.
- Investigate community based vehicle restriction zones that will benefit communities and protect vulnerable highway users from a safety and health perspective.
- All overarching and mode policies will take this policy into account.



3.4. Freight Policy Document (PD3)



Figure PD3 (A) – Gloucestershire's spectrum of freight demands



- **3.4.1** The LTP considers freight across a spectrum of movement types, from mail deliveries on foot, through to a retail home delivery vanor from 'white van' courier and trade services by light goods vehicles (LGVs) through to the heavy goods which are traditionally thought about. This spectrum of freight is expressed in Figure PD3 (A).
- **3.4.2** In the period 2016-2020, internet sales as a percentage of retail sales in the UK increased by 14.7%. Road traffic estimates in 2019 indicate lights goods vehicle (LGV) traffic increased by 7.35% since 2016 to 55.5 billion vehicle miles. The miles in 2019 indicate lights goods vehicle (LGV) traffic increased by 7.35% since 2016 to 55.5 billion vehicle miles.



Increase in LGV traffic by 7.35% in 3yrs

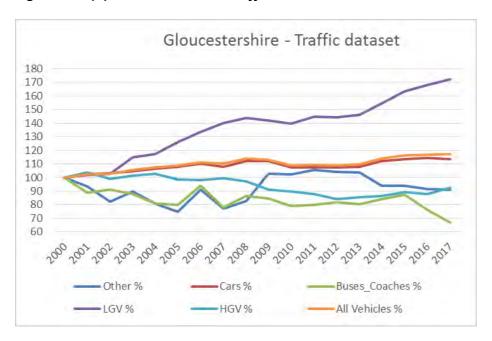
https://www.ons.gov.uk/businessindustryandtrade/retailindustry/timeseries/j4mc/drsi 55 TRA0101 - https://www.gov.uk/government/statistical-data-sets/road-traffic-statistics-tra



⁵⁴ ONS Data -

3.4.3 Given the national trend in the use of smaller delivery vehicles, and the onset of home delivery services, this change in the mix of freight is likely to continue, demonstrated in Figure PD3 (B).

Figure PD3 (B) - Gloucestershire Traffic Dataset⁵⁶

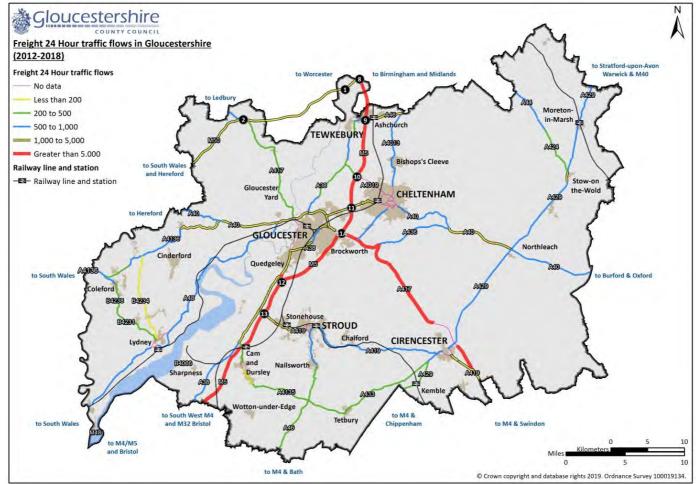




⁵⁶ Gloucestershire's vehicular traffic shows that LGV vehicle miles have been increasing more rapidly than either HGV miles, or all vehicle mileage, from the base year of 2000, based on the Annual Average Daily Flows (2000-2017).



Figure PD3 (C) – Gloucestershire Annual Average Daily HGV Traffic flows by corridor (2012-2018)





- 3.4.4 Similarly, HGV vehicular miles travelled in Gloucestershire between 2000 and 2017 has decreased by 7%, whilst LGVs have increased by 72% over the same period, making localised delivery solutions more important to contain growth in delivery vehicles and reduce transport carbon emissions, as illustrated in Figure PD3 (B).⁵⁷
- **3.4.5** Journey time reliability and freight routing are seen as being key issues. Gloucestershire has a primary freight network in place whose main function is to get traffic from A to B in the most effective and efficient manner. However, this must be balanced to mitigate and effectively manage the impact of demand against community needs and the environmental impacts of freight transport. To support government ambitions, and to bring in line with GCC's ambition, it is the aim of this plan is to facilitate the decarbonisation of road and rail freight by 2045.

Gloucestershire's Freight Network

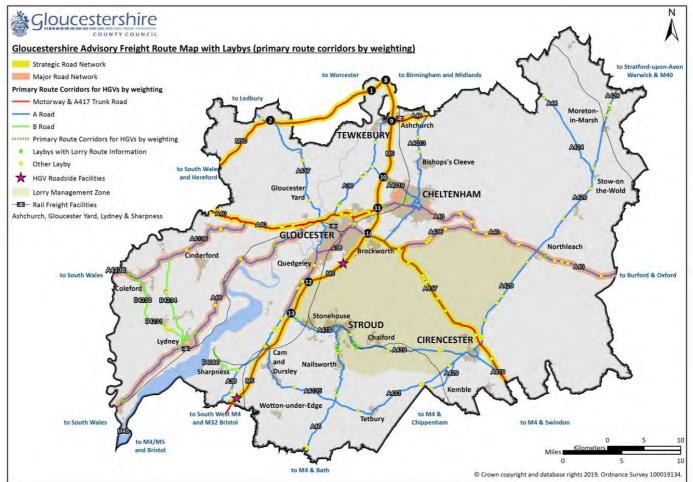
3.4.6 Goods need to get where they need to be, on time and at the lowest possible cost, but managed in a 'place-sensitive' manner. Journey time reliability and predictability is a key factor in 'just in time' logistics planning and will equally affect a business waiting for the delivery of a specialist part through to a supermarket needing to replenish its shelves. Prioritising investment in maintaining journey time reliability on primary route corridors will facilitate this demand. Equally, supporting 'transmodal' freight facilities will allow for freight growth and a move towards the carbon neutral target for transport.

- **3.4.7** There are a number of freight movements that have historically used lower specification "A" and "B" roads as opposed to use of the strategic road network. For this reason, the LTP has identified key routes whose primary purpose will always be the movement of high traffic volumes. This is reflected in the primary route corridors mapped in **Figure PD3 (D)**. It should be noted that these routes are, for the most part advisory and form the Advisory Freight Route Map for the county, set in policy and periodically reviewed to mirror HGV traffic flows.
- **3.4.8** The routes also align with the Cotswold Lorry Management Zone, which includes a number of Traffic Regulation Orders to reduce the number of HGVs using unsuitable roads for their journey.





Figure PD3 (D) – Advisory Freight Route Map (primary route corridors by weighting)





Policy LTP PD3.1 – Gloucestershire's Freight Network

GCC in its role as local highway authority will work with its partners; Highways England, Network Rail, neighbouring highway authorities, District, Parish and Town Councils, designated neighbourhood forums and Gloucestershire Police to maintain a functioning freight network by ensuring the safe and expeditious movement of goods vehicles using the highway, and facilitate the decarbonisation of freight by 2045.

GCC will achieve this through the following policy proposals:

- Work with partners to attract investment to mitigate vehicle delay pinch points and explore opportunities for 'trans-modal' freight facilities.
- Work with freight companies and our partners to a chieve an increase in freight being transported by sustainable, low-carbon modes of non-road transport where possible and support the transition to ultra low emission freight vehicles.
- Continue to work with designated neighbourhood forums and neighbouring authorities on cross-boundary weight restriction that could adversely affect sensitive routes in Gloucestershire.
- Continue to work collaboratively with Gloucestershire local planning authorities and other partners to ensure the effective implementation of adopted transport-related land-use policies with development proposals that could impact on the County's functional freight network.
- Identify the most vulnerable parts of the transport network and develop contingency plans to ensure a functioning network during unplanned events.
- Continue to deliver highway and flood alleviation schemes to reduce the risk of highway closures on primary route corridors.
- Work in partnership with Highways England and neighbouring highway authorities to manage cross boundary advisory freight routes including the management of abnormal loads. This partnership will be on the basis of an informal working relationship rather than a formal Quality Partnership arrangement.
- Work with national freight mapping companies to inform freight operating route planning systems. Ensure the freight primary route corridor map is reviewed periodically, and that freight transport use the primary route corridors wherever possible and avoid roads not included in corridors.
- Work with Highways England and neighbouring highway authorities to ensure that freight routes are clearly identified on signs and maps and ensure updated or temporary route updates are shared with information portals accessed by the freight industry periodically, and that freight transport use the primary route corridors.
- Ensure freight companies transporting abnormal loads greater than 4.95 metres high or 4.1 metres wide for non-motorway use and 4.6 metres for motorway use, contact Gloucestershire County Council and Gloucestershire Constabulary providing at least two days' notice before any planned travel.
- Continue working with Gloucestershire police in the management and enforcement of the Cotswold Lorry Management Zone.
- Continue to observe the Lorries in the Vale of Evesham policy adopted by Cotswold District Council.
- Apply the Link and Place highway spectrum when prioritising investment decisions and during discussions with local communities when producing their Neighbourhood Plans.
- Introduce speed limits in accordance with the current national guidelines and prioritise them based on available evidence, in cluding 20mph zones



- Lobby government to pursue opportunities for the decriminalisation of the enforcement of moving traffic offences, regulated under the Traffic Management Act.
- Developers are required to submit through planning, Delivery and Servicing Plans and where appropriate, Construction Management Plans to; manage site traffic, and to reduce carbon emissions and other pollutants.
- All overarching and mode policies will take this policy into account.



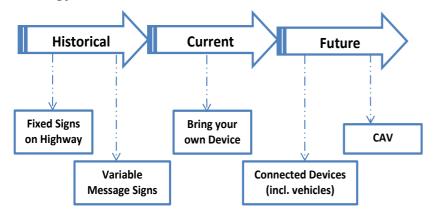
Journey Routing Information for Freight

- **3.4.9** Reliable travel information is essential for freight companies and freight drivers. GCC will increase the role of technology to assist in the dissemination of freight journey routing information. There are online tools available to support this and as funding becomes available GCC will aim to upgrade its journey routing offer.⁵⁸
- **3.4.10** Freight companies and drivers often use 'route planners' or satellite navigation systems to optimise their journeys. This can result in the use of inappropriate roads, which can impact the journey time reliability and safety of other road users and local communities. Technology is increasingly useful for planning and managing freight journeys and in providing information, including details of unplanned events, road closures and traffic incidents. GCC will investigate more opportunities to make appropriate GCC data available as open source data in the future.
- **3.4.11** Enforcement of advisory routes by HGVs, can be difficult. Currently, GCC relies on the good-will of HGV drivers to observe good-practice and take account of the advisory freight network and weight or height restrictions when planning routes. For a period Freight Gateway provided free to use compliant freight route journey planning platform to the freight industry, to help reduce the use of inappropriate freight routes. The gateway system will need to be replaced by a HGV freight weight restrictions compliant platform, GCC are investigating an appropriate replacement. The significant advantage of using a compliant freight journey planning system, is that it is supports a dynamic journey routing function which can be updated to reflect planned incidents on the highway network such as road closures or temporary highway restrictions impacted by major events which aims to rival the drivers' use of satellite navigation systems.
- **3.4.12** GCC will identify smart information points where a traditional mapping and 'poster' information and a QR Code to link to live information will be provided.
- **3.4.13** When via ble, smart information points will provide gateway system intelligence and live streaming of open source data. GCC will prepare for an open data future to be ready for funding opportunities, ahead of DfT standardisation of moving traffic regulation orders. As part of this information offer it will be important to work with surrounding highway authorities to identify further 'lorry stop' locations that function as key decision points for drivers, such as on the A38 just north of M50 Junction 1 and on the A46 near Evesham.

Freight Journey Routing (Lorry Route, a compliant journey planning platform)

3.4.14 GCC will continue to support Highways England and neighbouring authorities to develop a common VMS information strategy for the strategic road network. Figure PD3 (E) illustrates the future progression to driver information technology which will replace fixed asset messaging on the local network, developing mobile applications. GCC are aware and look forward to seeing the results of the trial that the Department for Transport (DfT) and Highways England has commissioned Transport TRL, as the global centre of innovation in transport and mobility, to lead on the first real-world operational trial of platooning vehicles on UK roads. ⁵⁹

Figure PD3 (E) – Future progression to driver information technology





⁵⁹ https://www.gov.uk/government/publications/truck-platooning-uk-road-trial-feasibility-study Photo: Published in - The automation revolution coming to mobility and transport by 2025 (Ricardo 2018)



Policy LTP PD 3.2 – Freight Journey Routing Information

GCC will work in partnership with Highways England, neighbouring highway authorities and the Gloucestershire Police to maximise the role of technology for the dissemination of freight journey routing information.

- Work with national freight mapping companies in order to inform freight operating route planning systems. Ensure the primary route corridors map is reviewed periodically and that freight transport use the primary route corridors wherever possible and avoid roads not included in the corridors
- Investigate an alternative freight route planning platform.
- Work in partnership with Highways England and neighbouring highway authorities to manage cross boundary advisory freight routes, including the management of abnormal loads. This partnership will be on the basis of an informal working relationship, rather than a formal Quality Partnership arrangement.
- Continue to work with designated neighbourhood forums and neighbouring authorities on cross-boundary weight restrictions that could adversely affect sensitive routes in Gloucestershire.
- Increase the use of technology and social media to increase a wareness of any delays on the highway network to ensure highway users are informed in a dvance or during their journey.
- Disseminate journey routing information during times of extreme weather so people are informed about the most appropriate routing options.
- Develop a network of smart information posts at lorry waiting areas that provide access to the advisory freight map.
- Update the advisory freight map with QR Code at lorry waiting areas and lay-bys.
- Investigate opportunities for funding to make relevant GCC data available to open source.
- Encourage Parish and Town councils to identify and monitor perceived freight issues through a 'Lorry Watch' system.
- Developers are required to submit through planning, Delivery and Servicing Plans and where appropriate, Construction Management Plans to; manage site traffic, and to reduce carbon emissions and other pollutants.
- All overarching and mode policies will take this policy into account.



Driver Facilities

3.4.15 There has been a significant growth in use of lorry parking; 58% utilised in 2010 rising to 76% in 2017. 60 For the South West, the level of utilisation was considered 's erious' and if it continues to grow at this rate, will be 'critical' by 2024. Nationally, 14% of all HGV overnight parking is on industrial estates or retail parks, whilst 25% of parking is in lay-bys, of which only 1% has toilets, 2% a café, and 6% are lit.

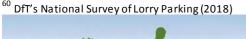
3.4.16 Lay-bys are an important asset for freight vehicles. They provide the opportunity for drivers to stop for short breaks, plan routes and take advantage offacilities. These are also used for overnight parking by vehicles on longer distance journeys. These facilities are particularly important for logistics movements where the drivers are unfamiliar with the county and the 'last mile' delivery restrictions and road constraints. However, there is a significant shortage in lorry parking and facilities, on a regional level.

- Gloucestershire has 164 lay-bys; as previously shown in Figure PD3 (D) Advisory Freight Route Map. There are three broad categories of lay-bys in Gloucestershire:
 - Lay-bys on an advisory freight route with lorry route information.
 - Lay-bys on an advisory freight route with no lorry route information.
 - Lay-bys which are not on the advisory freight route.
- Additionally, there are privately-operated lorry stops, which can be 3.4.18 accessed for a fee and provide a range of facilities for drivers. The facilities available at lay-bys and lorry stops vary and can include lighting, to ilets and road side cafes.

Policy LTP PD 3.3 Driver Facilities

GCC will provide facilities for drivers to rest. These will be provided at suitable locations on or near the primary route corridors used by HGV traffic.

- Work with District Councils, Highways England and Parish & Town Councils to encourage the designation and provision of off-road freight parking facilities, in line with paragraph 107 of the NPPF.
- Ensure lay-bys are maintained to provide suitable facilities, including a maintained road surface, removal of low hanging vegetation and street lighting.
- Ensure the availability of up-to-date journey routing information for drivers.
- All overarching and mode policies will take this policy into account.





Driving Better Practice

- **3.4.19** It is important to consider, how the development management process and network management can influence improving codes of practice for construction traffic and the logistics industry, in terms of its timing, routing, number of vehicle movements, and the overall impact on surrounding communities.
- **3.4.20** Best practice promotes the use of Construction Management Plans (CMP), to ensure developers, planning and highway authorities and local community organisations work together to agree and monitor mutually beneficial arrangements for construction trafficthat work for all parties. Building on good practice and guidance, GCC willlook at ways to ensure that the quality and context of CMPs are benchmarked and meet local needs. GCC will also use best practice in relation to events planning and to mitigate the temporary impacts caused by road works and other pre-planned activities. GCC will support the uptake of new codes of practice and promote safety schemes such as Fleet Operators Recognition System (FORS), Construction Logistics and Community Safety (CLOCS) and Driving for Better Business.







Policy LTP PD3.4 – Driving Better Practice

GCC as part of the development management process and network management will support improved codes of practice across the construction and logistics industry and require the production of Construction Management Plans (CMP) for strategic development sites and planned events, in order to minimise the impact on the surrounding community.

- Work with District Councils to ensure that new development is appropriately connected to the existing transport network.
- Support and work in partnership with communities in identifying local transport needs and solutions through Neighbourhood Plans.
- Ensure any additional freight movements associated with development and planned events are identified and managed through the Highways Development Management process and Network Management. This may include restricting construction / delivery vehicle access to specific times where an employment development is likely to generate significant freight movements.
- Provide specific advisory guidance on CMPs within Gloucestershire.
- Support the uptake of new codes of practice and promote safety schemes such as FORS, CLOCs and Driving for Better Business.
- All overarching and mode policies will take this policy into account



Managing Deliveries in Urban or Other Sensitive Locations

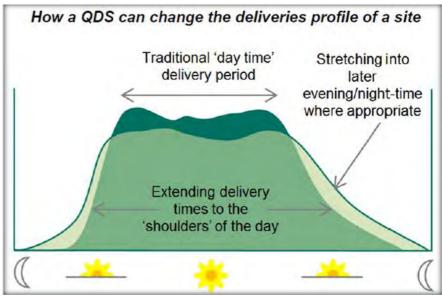
3.4.21 Across the UK, the growth in online shopping and home delivery is significant. Localised domestic delivery solutions are growing, for example the use of supermarkets, railway stations, post offices, news agents and local '8 till late' or community shops as 'drop points'. It is estimated that 40% of home shoppers would use this type of solution.



40% of home shoppers would use 'drop points'

3.4.22 In addition, it is important to consider the use of appropriate 'last mile' delivery methods in urban or other sensitive locations. One such is 'Quiet Deliveries' best practice delivery method, including the retiming of last mile deliveries as a positive tool to manage travel demand in town centres and locations where there are residential properties close by. Through using the 'shoulders' of the day, seen in Figure PD3 (F), it is possible to make more effective use of the existing network whilst minimising distance and environmental impact.

Figure PD3 (F) - How a Quiet Delivery Service can change delivery profiles of a site



Department for Transport, Quiet Deliveries Guidance for Local Authorities, 2014



3.4.23 Last mile deliveries by low carbon alternatives such as e-cargo bikes⁶¹ and electric vehicles from rail parcel freight hubs could serve the main centres of Cheltenham and Gloucester, where opportunities for railway sidings or land availability next to the railway network is present. Thereby, helping to reduce carbon emissions and air pollution in town centres.



- **3.4.24** In urban areas additional delivery traffic at peaktimes has implications for network efficiency, as well as carbon and other emission levels. For rural areas, the cost and time factors associated with failed deliveries is significant, because of the distances involved.
- **3.4.25** GCC will encourage local communities through the neighbourhood planning process to consider innovative techniques such as secure boxes. There are versions available which can be placed at communal locations, but also individual units suitable for home use. GCC will encourage the use of these types of solutions and consider how they can be integrated into business and residential travel planning, and included within new housing schemes as part of the planning process.
- **3.4.26** Secure facilities allows access by multiple couriers using a security number per drop. These are currently available for non-food deliveries and under development for perishables. Similarly, a model is being developed, whereby rail commuters can have deliveries made to secure deposit boxes at their chosen railway station, so they can collect their delivery on the way home from work.

Permission given by Shutters tock to use this photograph.

Policy LTP PD 3.5 - Managing Domestic Deliveries in Urban or other Sensitive Locations

GCC will encourage local communities, Chamber of Commerce, Parish and Town Councils to consider the role of freight within their Neighbourhood or Town Centre Plans in order to minimise the impact of domestic deliveries in urban or other sensitive locations and of wasted delivery miles due to failed deliveries.

- Provide specific advisory guidance for local communities to consider the development of last mile delivery policy and route identification as part of the neighbourhood and local plan process.
- Provide specific advisory guidance for the development of voluntary quiet delivery service scheme as part of the neighbourhood and local plan process.
- Promote and encourage low carbon bike delivery in urban centres, particularly where vehicle delivery restrictions are in force.
- Support ultra-low emission vehicles for last mile deliveries.
- All overarching and mode policies will take this policy into account.



Rail and Water Freight

- **3.4.27** Improving connectivity to ports and airports is a national priority. Ports at Poole, Bristol and Newport and connections to Bristol airport are particularly important for the South West. The government's Rail Freight Strategy, ⁶² highlights that each tonne of freight carried by rail instead of by road reduces carbon emissions by 76% compared to road. It therefore set out actions to encourage more freight to go by rail.
- **3.4.28** Although there are no commercial railfreight terminals in Gloucestershire, infrastructure such as sidings exist which could be used as small scale terminals for specific types of freight. These include Gloucester Yard and Lydney. A number of freight facilities exist in neighbouring areas such as at Westerleigh petroleum terminal, Tytherington quarry and Long Marston. There is also potential for light parcel rail traffic hubs at Chel tenham and Gloucester rail stations where low carbon alternatives such as e-cargo bikes or electric vehicles could be used for the last mile deliveries. Consideration should be given to the safeguarding of land to facilitate this development in the future.
- **3.4.29** Gloucestershire has a strong shipping heritage, as demonstrated by the extensive Gloucester Docks complex and the Glouces ter and Sharpness Canal linking to the Severn estuary. Today, commercial shipping in the county is limited to small scale operations at Sharpness Docks while Gloucester is primarily a leisure port, along with the harbour at Lydney.



Rail freight reduces CO₂ emissions by 76%





Policy LTP PD 3.6 Rail and Water Freight

GCC recognises the limitations for existing and potential 'trans-modal' freight facilities within Gloucestershire, while encouraging the transfer of goods to non-highway means of transit for freight travelling through the County.

- Supporting suitable third party promoted schemes for increased use of rail or water (sea or canal) to transfer freight, where a valid business case and funding proposal can be provided.
- All overarching and mode policies will take this policy into account.



3.5. Highways Policy Document (PD4)



- 3.5.1 Businesses, their supply chains, workers and consumers collectively depend upon a good quality highway network in Gloucestershire to move goods, deliver services and travel to work and other service facilities. The time taken to undertake a journey affects productivity, in that time spent travelling reduces time available to produce goods or provide services. Increased connectivity, quicker journey times and better access to new locations allows businesses to expand their labour pools and access bigger markets. For commuters, better network connectivity further results in greater employment and key service choices.
- 3.5.2 Gloucestershire aims to provide the right connections to facilitate economic growth, ensuring the highways network serves all modes, communities, commuters and travellers, linking them to job opportunities, services and other areas. This has to be balanced against pressures to reduce car dependency and reduce highway transport's contributions to CO_2 emissions and other adverse environmental impacts. Nationally, road passenger cars account for 55% of all transport related greenhouse gas emissions (GHG), HGVs 16.6%, LGVs 15.6% and buses 2.5%, as opposed to railways 1.4% (by source 2018).

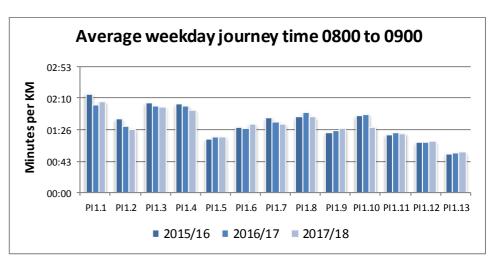


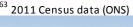
Together cars, vans and HGVs account for over 87% of emissions



- **3.5.3** The population and travel profiles for the county highlight where there is current and future demand for travel on our highways. Gloucestershire is a predominantly rural county. Car and van travel is the predominant choice of travel to work in Gloucestershire ⁶³. There is a culture of high car dependency and usage which, if unmitigated and combined with significant planned growth, will place increasing pressure on transport networks across the county and on strategic links to neighbouring areas. This will result in increased journey times by car and bus. Equally, network saturation will have a detrimental impact on local business activity in the county, undermining its capacity to secure growth.
- 3.5.4 Congestion affects journey time reliability and is therefore strategically critical for the local economy. It also increases transport emissions. It is therefore measured in LTP indicator PI-1 Journey time reliability on strategic important routes during the AM peak, seen in Figure PD4 (A), showing overall a speeding up of minutes travelled per kilometre. LTP Indicator PI-2 Number of peak hour vehicle journeys, reported in the LTP monitoring, show that in Gloucestershire, journeys are decreasing at an average of 0.7% and 0.05% in the AM and PM peaks respectively, suggesting that people are adapting their journey times, possibly extending the peak period while commuters vary their travel times to avoid peak congestion. However, significant growth will require a continued commitment to providing a range of travel choices that ensure the network remains efficient as journeys continue to increase.

Figure PD4 (A) - Journey time reliability on strategic important routes during the am peak







Gloucestershire's Highways Network

- **3.5.5** Gloucestershire has about 80 miles of motorway and trunk road and approximately 3,300 miles of local authority managed highway. The network is dominated by the M5 motorway, which runs north-south through the county and provides good connectivity to Birmingham, the Midlands, the North, Bristol and the South West and the M4 corridor (Wales and London).
- 3.5.6 The Strategic Road Network (SRN) of motorways and other major routes are managed by Highways England and benefit from the Road Investment Strategy. Government announced, as part of the Transport Investment Strategy, that it would take forward proposals to create the Major Road Network (MRN). This middle-tier of local authority 'A' roads sits between the nationally-managed SRN and the rest of the Local Road Network. These roads will benefit from targeted funding available through a share of the National Roads Fund (NRF). The aim is to improve productivity and connectivity in our towns and cities. Figure PD4 (B) illustrates the SRN and MRN for Gloucestershire.
- **3.5.7** Maintaining a functioning highway network is the foundation for an integrated transport system. All transport modes in some way interact with the highway network. Therefore, providing a safe and reliable highway network is fundamental to the delivery of the LTP objectives.
- **3.5.8** To maintain a functioning highways networkfor all transport vehicle delay pinch points need to be minimised. Equally, it may be necessary to seek ways of better managing, or reducing, motorised traffic, to ease pressures on the system. It is not feasible to depend only on highway construction to minimise vehicle delays. It will also depend on a package of physical and behavioural change initiatives, branded as Thinktravel, designed to raise awareness of travel options. Technology will play an increasing role in alerting individuals to travel

conditions, informing travel choices and allowing journeys to be diverted to avoid vehicle delay pinch points.

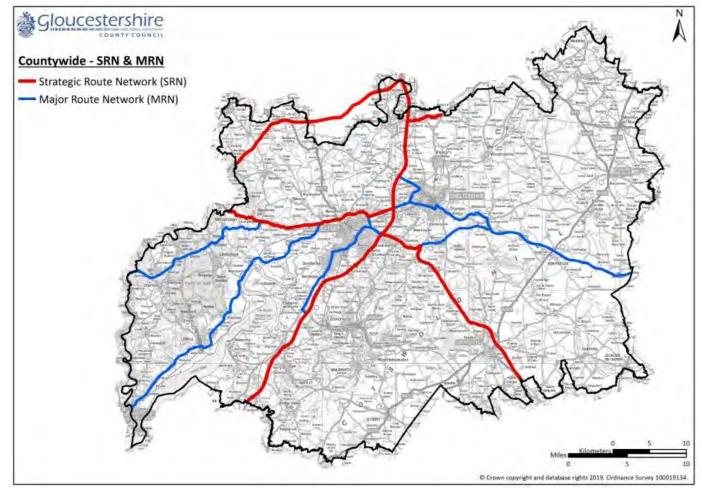
- **3.5.9** To aid the prioritisation of highway investments, the role of individual highway links (roads) has been considered at a strategic level. Gloucesters hire's **Link and Place Spectrum**, set out in the **LTP Summary Evidence Base**, builds on the approach outlined in the DfT's Manual for Streets. Where identified, each link has been designated a role in terms of its function in connecting different places. This designation has not been assigned simply in relation to the type of road but how the road is used and how the road is perceived when being used.
- **3.5.10** Managing the traffic flow on certain roads helps conserve the local environment. For some communities, their existence stems from the access provided by the road. The function of the road (link) may not have changed over time and it may continue to remain as critical now as it did in the past. Where this is the case, this role must be maintained. The **Link and Place Spectrum** in **Annex 3.0** illustrates howthis approach has been applied in Gloucestershire and builds on the DfT's Manual for Streets. ⁶⁵ Where identified, each link has been designated a role in terms of its function in connecting different places. This designation has not been assigned simply in relation to the type of road, but how the road is used and perceived when being used.
- **3.5.11** The Link and Place designations have no impact in terms of highways maintenance or the consideration of future development. Primarily they inform local investment priorities and helplocal communities think about the role of the highway where they live. This could be a consideration when producing Neighbourhood Development Plans.

⁶⁵ Department for Transport (DfT) Manual for Streets https://www.gloucestershire.gov.uk/highways/plans-policies-procedures-manuals/manual-for-gloucestershire-streets/



⁶⁴ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/508505/road-investment-strategy-post-2020-planning-ahead.pdf

Figure PD4 (B) Gloucestershire Strategic and Major Road Network





Policy LTP PD 4.1 –Gloucestershire's Highway Network

GCC will maintain a functioning highway network that supports Gloucestershire's transport network by ensuring the safe, accessible and expeditious movement of highway users.

- Work in partnership with Highways England to maintain the safe and expeditious movement of traffic when using the Strategic Road Network, by seeking value for money improvements to network pinch points to enhance network efficiency.
- Develop MRN routes in line with guidelines, available funding and neighbouring authorities, to ensure the objectives for the network are achieved.
- Maintain and, where feasible, improve the highway network for all non-motorised highway users prioritising the integration of transport modes.
- Reduce the risk of conflict for all highway users by complying with national Government guidance and legislation, including the use of mobility scooters on the footpath.
- Increase the use of technology and social media (Intelligent Transport Systems) to increase awareness of delays on the highway network, ensuring highway users are informed in advance or during their journey.
- Reduce pressure on the local road network by promoting alternative sustainable travel choices through the <u>Thinktravel</u> programme.
- Apply the Link and Place highway spectrum when prioritising investment decisions and during discussions with local communities when producing their Neighbourhood Plans.
- Lobby Government to pursue opportunities for the decriminalisation of the enforcement for moving traffic offences, regulated under the Traffic Management Act.
- Ensure walking and cycling routes are safe and form a continuous accessible network accessing town centres, residential areas, employment areas, and routes to schools.
- Follow green infrastructure principles in the design, maintenance and operation of highway asset as set out in the green infrastructure pledge as well as meeting Building with Nature standards.
- Preserve and enhance the geodiversity of the highway asset wherever practicable.
- Under the Highways Act 1980, any developer or scheme promoters, that delivers highway infrastructure to be adopted by GCC, must fully comply with the Council's Enhanced Materials and Commuted Sum Policy (MfGS), whereby appropriate materials are specified and the full costs of implementation and future maintenance are factored in to the scheme budget.
- All overarching and mode policies will take this policy into account.



Highway Network Resilience

- **3.5.12** Due regard for the strategic risk of climate change in line with the Corporate Risk Management Strategy and Gloucestershire Climate Change Strategy is of key importance to Gloucestershire's highway network resilience. Severe Weather Impacts Monitoring (SWIM) and the UK Climate Impacts Programme (UKCIP) and the Shoreline Management Plan for the Severn Estuary helps to monitor, evaluate and bring resource knowledge to the council to better manage highway resilience in the face of climate change.
- **3.5.13** It is vital to manage a resilient highway network because Gloucestershire is a rural county that depends on its highway network for the movement of people and goods. When parts of the network are compromised by weather events, unplanned network repairs or major events, the impacts can be significant. Therefore, National and Primary Links must be resilient to abnormal events, such as flooding, high winds, road closures or accidents, to help maintain journey reliability. This in turn will support confidence in the network and inward investment in the region.
- **3.5.14** GCC continues to work with specialist bodies, such as the Environment Agency and Highways England, our partners at parish and district level and communities, to try and ensure that the highway network and the communities, trade and commerce that it serves, are better protected in terms of flood risk resilience including green and blue infrastructure in line with Biodiversity Diversity Guidance for Gloucestershire, to help reduce flood risk in communities.

- **3.5.15** A further challenge is that sections of the highway network, under normal conditions, are currently operating near, or beyond, capacity. Also, poor quality roads can lead to emergency unplanned network repairs which, in turn, can result in severe disruption. The backlog of required maintenance costs is calculated at approximately £80 million, and reductions in the future budget for road maintenance, pose a real threat to the network. We will aim to seek investment in the County's transport network as funding opportunities arise to address highway network flood risk and build in long-term resilience.
- **3.5.16** In the face of these challenges, there are opportunities to strengthen the network and minimise disruption. Communication, for example, is vital to achieving a resilient highway network and new technologies. Variable Message Signs on the Strategic Road Network and social media play important roles in disseminating critical journey planning information to manage traffic demand. Exploring opportunities for data and intelligence sharing needs to be maintained to ensure road users are prepared and informed and resources are pooled.
- **3.5.17** Advanced planning is also critical. Identifying vulnerable location using Highways Infrastructure Resilience Assessment Modelling (HIRAM) tool, developing severe weather plans, having incident de-brief processes, and research and development, can all help to mitigate against situations where the resilience of the highway network is under threat.



Policy LTP PD 4.2 – Highway Network Resilience

GCC will provide a resilient highway network that can withstand unforeseen events, including extreme weather events and long term changes to the climate.

- Take due regard for the strategic risk of climate change in line with GCC's Corporate Risk Management Strategy, the Glouces tershire Climate Change Strategy, the Local Adaptation Advisory Panel (LAAP) England, Severe Weather Impacts Monitoring (SWIM), the UK Climate Impacts Programme (UKCIP) and the Shoreline Management Plan for the Severn Estuary, to better manage highway network resilience.
- Identify the most vulnerable parts of the transport network and develop contingency plans to ensure a functioning network during unplanned events.
- Disseminate network information during times of extreme weather so people are informed and aware about the travel choices they make.
- Regularly review winter maintenance and vegetation clearance procedures and policies, in line with the Gloucestershire Highways Biodiversity Guidance (or subsequent guidance).
- Continue to deliver highway and flood alleviation schemes which reduce the risk of highway closures on class one and two rout es.
- Continue to work with specialist bodies, such as the Environment Agency and Highways England, our partners and communities, to try and en sure that the highway network and the communities, trade and commerce that it serves, are better protected in terms of flood risk resilience including green and blue infrastructure measures to change impermeable surfaces connected with the highways and verges to help reduce (primarily surface water) flood risk in communities.
- Work in partnership with District Councils, the Environment Agency, GFirst LEP, Homes England, Highways England, DfT and any other necessary government bodies, to seek investment in the County's transport network as funding opportunities arise to address highway network flood risk and build in long-term resilience.
- Continue working jointly with the Environment Agency to build evidence of the effects of flood risk and climate change on highway network infrastructure in order to develop a pipeline of schemes.
- Explore opportunities for sharing data and intelligence to build an Integrated Environment Mapping Tool or similar, to draw together evidence of environmental constraints and opportunities to help target resources.
- Continue to work with partner organisations at a sub-national level to resolve issues that arise on the network outside of the county.
- Continue to seek funding for larger scale improvements to provide an alternative where routes resilience is compromised by the lack of any suitable adjoining network.
- Promote energy saving, water conservation, improvements in surface water run-off and provision of SuDS, in both new highway schemes and retrofitting of existing schemes (where opportunities arise), recycling and use of sustainable materials in the construction and operation of transport projects.



- Under the Highways Act 1980, any developer or scheme promoters, that delivers highway infrastructure to be adopted by GCC, must fully comply with the Council's Enhanced Materials and Commuted Sum Policy (MfGS), whereby appropriate materials are specified and the full costs of implementation and future maintenance are factored in to the scheme budget.
- Developers are required to submit through planning, Delivery and Servicing Plans and where appropriate, Construction Management Plans to; manage site traffic, and to reduce carbon emissions and other pollutants.
- All overarching and mode policies will take this policy into account.

Highway Maintenance

3.5.18 Gloucestershire's 3,300 miles of local highway network comprises of a range of assets, including; carriageways, footways, bridges, traffic signals and street lighting. GCC as local highway authority is responsible for the management of this network. Maintenance of the network is delivered by a GCC appointed highway maintenance supplier.

3.5.19 How this service is delivered is informed by GCC's Transport Asset Management Plan (TAMP), which is the County's strategy for managing highway assets in Gloucestershire and forms part of the Highways Asset Management Framework. ⁶⁶ The TAMP aims to move away from reactive maintenance towards a preventative approach to the maintenance of highway assets and to prioritise roads that have not yet fallen into the failure threshold. Whilst to a general onlooker carrying out maintenance on a road that doesn't look in need of repair may seem unnecessary when other roads are in worse condition, this will often be the right choice and ultimately deliver the best value for the county in the long term. Where appropriate opportunities arise, improvements in surface water run-off and provision of SuDS, including retrofitting of existing highway scheme can also add value for money.

- **3.5.20** GCC's highway maintenance forward programme covers all of our major highway assets. We have identified that the next stage to improve our programming is to develop a cross asset programme, in line with the Code of Practice for Well Managed Highway Infrastructure. Due to the backlog of deterioration and limited available funding, it is not possible to maintain every road to a high standard. However, users should expect to find a condition that is safe and consistent with the type and location of that particular road or footway.
- **3.5.21** Key risks which threaten the sustained delivery of the road transport asset are:
 - Maintenance backlog
 - Funding cuts
 - Climate change
 - Future demand
 - Network resilience

3.5.22 The Council is investing additional capital funding in Structural Maintenance which will result in over £150m of investment in the road network between 2018/19 and 2021/22. This investment will double the amount of resurfacing done on the network and reduce the maintenance backlog.





- **3.5.23** Ensure that any developer or scheme promoters, that delivers highway infrastructure to be adopted by GCC, must fully comply with the Council's Enhanced Materials and Commuted Sum Policy (MfGS Appendix I) ⁶⁷, whereby appropriate materials are specified and the full costs of implementation and future maintenance are factored in to the scheme budget.
- **3.5.24** Gloucestershire has a programme of street lighting upgrades, with the implementation of LED, coupled with dimming technology to reduce energy consumption and manage costs.

⁶⁷ MfGS (July 2020) - https://www.gloucestershire.gov.uk/highways/plans-policies-procedures-manuals/manual-for-gloucestershire-streets/



Policy LTP PD 4.3 – Highway Maintenance

GCC will manage the local highway asset management in line with the Highways Asset Management Framework and other guidance or policies such as the Code of Practice for Well Managed Highway Infrastructure.

- Deliver a fit for purpose highway asset.
- Deliver over £150m of investment in highways including additional investment in structural maintenance to reduce the maintenance backlog.
- Work with GCC's Highways Maintenance supplier to deliver the works and services outlined in the Highways Asset Management Framework.
- Inspect and repair the highway network in line with the County's Highway Safety Inspection Policy, in order to ensure it is in a safe condition.
- Ensure that street works undertaken on the local network by third parties are completed to a high standard minimising congestion and ensuring safety for those walking, cycling and people with limited mobility, and that the quality of such works are monitored, with third parties being required to take corrective action as necessary.
- Promote alternative sustainable travel choices through the Thinktravel programme during highway maintenance works.
- Manage the street lighting network to minimise environmental impact without compromising on road safety and personal security.
- Manage the traffic signal network to minimise congestion and to prioritise the movement of buses and cyclists through phased traffic signals.
- Ensure road signage is maintained within the Highways Asset Management Framework. Review the provision of street furniture and signing and manage the local highway asset in line with the Highways Asset Management Framework, ensuring that street clutter is minimised.
- Minimise the impact of highway work on the surrounding landscape and ensure where new highway structures are required they are sympathetic to their surroundings including bridges, fencing and walling.
- Ensure promoters of new transport schemes comply with the Enhanced Materials and Commuted Sum Policy (MFGS) whereby appropriate materials are specified and the full costs of implementation and future maintenance are factored into the scheme budget.
- Comply with the Gloucestershire Highways Biodiversity Guidance or subsequent guidance. Enhance and restore the wildlife function of highway verges by continuing to work in partnership with Gloucestershire Wildlife Trust (GWT) through GCC's Conservation Road Verges Site Register to ensure that all road verges receive appropriate conservation management as part of highways maintenance and related schemes.
- Under the Highways Act 1980, any developer or scheme promoters, that delivers highway infrastructure to be adopted by GCC, must fully comply with the Council's Enhanced Materials and Commuted Sum Policy (MfGS), whereby appropriate materials are specified and the full costs of implementation and future maintenance are factored in to the scheme budget.
- All overarching and mode policies will take this policy into account.



Road Safety

- **3.5.25** Road safety contributes to the, security and health of individuals by reducing the risk of death, injury or illness arising from transport, by working with partners to improve personal safety perceptions and the promotion of transport that contributes to good health and wellbeing.
- **3.5.26** Road safety concerns damage social wellbeing and losses of life or serious injury have economic impacts. In Gloucestershire the value of prevention of collisions was valued at £113m in 2017. In terms of the impact on other transport users, accidents can be the source of unplanned delays which adversely affect route journey times and disrupt business activity, adding to overhead costs through lost time. Safety issues, whether perceived or actual, can also form a barrier to the use of more sustainable modes, including cycling, walking and public transport.
- **3.5.27** Well designed transport infrastructure and safe service provision can aid in improving safety for all transport modes and thereby reduce the number of injuries occurring in Gloucestershire. Manual for Streets (DfT) sets out the relationship between transport and land use and the methods for delivering well planned communities, including creating safe and secure layouts which minimise conflict between road traffic and those choosing to walk and cycle.

- **3.5.28** Road safety is a statutory duty for a local authority and GCC works with partners to reduce road deaths and injuries. Significant funding has been spent on road safety across the county over recent years. For example, a £2.2million summer programme of 100km of new road surface treatment that increases a road's lifespan and enhances skid resistance, making it safer to drive on. Funding has also been invested in road planning, speed management and road safety education campaigns and programmes.
- **3.5.29** Whilst there has been a decrease in casualty numbers across all districts in Gloucestershire, serious and fatal casualties remain an issue in both urban and rural areas, with incidents strongly clustered around the most heavily trafficked corridors and the main urban settlements.
- **3.5.30** There is still progress to be made to improve Gloucestershire's road safety record and one of the key challenges is that, as maintenance funding constraints continue, and the county tackles the maintenance backlog, there is a risk (particularly inoutlying rural areas) that road conditions may deteriorate, contributing to heightened safety risk to users.



Policy LTP PD 4.4 – Road Safety

GCC will contribute to improved safety, security and health by reducing the risk of death, injury or illness arising from transport, working with partners to improve personal safety perceptions and the promotion of transport that contributes to good health and wellbeing.

- Ensure all new highway schemes that are delivered by the Local Highway Authority, developers or scheme promoters are designed using the principles of Manual for Streets and the County's technical specifications for new streets.
- Deliver a co-ordinated approach to road safety with partners that include proactive highway design guidance, delivery of reactive engineering solutions to highway issues, provide evidence to support engineering, education and enforcement activities.
- Work collaboratively with Gloucestershire police, relevant agencies and campaign groups on education training programmes to target young drivers, motorcyclists, distraction and alcohol and drug related driving.
- Support communities to deliver local speed campaigns through the local policing teams.
- Introduce speed limits in accordance with the current national guidelines and prioritise them based on available evidence, including 20mph zones.
- Consider the needs of all road users, including pedestrians and cyclists, when amending highway speeds to ensure safety, functionality and consistency are not compromised.
- Work with developers and transport scheme promoters to consider, when designing new schemes, factors which influence the success of routes and facilities in terms of their safe use and function, such as layout, visibility, gradient, lighting, natural surveillance, integration and signing.
- All overarching and mode policies will take this policy into account.



On-Street Car Parking

- **3.5.31** The management of parking is one of the most effective means of managing congestion. As Gloucestershire is a two-tier authority, responsibility for parking in the county is shared between the County Council and the six district authorities. The control and demand management of on-street parking and Transport Interchange Hubs (previously, traditional park and ride sites) is the responsibility of the County Council as the local highway authority. The District Councils control and manage most public off-street car parks.
- **3.5.32** Wherever possible, the County Council seeks to influence off-street car park charging regimes, specifically in the urban areas, to influence demand management and balance the needs of commuters or employees (i.e. long stay parking) and the requirements of local businesses and shoppers (i.e. short stay parking). GCC continues to review parking restrictions and work with the District Councils. Details of the current policies on the provision and management of residents' parking can be found on our website, www.gloucestershire.gov.uk/highways/parking/.
- **3.5.33** Where competition for spaces occurs, priority is normally given to short stay parking. GCC encourages the development of strategies for town centre onstreet car park charges and other controls that benefit short stay over long stay parking. This approach encourages shopping and supports economic activity, while incentivising more sustainable and congestion friendly travel to work.
- **3.5.34** Longer stay commuter parking is discouraged in town centres as it reduces the opportunity for shorter stay parking which is vital to the local economy, subject to the needs of residents being safeguarded. An ongoing partnership with District Councils, local businesses and employees is needed to encourage the use of long stay car parks, Transport Interchange Hubs, car sharing, public transport, cycling and walking for the work journey.

- **3.5.35** The main issue concerning designated areas of regulated parking is how controls are managed, charged and enforced. Parking controls will be applied selectively, in order to address specific problems. Limited waiting pay and displays paces close to neighbourhood shopping centres may be introduced in order to provide adequate short stay spaces without the need for more extensive controls. In areas where conflicts are likely to be more wides pread, Controlled Parking Zones (CPZ) or Permit Parking Areas (PPA) can be introduced to manage area-wide parking issues. Additional CPZs or PPAs will be introduced as the need arises.
- **3.5.36** GCC continues to work with District Councils to ensure that adequate provision is made for ranks for the standing of licensed taxis. These provide for access to town centres in locations where parked vehicles do not hinder normal traffic flows. Additionally, part-time evening and overnight ranks are considered in locations which serve the night time economy.
- **3.5.37** Gloucestershire County Council will seek to clarify policy guidance for on-street car parking, through the revised Manual for Gloucestershire Streets. Guidance for new development will set out provision for, electric vehicle charge points and/or alternative infrastructure, 'EV-Car Clubs', 'car-free' or 'permit free' arrangements for new development, appropriate to location. MfGS will provide for exemplar on-street space, designed and allocated for pedestrians, cyclists, mobility users, deliveries, bus stops and bus priority measures before parking of private vehicles.



Policy LTP PD 4.5 – On-Street Car Parking

GCC will work in partnership with District, Parish and Town Councils, transport operators and neighbouring Highway Authorities, to ensure that parking policies in each area support the local economy and maintain the safe and expeditious movement of traffic on the road network.

- Operate the civil enforcement parking operation as a partnership with affected residents, businesses and visitors.
- Coordinate off-street parking enforcement management to ensure a comprehensive and complementary approach.
- Allocate parking permits or waivers with clear conditions of use, based on transparent and consistent principles, to give priority in accordance with the defined hierarchy of parking enforcement.
- Maximise the potential of information technology systems to support an effective and efficient parking management operation
- To approach the use of discretion objectively and in accordance with legislation. GCC will publish policies on the 'exercise of discretion'. For the latest information and guidance refer to the County Council website www.gloucestershire.gov.uk/parking.
- Work with our partners in the demand management of vehicle parking and discourage commuter parking in town and city centres. This will be through the application of supply and pricing mechanisms, and the encouragement of the use of public transport, flexible working patterns, Transport Interchange Hubs and active travel modes.
- Establish informal parking board meetings with District Councils on a project by project basis.
- Developers are required to fully comply with Manual for Gloucestershire Streets (MfGS) and the County's Technical Specifications in respect to provision for car parking, taking account of exemplar design for on-street parking.
- Align with the EV Strategy, Climate Change Strategy, and the Gloucestershire Sustainable Energy Strategy.
- All overarching and mode policies will take this policy into account.



3.6. Rail Policy Document (PD5)



- **3.6.1** Current levels of rail usage in Gloucestershire are relatively low (at 1%) compared with other parts of England (around 5%). However, with rail accounting for just 1.4% of transport related greenhouse gas (GHG) emissions, there is considerable potential for rail to facilitate sustainable economic growth by making best use of its strategic advantages, including:
 - The central location of Gloucestershire and its good rail links with Birmingham, Bristol, Swindon, Reading and London

- The availability of housing land within the catchment areas of existing stations such as Kemble, Cam and Dursley, Lydney, Stonehouse and Ashchurch
- The established urban centres of Cheltenham and Gloucester, along with their excellent links to the key centres



Rail - 1.4% of greenhouse gas emissions

- **3.6.2** Gloucestershire's long term vision for rail is for more frequent, faster passenger services accessed via modern station facilities that provide gateways to the rest of the country. The vision will be achieved by delivering a comprehensive local service that complements faster, longer distance services with links to the City Regions; together they will offer improved journey choice and connectivity, shown in Figure PD5 (A).
- **3.6.3** Different organisations manage the rail network within the UK. Network Railis a government owned company responsible for managing rail infrastructure including rail lines and level crossings. Train Operating Companies (TOCs) are privately owned businesses that operate train services and manage stations. These are managed through franchises awarded for fixed time periods. TOCs operating in Gloucestershire include: Great Western Railway, Cross Country Trains, and Keolis Amey (Transport for Wales).

The Department for Transport (DfT) put in place Emergency Measure Agreements (EMAs) with privately owned franchised train operating companies (TOCs) to mitigate the



- **3.6.4** Rail fare structure is a national issue, several governments have attempted to institute change in these areas since privatisation. While some positive changes have been delivered for passengers; including new ticketing technologies and an improved process of buying tickets, the overall system remains largely the same. A House of Commons briefing paper, 'Rail fares, ticketing & prospects for reform'. ⁶⁹ GCC will support future national rail fare and ticketing reform.
- **3.6.5** GCC has a limited role in future rail investment decisions, although it may make representations about future franchises. As GCC's role as local transport authority, the use of rail is promoted primarily as an alternative to the car for medium and long distance travel. Rail also has a role in offering some short distance trips, such as between Lydney and Gloucester.
- **3.6.6** Table PD5 (a) outlines the main themes of this policy document and the associated issues. Whilst the County Council can more directly influence and deliver on theme 3 it is also able to influence infrastructure and service improvements through partnership working and direct lobbying. For information on Rail Freight refer to policy Rail and Water Freight (LTP PD 3.6) included in the LTP Freight policy chapter (PD3 Freight).

Table PD5 (a) – Key themes of Rail Policy Document

Theme 1 Infrastructure improvements	Theme 2 Service improvements	Theme 3 Rail station access improvements
 Electrification Capacity infrastructure 	 Great Western mainline Bristol to Birmingham main line including Worcester Shrub Hill South Cotswold line North Cotswold line Gloucester to South Wales 	 Access by non-car modes Access by car Access to information Station facilities

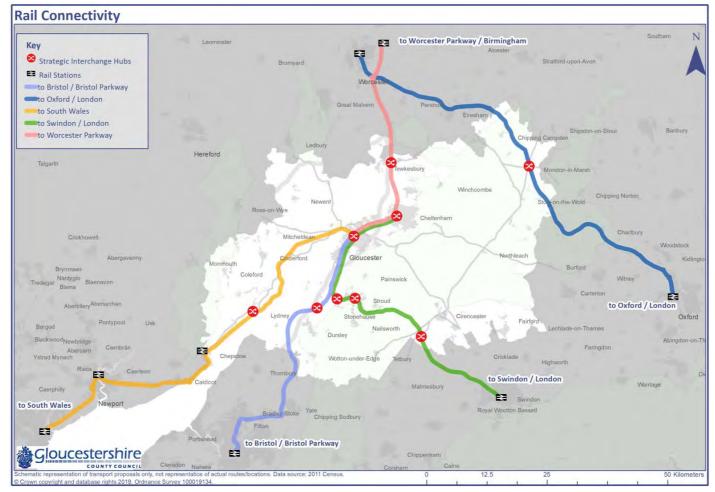
financial impacts resulting from the COVID-19 pandemic and ensure that key rail services could continue to operate. Following EMAs, the Minister for Transport announced a plan to end franchises. No further detail is currently available.

⁶⁹ Rail Fares, ticketing & prospects for reform (April 2019) -

https://commonslibrary.parliament.uk/research-briefings/cbp-8552/



Figure PD5 (A) – Gloucestershire Rail Connectivity





Rail Infrastructure Improvements

- **3.6.7** Improvements to rail infrastructure will enable train operators to deliver improved service patterns. Network Rail is considering a number of medium to long-term infrastructure improvements that will improve the operation, speed and capacity of rail services to, through and within Gloucestershire. A rail investment strategy for Gloucestershire (**RIS**) was commissioned to provide the economic evidence base needed to prioritise infrastructure and service enhancements investments in the county. ⁷⁰
- **3.6.8** Gloucestershire needs to engage with the proposals for Bristol, Cardiff and Birmingham to ensure rail infrastructure is in place to maximise connectivity to serve the expected increase in demand from businesses and communities wanting to access these economic centres. Improvements in journey times to London will also strengthen Gloucestershire's position.
- **3.6.9** The West of England Combined Authority is seeking capacity improvements to enable the MetroWest proposals to improve services in the greater Bristol area. The County Council is working with the West of England Councils to extend services to Gloucester calling at Cam and Dursley creating an half hourly service between Bristol and Gloucester.
- **3.6.10** Electrification of the Great Western Mainline between London and Bristol Parkway has helped to improve services times.
- The Bristol to Birmingham main line is a key corridor on the national rail network running parallel with the M5. It runs north – south through the Central Severn Vale where the majority of the Gloucestershire's housing and employment land is located and where considerable development is proposed over the next two decades. The recently published RIS identified this rail corridor as the most economically important for the County which would be significantly enhanced by two additional regional stopping services. Network Rail has previously considered the electrification of the Bristol to Birmingham mainline. This would enable wider plans for additional services, stations and stops at Ashchurch for Tewkesbury and Cam & Dursley, as well as providing enhanced capacity and speeds and potentially complementing the case for 'classic compatible' trains running through Birmingham onto HS2. Electrification of this route would also improve air quality particularly through the Gloucester -Cheltenham conurbation and encourage cars off the M5. The recently published Network Rail Traction Decarbonisation Network Strategy Interim Programme Business Case proposed extensive electrification for routes within Gloucestershire. 72
- **3.6.12** The North Cotswold Line Task Force brings together a range of stakeholders along the route to promote faster and more frequent services through more efficient use of existing infrastructure in the short term and provision of additional infrastructure in the longer term. This will benefit stations in and adjacent to Gloucestershire including Moreton in Marsh, Honeybourne and Kingham.

⁷¹ Network Rail Traction Decarbonisation Network Strategy (July 2020)recommends all railway lines in Gloucestershire for electrification although no indication of timescales is given. https://www.networkrail.co.uk/wp-content/uploads/2020/09/Traction-Decarbonisation-Network-Strategy-Interim-Programme-Business-Case.pdf



⁷⁰ RIS - https://www.gloucestershire.gov.uk/transport/gloucestershires-local-transport-plan-2015-2031/rail/

- **3.6.13** There is a complex inter-relationships between the different strands of rail investment and how these could impact on Gloucestershire. <u>Table PD5 (b)</u> summarises key elements stemming from the analysis of the existing commitments and the long-term plan options set out in the Western and Welsh Route Study documents and CSMP process.
- **3.6.14** Other long-term infrastructure schemes which will have indirect (though still significant) impacts on services in the Gloucestershire area include HS2 and the arrangements for interchange in Birmingham Crossrail with improvements at Reading and the western access improvements at Heathrow.
- **3.6.15** Future freight demand will need to be accommodated by a 'transmodal' model to include road, rail and port infrastructure along with demand for passenger transport in order to accommodate growth. Location of freight distribution centres on rail and water connected routes, not only on the strategic road network, would encourage non-road freight and help reduce road congestion. ⁷² PD3 Freight policy chapter covers the rail and water freight.
- **3.6.16** Last mile deliveries by low carbon e-bikes or electric vehicles from rail parcel freight hubs could serve the main centres of Cheltenham and Gloucester, where opportunities for railways idings or land availability next to the railway network is present, so as to help reduce carbon emissions and air pollution in town centres.
- **3.6.17** GCC will engage effectively with Network Rail and its planning processes, highlighting the links between rail development and local housing and economic development within the county.

www.nic.org.uk/wp-content/uploads/Future-of-Freight_Future-of-Freight_Demand MDS-Transmodal.pdf



Table PD5 (b) - Key Rail Commitments and policy proposals

Proposal	Timescale, Source and Status	Gloucestershire Impacts	Actions
Great Western Main Line Electrification	Being delivered, but some sections removed from current programme	Improved services and greater capacity	Support case for extension to Cheltenham and Gloucester
Bristol – Birmingham electrification	The recently published Network Rail Traction Decarbonisation Network Strategy Interim Programme Business Case proposes extensive electrification for routes within Gloucestershire including Bristol to Birmingham	Improved journey times, capacity and environmental benefits. Potentially better HS2 integration (long term)	Work with Bristol & other Councils/LEPs to press for scheme
MetroWest services Bristol-Yate and beyond	New trains to Yate funded through Local Growth Fund, likely Control Period 6 (2019-2024). Capacity improvements needed	Potential extension to Gloucester	Work with West of England Councils West of England Combined Authority and LEPs to develop planfor route and build funding case for trains & infrastructure improvements
Junction capacity improvements	Abbotsford Junction (South of Worcester) and Westerleigh Junction (East of Bristol Parkway) under consideration – Control Period 6 (2019-2024) Control Period 7 (2014-2029) & beyond. Raised via the Western Route Study which is now being superseded by Network Rail's Continuous Modular Strategic Planning process. Standish Junction improvements	Will help support a range of service improvements by reducing conflicts between services, increase capacity and improve journey times	Work closely with the TOC and Network Rail on the options, what they would enable and how they would link into housing growth/rail growth plans
Capacity improvements – dynamic/passingloops	Western Route Study - Control Period 6 (2019-2024) Control Period 7 (2014-2029) to meet 2043 Conditional Outputs	Various alternatives for passing loops, including at As hchurch for Tewkes bury and Charfield, enabling more trains generally, and more stopping trains.	



Policy LTP PD5.1 - Rail Infrastructure Improvements

GCC will engage with the rail industry to ensure that Gloucestershire is well placed to take advantage of the wider rail infrastructure improvements, including route electrification, HS2 at Birmingham, MetroWest and western access to Heathrow Airport and CrossRail at Reading. Potential enhancements will need to be considered through Network Rail's Continuing Modular Strategic Planning process which has highlighted the Bristol to Birmingham corridor as a priority in conjunction with the Western Gateway Sub-National Transport Body's priorities.

- Work in partnership with District Councils, neighbouring authorities, Local Enterprise Partnership, Highways England, Network Rail, Train Operating Companies and Department for Transport to encourage investment in the County's transport network, as funding opportunities arise. Furthermore, to work with all interested parties to support transport improvements in line with delivery of the 'Access for All', LEP's Strategic Economic Plan and Local Industrial Strategy.
- Support the case for further electrification, including Bristol to Birmingham mainline.
- Work in partnership with GFirst, West of England authorities, West of England Combined Authority and Great Western Railway to develop and fund, the extension of the enhanced MetroWest Bristol Yate service to Gloucester and potentially beyond to Worcester.
- Work in partnership with Worcestershire and Oxfordshire County Councils, the rail industry and other stakeholders to improve infrastructure in order to increase services and reduce journey times on the North Cotswold line as set out by the North Cotswold Line Task Force.
- Work with Train Operating Companies and Network Rail to define and understand the infrastructure requirements needed to meet increased demand across the County network.
- Provide appropriate evidence to support the transport and economic case for track (including electrification through Gloucestershire), signal and station capacity enhancements, as part of Network Rail's Continuous Modular Strategic Planning (CMSP).
- GCC continues to look at the most suitable location for a new station south of Gloucester in conjunction with a range of partners. Given the limited capacity between Gloucester and Bristol the location for a new station(s) will need to be able to help meet the long term strategic growth over the next thirty years. Third party proposals for an additional new station south of Gloucester will need to be accompanied by a robust business case.
- Only support the re-opening of railway lines where a robust business case can be provided by the scheme promoter.
- Support heritage railway lines (Gloucestershire Warwickshire Steam Railway, Dean Forest Railway and Vale of Berkeley Railway) and their contributions to tourism.
- Protect the freight line at Sharpness for future use.
- Support in partnership with local planning authorities, Network Rail, rail freight operators and the private sector opportunities for last mile rail parcel freight hubs to help reduce carbon emissions.
- Secure contributions from developers towards priorities and schemes contained within the Local Transport Plan, where those priorities and schemes satisfy the



- tests of the Community Infrastructure Levy (Amendment) Regulations 2015 (or any subsequent legislation).
- Work with Tewkesbury Borough Council and other stakeholders to deliver the recommendations of the Ashchurch for Tewkesbury Ra il Strategy for service enhancements and station improvements.
- Work with partners to identify infrastructure enhancements on the Birmingham to Bristol mainline to deliver timetable and connectivity improvements for residents, businesses and visitors to the Gloucestershire. These may include some of the following:
 - o Dynamic/passing loops south of Gloucester and at Ashchurch for Tewkesbury
 - o Junction improvements at Abbotswood, Standish and Westerleigh
 - Signalling improvements in the Gloucester area
 - Cheltenham station capacity improvements
 - o Electrification between Bristol Parkway and Bromsgrove
 - o Gauge enhancements for freight traffic between Birmingham and Bristol to W12 standard
 - o Four tracking between Standish Junction and Cheltenham
- All overarching and mode policies will take this policy into account.

Rail Service Capacity Improvements

- **3.6.18** Service improvements are deliverable either through changes made through the Rail Franchise renewal process (or their replacements), or through the twice annual timetable renewal. The rail infrastructure improvements will, if implemented, provide the opportunity for TOCs to improve the service pattern within Gloucestershire, if it is financially viable to do so.
- **3.6.19** Where no commercial case can be made, a subsidy can be paid by a third party to enable a desired stopping pattern until such time as demand can be demonstrated and the service becomes commercially viable. GCC can request planning obligations (s106 or CIL if adopted) from developers where it is reasonable to do so.
- **3.6.20** MetroWest Phase 2 provides an opportunity to improve the links between Gloucester and Bristol, achieving a half-hourly service via Bristol Parkway and Yate. Developing a Business Case for this, in partnership with GFirst, South Gloucestershire Council and West of England Combined Authority is a priority in the short-term. Once these service improvements are established and operating commercially, further improvements could include the provision of a new transport hub or station south of Gloucester. This would be subject to the preparation of a business case, linked to housing developments in the area.
- **3.6.21** Improvements to passenger services at Ashchurch for Tewkesbury, as set out in its railstrategy, are important to support the proposed developments in the area. As with Ashchurch for Tewkesbury station the main barrier to the provision of additional services at Lydney is the shortage of rolling stock. In the longer term, it will be important to engage with the wider rail industry in the context of proposals for enhanced Birmingham Gloucester Cardiff services.



3.6.22 Opportunities for enhanced connectivity through HS2 will also be pursued. Active engagement is required, setting out the case for enhanced regional services on existing lines, complemented by 'Classic Compatible', running through Birmingham onto HS2 towards Leeds and Manchester. Failure to address this may leave the Gloucestershire economy at a significant disadvantage. Table PD5 (c) summarises the rail service policy aims for the short and long term.

Table PD5 (c) - Rail Service policy aims

Station and existing services	Short-Term policy aims (2021)	Medium to Long-Term policy aims (2021-2043+)
Cheltenham Spa	Hourly direct services to London	Review overall service patterns as part of wider planning in
Excellent connectivity a cross UK, including London		accordance with the GRIS
Gloucester	Hourly direct services to London	Work with GFirst, Bristol and West of England LEP to fund &
Good connectivity a cross UK, including London		deliver half-hourly Bristol-Glouces ters ervice
		Work within rail industry long-term planning to increase
		Gloucester-London frequency in accordance with GRIS
Stonehouse	Hourly direct services to London	Work with rail industry on long-term increase in frequency
Hourly services to London and to Swindon (from		(seeking half-hourly to London changing at Swindon) in
Chel tenham via Gloucester)		accordance with the GRIS
Stroud	Hourly direct services to London	Work with rail industry on long-term increase in frequency
Hourly services to London and to Swindon (from		(seeking half-hourly to London changing at Swindon) in
Chel tenham via Gloucester)		accordance with the GRIS
Kemble	Hourly direct services to London	Work within rail long-term planning to a dvocate London-
Fast hourly service to London (from		Swindon additional service runs to Kemble in accordance with
Cheltenham/Gloucester) – excellent scope for growth		the GRIS
Moreton-in-Marsh	Increase in services	Work with North Cotswold Line Taskforce on long-term
Good links to London (from Worcester) via Oxford		increase in frequency along with the GRIS
		Work with rail industry, North Cotswold Line Task Force, local
		authorities and other stakeholders to reinstate the rail link
		between Honeybourne and Stratford on Avon



Station and existing services	Short-Term policy aims (2021)	Medium to Long-Term policy aims (2021-2043+)
Cam & Dursley Hourly services to Bristol	Half hourly service to Bristol/Gloucester	Work with GFirst, South Gloucestershire Council and West of England Combined Authority to fund & deliver half-hourly Bristol-Gloucesters ervice in accordance with the GRIS
Lydney Station serves Lydney and wider Forest of Dean Trains stop only 2-hourly (Cheltenham-Maesteg via Cardiff) Availability of rolling stock constrains additional stopping services	Work with GFirst, developers and neighbouring areas to fund rolling stock/staffing for additional stops particularly during the day and on Sundays	Work within the Network Rail's long-term planning system, Monmouths hire County Council and other stakeholders to develop most effective approach to Lydney and Chepstow connectivity, taking account of access to Cardiff, Bristol and Gloucester/ Cheltenham. Also to explore the possibility of providing direct services between Lydney, Chepstowand the wider Bristol area by installing the necessary rail infrastructure to connect with the Severn Tunnel in accordance with the GRIS
Ashchurch for Tewkesbury Infrequent (2-hourly) service Rolling stock/staffing constrains additional stopping services	Work with Tewkesbury Borough Council GFirst and developers to fund hourly service / staffing for additional stops for services to Worcester and Birmingham. Implement the initial recommendations of the Ashchurch for Tewkesbury Rail Strategy	Build on potential to extend Bristol-Gloucester's ervices to Worcester, via Ashchurch Deliver the longer term outcomes of the Ashchurch for Tewkes bury Rail Strategy in accordance with the GRIS



Policy LTP PD5.2 - Rail Service Capacity Improvements

GCC will engage with the rail industry to ensure that Gloucestershire benefits from improved local and longer distance rail services to London, Bristol, Birmingham, Cardiff, Oxford and Worcester.

- Respond to rail franchise and timetable consultations to ensure that Gloucestershire is well connected to the national rail network, with competitively timed local services that reflect the travel requirements of different users later into the evening and seven days a week.
- Contribute to and influence the debates surrounding medium to long-term developments, such as MetroWest and HS2, ensuring that Gloucestershire's needs and contribution are expressed.
- Work with Transport for West Midlands to explore potential service improvements between Gloucester/Cheltenham, Worcester and Birmingham.
- Work with partners (including developers) to facilitate improvements in service provision for Ashchurch for Tewkesbury as set out in its rail strategy.
- Work with the rail industry, local authorities and other stakeholders to consider the reinstatement of the rail link between Honeybourne and Stratford on Avon, as well as suitable other railway line reinstatements.
- Work with partners (including developers) to deliver a more frequent service at Lydney. In parallel, work with the Local Enterprise Partnership, Transport for Wales, Monmouthshire County Council and the rail industry to define and agree long-term options for the provision of enhanced Birmingham-Gloucester-Cardiff services. Also to improve connectivity between Lydney, Chepstow and the wider Bristol area through enhanced timetabling at Severn Tunnel Junction to allow for easier and more frequent interchanges and or a direct service.
- Work with Great Western Railway and Network Rail to identify the most effective approach to station development and stopping patterns on the Bristol Gloucester route, including the development of the existing Cam and Dursley station and the potential for a new station south of Gloucester.
- Work with and support Gloucestershire Community Rail Partnership to increase passenger numbers, improve access to stations and improve station facilities.
- All overarching and mode policies will take this policy into account.



Rail Station Improvements

- **3.6.23** Rail stations fulfil an important role, not only by providing access to the rail network, but also as interchange hubs between modes.
- **3.6.24** Railway stations, including their facilities and information provision, are managed by TOCs as part of their franchise arrangements. Stations within Gloucestershire, apart from Lydney, are managed by Great Western Railway. Lydney is managed by Transport for Wales (Keolis Amey). The recently formed Gloucestershire Community Rail Partnership (GCRP) will have an important role in helping to make stations more user-friendly particularly in the more remote locations as well as improving access to them particularly from residents who don't normally use rail.
- **3.6.25** Car parking at stations is also usually covered by the franchise arrangements. However, GCC own the car parks at Ashchurch for Tewkesbury and Cam and Dursley.
- **3.6.26** While there are ongoing discussions with TOCs and Network Rail to improve station facilities, improving access to stations is an issue that GCC can directly influence. Each location has its ownset of issues as summarised in <u>Table PD5 (d)</u> and described in more detail in the LTP Summary Evidence Base.



Table PD5 (d) – Station access key finding and recommendations

Station	Findings	Short-Term proposals
Chel tenham Spa	 Key gateway to one of two main urban centres Distant from town Poor passenger facilities Lack of parking 	 Investment in facilities Increase car parking Improve concourse Improve bus interchange Improve cycle access & facilities Install lifts
Gloucester	 Key gateway to one of two main urban centres Central location provides focus for development of city Poor environment around station Poor access to town centre 	 Improve north-south access (improve subway) Integrate station with town centre, via Kings Quarter and new bus station Improve forecourt and station buildings Install electric vehicle charging points
Stroud	 Market town station Central location and attractive environment Limited car parking Good cycle access but limited cycle parking Poor access across tracks (old footbridge not Equality Act compliant) 	 Improve station facilities and access (e.g. footbridge) Increase and improve cycle parking Improve forecourt Install electric vehicle charging points
Stonehouse	 Basic station facilities Very constrained location, making access and parking difficult Cycling to station from surrounding area quite feasible Poor cycle storage (unsuitable location, poor security) 	 Improve station facilities, including cycle storage Promote walk and cycle access Install electric vehicle charging points
Kemble	 Station serves Cirencester and surrounding rural area Station lies 6km from Cirencester Poor highway access (queuing at A433/A429 junction) Poor cycle access from Cirencester Irregular and complex bus links, not timed to trains 	 Improve highway, bus and cycle links (developer contributions) Install electric charging points



Station	Findings	Short-Term proposals
Moreton-in-Marsh	 Station serves village and surrounding rural area High growth in patronage (2014-2018) Relatively low housing growth planned 	 Resolve town centre pedestrian access issue Increase station car parking Install electric vehicle charging points
Cam and Dursley	Car park full –Car parking always likely to be constraint	 Deliver new car park and plan further provision to meet growth Improve highway, bus and cycle links (developer contributions) Install electric vehicle charging points
Lydney	 Station serves Lydney and wider Forest of Dean Distant from town Significant planned housing growth in area, with more possible at harbour. Very basic station facilities. 	 Resolve longer term arrangements for the additional car parking. Install electric vehicle charging points
Ashchurchfor Tewkesbury	 Significant housing growth planned Poor connections to Tewkesbury Very basic station facilities 	 Seek funding to improve station facilities, including parking Work with stakeholders on the recommendations from the Ashchurch for Tewkesbury Rail Strategy Install electric vehicle charging points



Policy LTP PD 5.3 – Railway Stations Improvements

GCC will engage with delivery partners to maximise the desirability, demand and customer experience of using railway stations within Gloucestershire. Station facilities need to meet existing and forecasted demand by providing safe and secure facilities for those walking, cycling, bus users and car users.

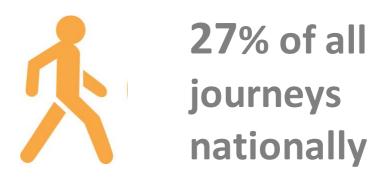
- Work in partnership with District Councils, the Local Enterprise Partnership, Highways England, Transport for Wales and Department for Trans port to seek investment in the County's transport network as funding opportunities arise.
- Ensure each railway station has a clear plan for its development in the short, medium and long term, linked to development proposals in the area and rail service improvements.
- Work with Train Operating Companies, Network Rail and the Gloucestershire Community Rail Partnership to encourage ongoing investment in station facilities to improve the experience of travelling within the county. Improvements include improved passenger waiting facilities, installing electric vehicle charging points, increasing cycle racks, car parking, access improvements, links to walking and cycle networks and providing real time passenger information for onward journeys.
- Promote connectivity to rail stations by active travel modes supported through Thinktravel and where bus services access railway stations ensure that timings complement each other to encourage interchange between transport modes.
- Encourage the use of innovative design to enhance the aesthetic appeal and desirability of using public transport facilities. In addition to operation and safety issues GCC welcomes designs which complement and where possible enhance the natural, built and historic environment.
- All overarching and mode policies will take this policy into account.



3.7. Walk Policy Document (PD6)



3.7.1 Walking feeds into our economy, is accessible, free and one of the easiest way for people to improve their activity levels and health and well being. Walking is the second most common mode for trips, but accounts for a small share of distance as walking trips tend to be shorter than average. Walking makes up 27% of all journeys nationally, but only cover 3% of distance. Walking is often an important part of longer public transport journeys. The average walking trip is 18 mins long.⁷³



3.7.2 It is important to recognise that pedestrians should have priority over other modes of transport in many situations, with particular consideration given to pedestrians with disabilities and mobility challenges. Those walking, cycling and mobility scooter users have much in common and there are important links with cycling policy and infrastructure that can cater for all vulnerable users.



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- **3.7.3** Development patterns that reduce the need to travel long distances and encourage walking and cycling are an essential element of sustainable development. The location and nature of all new development, commercial and residential, has a major bearing on both the need to travel and how people choose to travel. New development provides an excellent opportunity to create better walking and cycling opportunities, suitable routes for all non-car users and travel practices by overcoming barriers and improving connectivity. Our Overarching Policy Document provides further policy detail on integrating with new development (LTP PD0.4).
- **3.7.4** An important outcome of the LTP is to provide individuals with the confidence to consider all travel choices. This will be achieved on a scheme by scheme basis where a statement of background information on current or potential non-motorised users (NMUs) should be completed on issues relevant to the scheme. The NMU Context Report should ensure that appropriate decisions on scheme design are considered and particular attention is given to disabled people under the Design Manual for Road and Bridges (DMRB) standard ⁷⁴.

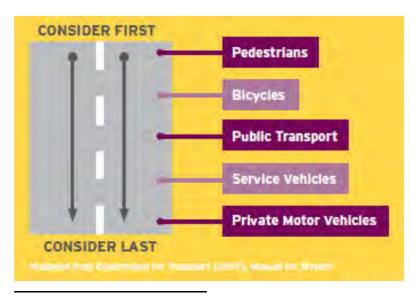
Gloucestershire's Pedestrian Network

- **3.7.5** The pedestrian route network is the most extensive of all transport networks since it includes the majority of the road network, including any associated footways, cycleways, bridle paths, public spaces, the network of pedestrian rights of way including public footpaths and Other Routes with Public Access. Alarge proportion of journeys are local, typically less than five miles in length. Given this, most of our everyday journeys could be walked, travelled by mobility scooter or cycled.
- **3.7.6** Topography, directness of route, route continuity, the quality of street lighting and extent of natural surveillance are other factors that can have a significant influence on pedestrian movements. Good street design and well

managed footpath maintenance are vital to the safe interaction of pedestrians, mobility scooters and other road users and can address safety concerns which can discourage walking and can lead to social exclusion.

3.7.7 Pedestrians' needs are often considered last. Introducing a hierarchy of road users, as specified in Manual for Streets, 75 with pedestrian needs at the top can support pedestrian movements, shown in Figure PD6 (A). There is also a need to consider how the needs of people with protected characteristics will be met, for example, those with impaired vision or hearing problems who might find traditional street layouts easier to navigate.

Figure PD6 (A) - Road User Hierarchy (Manual for Streets)



⁷⁵ Manual for Streets - https://www.gloucestershire.gov.uk/highways/plans-policies-procedures-manuals/manual-for-gloucestershire-streets/



- **3.7.8** In response to the Government's Cycle and Walking Investment Strategy (2017), Gloucestershire County Council is developing a series of Local Cycling and Walking Infrastructure Plans. These will consider strategic walking routes and identify investment opportunities for improvements to encourage more walking along specified corridors and in walking hotspots or zones such as urban centres or public transport hubs.
- **3.7.9** The first LCWIP has been developed for the Central Severn Vale area, which includes Cheltenham and Gloucester. This has considered main trip attractors and desire lines, used the Walking Route Audit Tool (WRAT)⁷⁶ to assess the current condition and suitability of the routes. In parallel, an Equalities Assessment Tool (EQAT) assessed routes in terms of their impacts on different groups. The results from these assessments, has provided evidence for our investment priorities. The LCWIP will work towards walking network maps, over time these will become available at

www.gloucestershire.gov.uk/transport/gloucestershires-local-transport-plan-2015-2031/local-cycling-and-walking-infrastructure-plans/







Policy LTP PD 6.1 – Gloucestershire's Pedestrian Network

GCC will work with interested parties to provide an inclusive safe, reliable and efficient highway environment that encourages walking, and provides pedestrian links to connect communities, employment and services.

- Promote Gloucestershire's pedestrian network through Thinktravel programme.
- Improve walking routes between and within settlements by working with delivery partners, other agencies, the community and stakeholders to remove barriers (real and perceived) to walking and consolidate walking networks to provide a continuous safe and accessible network accessing town centres, residential areas, employment areas, and routes to schools.
- Support the delivery of Local Cycling and Walking Infrastructure Plans (LCWIP) and the upgrade and improvement of routes where they connect to local footway networks or could offer convenient routes for local trips. Prioritise investment in urban centres, around public transport hubs and new developments in line with LCWIP guidance. Ensure that where possible development sites connect to LCWIP desire lines.
- Recognise the role and function of the existing quiet lane network and seek to expand this where possible to provide inclusive safe walking routes.
- Work in partnership with communities in identifying local transport needs and solutions (such as through Parish and Neighbour hood Plans).
- Work with District Councils to ensure that new development is well connected to the existing transport network.
- All walking infrastructure provided within the county will be designed in accordance with Manual for Gloucestershire Streets (MfGS) and all schemes on the local highway network will be subject to appropriate context reports and audits (including road safety, non-motorised users, walking, cycling and quality audits, including Building with Nature standards) before design approval.
- Encourage developers to consider the inclusion of playable space and informal play opp ortunities in new development and encourage the engagement of children and local community in the design process, to ensure inclusive streets are created where children feel safe to play, and where pedestrians, cyclists and mobility users are encouraged and supported through inclusive street design and development layout.
- Ensure development sites contribute towards the improvement of LCWIP desire lines.
- Developers are required to make an assessment needs of all pedestrian/mobility users/cyclists in line with government Road User Hierarchy within and associated with their development. And to, substantially improve connectivity and permeability of the County's pedestrian network and meet improved design standards and audits; for example MfGS, LCWIP and other Context Reports and best practice, as well as addressing the needs of those with mobility impairments.
- Under the Highways Act 1980, any developer or scheme promoter, that delivers highway infrastructure to be adopted by GCC, must fully comply with the Council's Enhanced Materials and Commuted Sum Policy (MfGS), whereby appropriate materials are specified and the full costs of implementation and future maintenance are factored in to the scheme budget.
- All overarching and mode policies will take this policy into account.



Rights of Way

- **3.7.10** Gloucestershire has 3,509 miles of Public Rights of Way (PRoW); one of the longest networks managed by any county. It is used predominantly by walkers, although 15% of it is bridleway where horse riding and cycling are also lawful uses. The GCC Rights of Way and Countryside Access Improvement Plan ⁷⁷ acts in tandem with the LTP to provide better connected rural access networks. PRoW and other routes with public access, and unsurfaced roads available for non-motorised vehicular users are important to vulnerable users mobility users, walkers, horse riders, carriage drivers and those travelling by bike. They can provide links in the network of other paths to complete coherent routes.
- **3.7.11** The danger to such vulnerable users from traffic is very real and it is important to reduce the risks. Access needs to be considered in the context of the LTP and with local planning processes. Encouraging people away from busy routes, agreeing measures to safeguard quieter routes and improving accessibility to and within green space are all within that context.
- **3.7.12** In some parts of the county increased safety and accessibility for vulnerable users may enable better community connectivity, support economic prosperity and provide wide social benefits. The county is a visitor destination for walkers, those travelling by bike, and recreational horse riding is recognised as a significant element of the rural tourism economy. There is a strong case for linking up some of these existing tracks and bridleways with new stretches of offroad track to create a more connected network of multi-user tracks, where practicable.

3.7.13 As a first principle it can be useful to agree what opportunities for walking, cycling and horse riding should be identified and secured through the production of Local and Neighbourhood Development Plans. When the local community, stakeholders and the local authority have agreed this in principle, and the relevant plans are adopted this will enable GCC to support the process of seeking funding opportunities.



⁷⁷ Gloucestershire County Council, Rights of Way and Countryside Access Improvement Plan 2011-2016



Policy LTP PD 6.2 - Rights of Way

GCC will support the Rights of Way and Countryside Access Improvement Plan in identifying and seeking to support measures to improve safety, accessibility and the quality of the experience for walkers, horse riders, carriage drivers and those travelling by bicycle, where there is an identified need.

- Integrate pedestrian, cycle and horse riding routes into the road network to promote a cohesive path network and, where a route has to cross a busy road, provide a safe crossing point.
- Maintain verges for horse riders and walkers, where it is safe to do so to provide links between sections of the public rights of way network and other routes with public access
- Consider the traffic implications on any existing pedestrian, cycle or horse riding paths or road crossing points where new development is planned.
- Encourage people away from busy routes, where traffic flows or speeds cannot reasonably be reduced, by agreeing measures to s afeguard quieter route alternatives and improve accessibility to and within green space, rural and inter-urban settlements.
- Encourage the use of the rights-of-way network and other routes with public access for utility journeys, particularly in the urban fringe and between some villages.
- Support the exploration and development of the wider network of route opportunities, including other routes with public access, which may successfully dovetail with the rights of way network to provide a coherent safe network.
- Reduce the number of outstanding applications for Definitive Map Modification Orders (DMMOs) a head of the 2026 Countryside and Rights of Way Act deadline.
- Support the Rights of Way and Countryside Access Improvement Plan.
- Recommend the use of designated walking routes and quietways which provide a safe and an attractive alternative to motorised trafficked routes.
- Ensure developers from the outset assess the needs of all pedestrians, mobility users, cyclists and horse-riders, within their development design and any associated improvements, ensure desire lines, connectivity and permeability across the site and its boundaries to existing and newly created PRoW and other routes with public access from neighbouring areas are considered and included.
- Under the Highways Act 1980, any developer or scheme promoter, that delivers highway infrastructure to be adopted by GCC, must fully comply with the Council's Enhanced Materials and Commuted Sum Policy (MfGS), whereby appropriate materials are specified and the full costs of implementation and future maintenance are factored in to the scheme budget.
- All overarching and mode policies will take this policy into account.



Pedestrian Asset Management

- **3.7.14** Maintenance of the carriageway and footways contributes to pedestrians afety and amenity. Pedestrians are disproportionately affected by puddles in the road and loose or uneven flagstones. They will be affected by the maintenance schedule that is applied to the main, secondary and tertiary transport networks.
- **3.7.15** The maintenance of the pedestrian network is dependent on various factors, as the network consists of; highway, footways, shared use footways and bridleways, as well as bespoke cycle routes that act also as pedestrian shared use routes. It needs a co-ordinated approach to maintenance across all these assets.





Policy LTP PD 6.3 - Pedestrian Asset Management

GCC will manage pedestrian infrastructure in line with the Highways Asset Management Framework and other guidance or policies such as the Code of Practice for Well Managed Highways Infrastructure.

- Work with partners to maximise investment in the County's pedestrian, cycle and rights of way networks and other routes with public access as funding opportunities arise. This will include working in partnership with, the Local Enterprise Partnership, District Councils, Parish and Town Councils, developers, landowners, Sustrans, Highways England and Department for Transport.
- Continue to deliver the GCC 'Highways Local Initiative' and the highway 'Big Community Offer' to prioritise highway services that deliver pedes trian improvement measures for the community.
- Deliver footway maintenance works outlined in the Highways Asset Management Framework.
- Regularly review the winter maintenance and vegetation clearance procedures and policies and in line with the Gloucestershire Highways Biodiversity Guidance or subsequent guidance.
- Review the provision of street furniture and signing as part of the design process for all maintenance and improvement schemes to ensure that street clutter is minimised.
- All local highway network schemes will be subject to appropriate context reports and audits.
- Manage the street lighting network to minimise environmental impact without compromising on road safety and personal security
- Ensure development sites contribute towards the improvement of LCWIP desire lines.
- Under the Highways Act 1980, any developer or scheme promoter, that delivers highway infrastructure to be adopted by GCC, must fully comply with the Council's Enhanced Materials and Commuted Sum Policy (MfGS), whereby appropriate materials are specified and the full costs of implementation and future maintenance are factored in to the scheme budget, to limit the long term burden on pedestrian highway asset.
- All overarching and mode policies will take this policy into account.



Pedestrian Safety

- **3.7.16** In general terms, road safety is improving: the number of road casualties of all severities in reported road traffic accidents in 2018 was 6% lower then in 2017 and is the lowest level on records. Comparison with earlier years should be interpreted with caution due to changes in systems for severity and reporting by some police forces. The trend in the number of fatalities has been broadly flat since 2010. The Gloucestershire, a change in method of reporting injury collisions has resulted in an increase in the number of serious casualties when compared with the 2015-2017 average. The Department for Transport is investigating nationally the effect of this change.
- **3.7.17** As mobility scooter users increase, the number of incidents from unsafe usage, risks of collisions with pedestrians, cyclists and road users are likely to follow. One fifth of mobility scooter users surveyed had experienced a safety or training issue. ⁸⁰ GCC would encourage local (community based) or national safety training programmes.
- **3.7.18** It is important to address people's safety concerns. Pedestrian safety can be addressed through pedestrian training in schools, driver awareness, and promotional material which emphasise safer behaviours and actions to promote safety. Training school children to walk safely will enable them to gain personal mobility and independence, improve physical and mental health and their social skills. It will help to embed walking as 'normal' behaviour in later life. Pedestrian safety training is available to primary schools via the SkillZONE initiative, a purpose built safety education facility.

- **3.7.19** Nationally, around half of all journeys to primary school are made on foot but many short journeys to school are still made by car. It is estimated that by 2050 with current trends, 70% of children will be affected by obesity⁸¹. Encouraging active travel by walking and cycling to school can contribute to helping children to maintain a healthier weight.
- **3.7.20** Cooperation between Gloucestershire police and GCC road safety team has included speed awareness and enforcement campaigns which can help improve pedestrian safety.



⁸¹ Making Children Healthier Through Walking Mackett, P. 2004



⁷⁸ Reported road casualties in Great Britain: 2018 annual report, DfT

⁷⁹ https://www.gloucestershire.gov.uk/highways/road-safety/casualty-statistics/

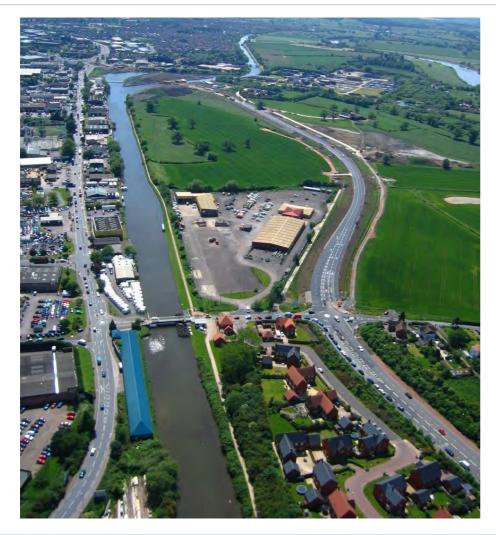
www.ridc.org.uk/sites/default/files/documents/pdfs/researchconsultancy/Rica%20Mobility%20scooter%20market%20study%20final.pdf

Policy LTP PD 6.4 - Pedestrian Safety

GCC will contribute towards improved safety, security and health by reducing the risk of death, injury or illness arising from journeys on foot or by mobility mode. This will be provided by working with partners to improve personal safety perceptions and the promotion of safe transport, th rough the Thinktravel programme that contribute to enjoyment and psychological wellbeing.

- Ensure a co-ordinated approach to <u>Thinktravel</u> programme and road safety with partners; to include proactive highway design guidance, delivery of reactive engineering solutions to highway issues, delivery of educational or campaign materials and support to assist in the monitoring and enforcement of traffic regulations.
- Deliver a collaborative approach to road safety with partners that include proactive highway design guidance, delivery of reactive engineering solutions to highway issues, and provision of evidence to support engineering, education and enforcement activities.
- Work in collaboration with Gloucestershire Police, relevant agencies and campaign groups on education programmes to target young drivers, motorcyclists, distraction, alcohol and drug related driving.
- Encourage greater availability of local (community based) and national training programmes for mobility scooter users.
- Reduce the rate of pedestrian casualties within Gloucestershire by providing an environment that reduces both actual and perceived risk to personal safety.
- Recommend the use of designated walking routes to provide attractive and safe alternatives to routes carrying high volumes of motorised traffic.
- Ensure children, young people and adults are equipped with knowledge, skills and training to become more confident pedestria ns.
- Introduce speed limits in accordance with the current national guidelines and prioritise them based on available evidence, including 20mph zones. And support communities to deliver local speed campaigns through the Safer Community Teams.
- Investigate community based vehicle restriction zones that will benefit communities and protect vulnerable highway users from a safety and health perspective.
- All overarching and mode policies will take this policy into account.





Chapter 4

Connecting Places Strategy



4. Connecting Places Strategy (CPS)

4.1. Local Transport Plan – Spatial Context

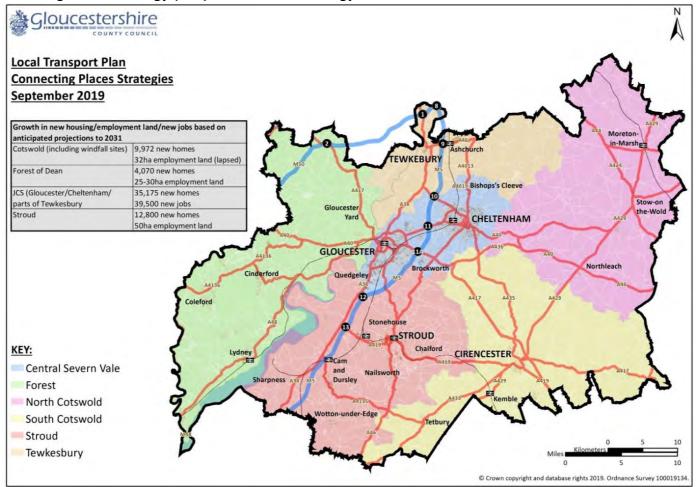
- **4.1.1** Gloucestershire is at a cross roads in terms of both its location and the future direction of the transport pressures arising from its spatial development strategies. Its strategicrail and road network is a hinge between major cities, such as Birmingham, Bristol, Cardiff and London. Transport must enable connectivity between these regional and national destinations, so that it remains a place that people travel to as well as through. 82
- **4.1.2** On a local level, Gloucestershire's future transport needs will be determined by its growth ambitions, as set out in the District Council Local Plans. These adopted plans have planning horizons ranging from 2031 to 2036, although many are under review and looking towards 2040-2041.
- **4.1.3** The LTP is structured around a number of travel corridors, each of which has distinctive transport issues and opportunities set out in six spatial strategies entitled Connecting Place Strategies (CPS), shown in <u>Figure CPS (A)</u>. A 'Link and Place' Spectrum approach was applied with the aim to identify travel focused strategy areas based on connections, moving away from a district based perspective.

- **4.1.4** Each CPS area sets out priorities based on strategic, major and local schemes. LTP schemes represent the transport priorities for Gloucestershire and into bordering counties, rather than a commitment by the County Council to funding. Priorities identified in this LTP provide the basis for future funding bids, as opportunities arise, and discussions with funding partners, such as government, GFirst LEP, Public Health, statutory bodies, transport operators, District Councils, Parish & Town Councils, developers and the private sector.
- **4.1.5** Through six CPS areas, the LTP will set out its spatial strategy to managing the transport demand expected from the projected housing development and accelerated economic growth in the adopted Local Plans up to 2031. The strategic direction transport will take beyond the adopted plan horizons is set out in the chapter, **Transport Scenarios looking to 2041**, which discusses the future direction of transport and the transport implications of future spatial development scenarios.

^{**}www.gloucestershire.gov.uk/council-and-democracy/joint-ventures/western-gateway-sub-national-transport-body/



Figure CPS (A) – Connecting Places Strategy (CPS) – area based strategy





4.2. Connecting Places Strategy CPS1 – Central Severn Vale

The Place

- 4.2.1 The Central Severn Vale (CSV) CPS area is bounded by Tewkesbury to the north, Stroud to the south, the Cotswolds to the east and the Forest of Dean and River Severn to the west. Key routes in the CSV are the M5 linking north south and the A40 and A417 linking east west to provide access to the M4 corridor. The M5 and part of the A40/ A417 corridors are part of the SRN and have also been identified within the Western Gateway Sub-National Transport Body (SNTB) as strategic links. The A38, A417 and the A40 make up a part of the newly formed MRN⁸³ proposal which forms a middle tier of the country's busiest and most economically important local authority 'A' roads. The MRN will sit between the SRN and the rest of the local road network.
- **4.2.2** The CSV CPS area accommodates almost half of Gloucestershire's total population and has the highest proportion of working age people when compared to the county average. This is reflected by the high proportion of travel to work journeys that begin and end within the CPS area.
- **4.2.3** Strategic direction for development in the Central Severn Vale CPS is given by the Joint Core Strategy which is the relevant policy document for this area and provides the higher level or strategic component of the development plan for Cheltenham, Gloucester and Tewkesbury. More detailed locally specific planning policies will be set out in the Gloucester City Plan, Cheltenham Local Plan and Tewkesbury Local Plan. The JCS identified a need for additional housing and employment consisting of 35,175 new homes and 192ha of employment

creating 39,500 new jobs. 84 The JCS was adopted with a commitment for immediate review and as such these totals may increase.

- **4.2.4** Growth proposals identified in the adopted JCS and Local Industrial Strategy will significantly increase the CPS area's population and range of employment opportunities offered, with even more growth expected through the JCS review. This will result in more trips within this area and will require careful management to reduce congestion and limit environmental impacts. The JCS aims to locate jobs near to the economically active population thus minimising out-commuting and reducing carbon emissions from car use and instead promoting sustainable transport by improving opportunities for public transport, walking and cycling by making routes more convenient, safe and attractive.
- **4.2.5** To manage the impacts of growth, the JCS is supported by a comprehensive Transport Strategy that details a recommended mitigation package to enable the delivery of the proposed development. The schemes detailed in the Transport Strategy are echoed in this Local Transport Plan.
- **4.2.6** In line with the JCS, GFirst LEP's Strategic Economic Plan (SEP) supports delivery of employment land around Junctions 9, 10 and 11 of the M5 area. Anumber of transport related proposals for the county will enable the planned growth to be achieved through the release of this employment land.
- **4.2.7** The Local Industrial Strategy identified the Gloucestershire area as a key location for cyber resilience alliance—cyber security. This will generate high level skilled employment opportunities for which people may be prepared to commute some distance. Gloucestershire will need to support growth in this sector by providing the necessary transport infrastructure to facilitate movement through and within the county.

⁸⁴ Joint Core Strategy adopted Dec 2017 https://www.cheltenham.gov.uk/downloads/download/1679/joint_core_strategy_plan_a dopted_december_2017



⁸³ DfT – Major Road Network - http://maps.dft.gov.uk/major-road-network-consultation/

Cheltenham and surrounding area

- **4.2.8** Cheltenham is the cultural centre of the county and is well known for its array of varied festivals. The town is in close proximity to the nearby settlements of Bishop's Cleeve, Woodmancote, Prestbury and Charlton Kings.
- **4.2.9** It is essential that communities and visitors are offered a choice of travel options, an objective shared by the **Connecting Cheltenham Strategy Report.** Connecting Cheltenham sets as its framework the Place Vision for Cheltenham and develops further the drivers for change to tackle identified challenges and bring about positive outcomes to benefit all. The LTP has shared outcomes with this strategy in terms of inclusive streets, cycle, walk and mobility friendly policy and the delivery of infrastructure in line with the Local Walking & Cycling Infrastructure Plan.
- Figure CPS1 (B) demonstrates that Cheltenham benefits from a large 4.2.10 number (40%) of internal work related trips, (approximately 29,462 per day) and a higher number of inbound trips than outbound (24.148 versus 19.782). However, despite the transport advantages of this high level of self containment, the addition of inbound trips means demand upon Cheltenham's Highway network becomes very high in peak times. Cheltenham's urbanarea is compact with a defined retail centre at its core. A large proportion of the residential areas fall within the recognised comfortable walking distance of 2km, ⁸⁷ and well within comfortable distance cycling distance. Furthermore, Cheltenham benefits from very high frequency bus routes both internally and externally to Gloucester with the Gold 94x, 94, 97, 98 and 10 routes being the most prominent. An achievement has been the completion of a west bound bus lane between Whittington Road and Arle Court round about to improve journey times and to ensure that buses are not delayed by congestion in peak times. Despite this, car mode share is high for both contained (44%) and internal (78%) trips. The high car mode share and resultant congestion has negatively impacted bus patronage (6-8% mode share), which is low for Cheltenham with good network coverage.
- **4.2.11** Cheltenham does have a healthy cycle mode share (11%) and benefits from an established cycle network. A key cycle desire line is the B4063/A40 corridor which leads to the town centre. Another is the Honeybourne Line which provides a car free green corridor from the north of the town direct to the railway station. Cycle improvements have been made to the southwest of the town along the Grovefield Way, Cold Pool Lane, Up Hatherley Way corridor which provides a link between the A46 and A40.

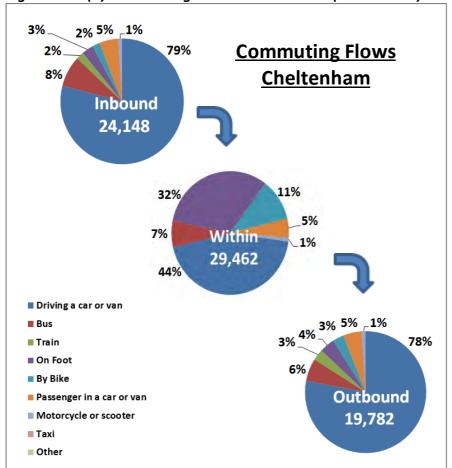
Department for Transport – Manual for Streets
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachmen
t data/file/341513/pdfmanforstreets.pdf



https://www.cheltenham.gov.uk/downloads/download/1747/connecting_cheltenham_

⁸⁶ LCWIP - https://www.gloucestershire.gov.uk/transport/gloucestershires-local-transport-plan-2015-2031/local-cycling-and-walking-infrastructure-plans/





- **4.2.12** Cheltenham has excellent scope to improve the cycle network to other key destinations with aspirations for a dedicated link to Bishop's Cleeve to the north and west to the proposed Golden Valley Development⁸⁸, as well as localised improvements as identified in the LCWIP. Figure CPS1(C) demonstrates that the biggest draw of trips to and from Cheltenham, are Tewkesbury and Gloucester areas. This therefore, given the distances between them, gives a realistic opportunity for increased sustainable noncar based travel which in turn will create an active community and improve air quality, especially if inbound trips can be accommodated by suitably located Interchange hubs that encourage onward journeys by foot, cycle or bus. This in turn would improve bus journey time reliability and exploit the network coverage to its full potential.
- **4.2.13** Cheltenham also benefits from a mainline station with a patronage level in excess of 2m per year⁸⁹, making it the busiest station in the county. The station has undergone improvements to platform length to accommodate the latest generation of inter-city trains and has been awarded £1.49m in GFirst LEP funding towards a £5.5m package to improve its car park and accessibility particularly for pedestrians and vulnerable users. The station provides good scope for a multi modal interchange hub and, with improvements to pedestrian and cycle access from the north, west and south (A40) will open the station up for more users and create an attractive travel option for commuters and tourists alike.

https://www.cheltenham.gov.uk/info/12/planning and development/1561/cyber centra l garden community

 $\frac{https://dataportal.orr.gov.uk/statistics/usage/estimates-of-station-usage}{Cheltenham\,Spa}\ select\ Cheltenham\,Spa$



⁸⁸ Formerly West Cheltenham Cyber Garden Community -

⁸⁹ Office of Rail and Road estimates of station usage -

Figure CPS1 (C): Cheltenham Commuting Breakdown (Census 2011)



Commuting totals for Cheltenham:

- . Inflow: 24,148 all persons commute into Cheltenham from other local authorities in the UK.
- . Outflow: 19,782 all persons commute out of Cheltenham to other local authorities in the UK or abroad.
- . Net change: Overall, commuting results in a population increase of 4,366 all persons in Cheltenham

Gloucester and surrounding area

- **4.2.14** Gloucester City strives to build on its strengths as one of the country's most important historic cities by creating a thriving and prosperous city centre. The Gloucester City Council vision states that Gloucester will be "a flourishing, modern and ambitious city, which all residents can enjoy."
- **4.2.15** Gloucester City's layout and recent development pattern has resulted in the city taking on an elongated form, with the perceived 'centre' of the city

being located towards the north of the urban settlement. Gloucester had an industrial past and recently has been subject to significant regeneration, particularly in the Docks/Quays area and will continue to benefit from a number of regeneration projects moving forward with particular aspirations to revitalise the city centre.

- **4.2.16** Gloucester city centre's regeneration, started with the completion of the Gloucester Transport Hub, which provides a key interchange location for sustainable transport users with access to the railway station and city centre.
- **4.2.17** Churchdown is a key peripheral area located on the NCN cycle route 41 and is also within a key cycling corridor between Gloucester and Cheltenham, along the B4063. Likewise Quedgeley is located in close proximity to the canal towpath which provides a direct link to the city centre. Phase 1 of the canal tow path improvements has been completed with aspirations for further phases. This creates a key sustainable route from Quedgeley to Gloucester and further north to Churchdown and eventually Cheltenham as shown on the GCC Countywide Strategic Cycleway Network desire lines (see Figure PD2 (C)). Creating key links and providing the necessary infrastructure will actively encourage additional usage and provides a sustainable route for both commuting and leisure purposes with scope for expansion to other key locations in the CSV area. These improvements, along with a positive shift to sustainable modes, will also result in health and wellbeing benefits for individuals and for the city as a whole, including improvements to air quality.
- **4.2.18** Gloucester has a high degree of contained trips; however unlike Cheltenham there is a more even spread of inbound and outbound trips with a smaller net change of 2514 people (Figure CPS1 (D)). The level of movements tests the resilience of the network. Highway improvements at Over Roundabout, with additional entry and circulatory lanes and Elmbridge Court Roundabout with straight through A40 lane has achieved capacity improvements on entry to the city from the east and west.

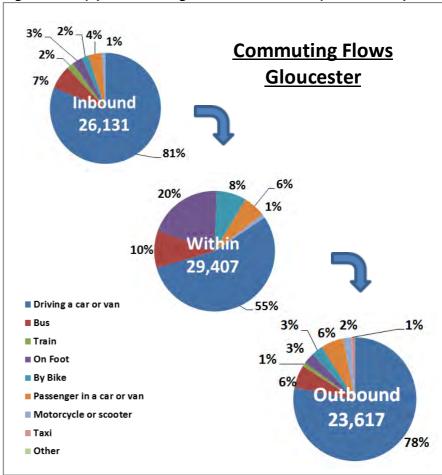


4.2.19 The Gloucester area also benefits from a number of very high frequency bus routes which accounts for 10% of internal movements as shown by Figure CPS1 (D). There are very high frequency connections to Cheltenham and Stroud for inbound/outbound journeys with the new transport hub facilitating services from the wider county area.

Figure CPS1 (D): Gloucester Commuting Breakdown (Census 2011)



Figure CPS1 (E): Commuting Flows – Gloucester (Census 2011)





4.2.20 Gloucester rail station is not sited on the Bristol – Birmingham mainline, resulting in fewer services as echoed by the lower annual patronage of 1.4m⁹⁰. There is scope to increase services to Bristol with the extension of the MetroWest service which will result in a half hourly service to Bristol and the creation of a viable sustainable regional travel option. An achievement at the railway station has been the improvements to accessibility from Great Western Road with new pedestrian/cycleway and entrance as well as car parking enhancements. Further GFirst LEP funding will help to continue the enhancement of Gloucester station and improve its sustainable links to the Transport Hub and city centre, particularly from the northern side of the railway station.

Central Severn Vale Issues and Opportunities

- **4.2.21** A consequence of Gloucester and Cheltenham being the main economic hubs for Gloucestershire is that the CSV becomes a net importer of labour. The 'Workday' population rises as a result of in-commuting, which places added pressure on network resilience. The Cheltenham population rises by 3,157 whilst Gloucester's rises by 3,018 economically active individuals.
- **4.2.22** The CSV's biggest combined issue is that there is little or no additional highway capacity for growth and linked alternative suitable routes which results in delay, queuing and unreliable journey times.
- 4.2.23 In regards to alternative travel modes away from single occupancy car travel, the CSV has a high bus patronage compared to other CPS areas. Although this is somewhat expected of an urban area, bus journeys account for 6% of journey to work trips in the CSV CPS, which is low when compared to travel by car. The key challenge for bus travel in the Cheltenham and Gloucester areas, despite a broad network of very high frequency routes (see Figure PD1 (A), is

that most of the core bus service routes use much of the congested parts of the network resulting in similar levels of delay to private cars and slow journey times which harm the ability to encourage modal shift.

- **4.2.24** Despite the travel choices on offer; car use continues to dominate. Congestion is an active threat to public health and wellbeing. The combination of already heavily trafficked routes and historic street patterns has resulted in Air Quality Management Areas (AQMAs) being declared at several locations. Within Gloucester these include Barton Street, St Oswald's Road and Painswick Road; an AQMA covers the whole of Cheltenham Borough and the A417 Air Balloon roundabout located on the east of the CPS area is also a declared AQMA.
- **4.2.25** 17.5% of Cheltenham's and 21% of Gloucester's 22 emissions are attributed to transport. Congestion and poor air quality are also barriers to active travel and its additional uptake despite significant potential for growth in active modes in the CSV CPS.
- **4.2.26** GCC aims to overcome these challenges by committing to measures to improve journey time reliability as well as maximising the opportunity to encourage sustainable transport use by making the most of the potential that the cycle network, high frequency bus routes and railway stations has to offer. GCC is also planning to develop an emissions reduction pathway to deliver on the commitment to reduce per capita transport carbon emissions by 2045.
- **4.2.27** The LCWIP has identified key routes, barriers and opportunities for improvements that can be implemented over the LTP plan period when appropriate funding is identified. This will help to achieve the county aim of providing a strategic cycleway network in order to encourage further modal shift. In addition, the LCWIP will work towards local walking networks, overtime these networks will become available at www.gloucestershire.gov.uk/lcwip.

⁹¹ www.gloucestershire.gov.uk/media/1520292/gloucestershire-transforming-cities-fund-bid-including-annexes-final.pdf



⁹⁰ Office of Rail and Road estimates of station usage https://dataportal.orr.gov.uk/statistics/usage/estimates-of-station-usage select Gloucester

- **4.2.28** It is a priority, within the LTP's timeframe to complete the strategic cycle route between Gloucester, Cheltenhamand Bishop's Cleeve. The schemes identified in the LTP aim to facilitate improved sustainable travel modes that can be used by all people which will result in Gloucestershire's vision of making the county a better place to live, work and visit a reality. Furthermore, the 55ha Golden Valley Development project will deliver 5,385 new homes and 45ha of employment enabling scope to provide new and improved sustainable transport links to key residential areas, to the rail station and town centre with additional promotion of bus priority measures on all key bus routes.
- **4.2.29** Support for opportunities to introduce soft connections between and through the main towns to more dispersed communities, is welcomed. The cumulative effect of these types of investments can both reduce traffic congestion and increase health, access and quality of life.
- **4.2.30** Cheltenham and Gloucester stations provide regular services to London, Bristol, Cardiff, Birmingham and Swindon, as well as local trips to Stroud, Ashchurch for Tewkesbury, Stonehouse, Kemble, Moreton-In-Marsh and Lydney. Both stations offer the potential to increase service frequency to Bristol from Gloucester via MetroWest and Cheltenham to Birmingham via Midlands Connect.

- **4.2.31** The CSV CPS1, over the Plan period, will require improvements to M5 Junction 10 and 11 to maintain the safe operation of the highway. These improvements will also support the delivery of the North West and West Cheltenham strategic allocation. This will address existing traffic congestion issues on the A40 and A4019 corridors. GCC has received Housing Infrastructure Funding for M5 Junction 10, which will allow for the upgrading of the junction to all movements and has also received Growth Deal 3 funding for improvements to the A40 corridor.
- **4.2.32** GCC will maximise the opportunity of capturing car-borne traffic at multi-mode interchange hubs, located on the strategic routes within the CSV, in order to provide sustainable links to key residential and employment areas for onward travel by bus, bicycle or on foot. The interchange hubs will reduce congestion along key routes with the added health and well-being benefits of improved air quality and active travel.
- **4.2.33** GCC will support increased rail service frequencies and improved journey times to support the expansion of the MetroWest network to Gloucester to provide a half hourly service to Bristol. Accessibility to the stations themselves is important in order to allow as many people as possible to access services easily and conveniently. Such accessibility improvements would be for the improvement of Gloucester railway stations subway, to create an attractive and safe space that links the city centre, railway and hospital. For Cheltenham, along with changes to the car park, access improvements from Gloucester Road/Queens Road and the Honeybourne line for walking and cycling users, the strategic vision would be to provide access from the A40 to the south which will allow improved accessibility between rail services and the high frequency Gold 94 as well as the 93 that will link the railway with the Arle Court strategic park and interchange site.

Previously West Cheltenham Cyber Central Garden Community https://www.cheltenham.gov.uk/info/12/planning and development/1561/cyber central garden community



Central Severn Vale Strategic Vision to 2031

Increase mode share and maximise the existing and potential future 4.2.34 cycling network; is the strategic vision for cycling. To encourage a wholesale change in the number of people cycling it needs to appeal to all ages and abilities. If the network is attractive, interconnected and perceived as safe for all, it will attract users who will see it as a viable door to door travel choice. Cycle infrastructure on key routes, interchanges at key destinations and supporting the creation of liveable streets, in which non-car users are prioritised, as well as establishing a quiet network for less experienced users are all methods of achieving modal shift. Furthermore, behavioural change events that positively promote, advertise and incentivise cycling are further ways to raise awareness of its benefits and willhelp towards a step change in travel behaviour. This will in turn have health and wellbeing benefits for individuals and communities as well as support the carbon neutral ambitions of the local authorities within the CSV CPS. Figure CPS1 (F) illustrates scheme ambitions to 2031 for the CSV CPS areas. Further information on these schemes is given in the LTP Delivery chapter.



Figure CPS1 (F): Cheltenham area scheme Map CPS1 reflecting schemes up to 2031

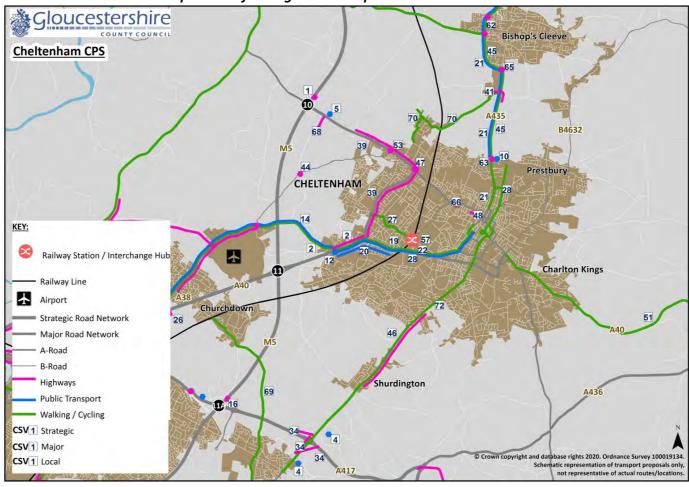




Figure CPS1 (G): Gloucester Area Scheme Map CPS1 reflecting schemes up to 2031

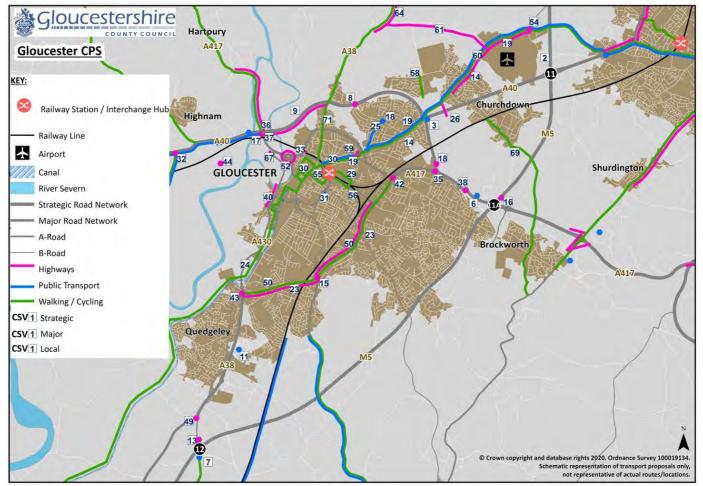




Table CPS1 (a) Central Severn Vale – Highway Scheme priorities up to 2031

Ref	Description	Funding Status
1	M5 Junction 10 'All movements' access and link road to West Cheltenham	Secured
2	Improvements to M5 J11 and the A40 corridor, including WCTIS, in West Cheltenham	Secured
8	Innsworth Gateway New A40 roundabout	Secured
9	A40 Viaduct widening to increase capacity between Longford and Over Roundabouts	Still Required
13	M5 J12 capacity and safety Improvements	Still Required
15	St Barnabas Roundabout capacity and accessibility Enhancement	Still Required
16	M5 J11a - Junction optimisation upgrade	Still Required
17	Junction improvement A40 Over roundabout. Enhancement for outbound traffic with alternative river crossing	Still Required
18	C&G Roundabout Upgrade	Still Required
26	New A40 Junction and Link Road to B4063 with bus priority on B4063 Elmbridge Roundabout approach arm	Still Required
32	A40/A48 Highnam round about – signalisation of round about - MOVA	Still Required
33	Junction improvement – Priory Road, Gloucester providing bus advantage	Still Required
34	Junction improvement - A417, Brockworth Bypass / A46 Shurdington Rd, Brockworth signalisation of slip roads	Still Required
35	Junction improvement A417 C&GRoundabout	Still Required
36	Over Roundabout Upgrade left slip from A40	Still Required
37	A40/A417 Over Roundabout – signalisation	Still Required
38	A417 Zoons Court Roundabout	Still Required
39	A4019/A4013 Corridor improvements	Still Required
40	A430 Llanthony Road and St Ann Way, Gloucester (South West Bypass)	Secured
41	Highway Improvements A435, Bishop's Cleeve	Still Required
42	A38 / Walls roundabout	Still Required



Ref	Description	Funding Status
43	Highway improvements - A38/A430/B4008 Cole Avenue Junction	Still Required
44	Signals upgrades through CSV	Still Required
46	Highway Improvements A46 (Shurdington Road) Corridor	Still Required
47	Junction Improvement A4019/A4013	Still Required
48	Connecting Chel tenham	Still Required
49	A38 Crosskeys - signalisation upgrade	Still Required
50	Highway improvements, A38 Outer Ring Road corridor, Gloucester	Still Required
52	Highway improvement Westgate Gyratory, Gloucester	Still Required
53	A4019/B4634 Old Gloucester Rd/Gallagher Retail ParkJunction	Still Required
54	Junction Improvement - Staverton Cross Roads (B4063/B4634)	Still Required
59	$Highway improvement-providing \ bus \ priority \ at the \ London \ Road/Denmark \ Road junction, \ Gloucester$	Still Required
60	Highway improvements - B4063 Corridor, Churchdown	Still Required
61	Highway Improvements, Down Hatherley Lane Corridor, Gloucester	Still Required
62	Highway Capacity improvements A435 Stoke Road /Finlay Way Roundabouts	Still Required
63	Highway Capacity improvements A435 - Racecourse roundabout	Still Required
64	Junction Improvement A38 / Down Hatherley Lane Junction upgrade	Still Required
65	Highway capacity improvements at A435 / GE roundabout	Still Required
66	Highway improvement - A4019 Honeybourne Railway bridge, Cheltenham	Still Required
67	Junction Improvement - A430/A417 Castlemeads	Still Required
68	Close Withybridge lane access to A4019	Still Required



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Table CPS1 (b) Central Severn Vale – Active Travel (Walking/Cycling) Scheme priorities up to 2031

Ref	Description	Funding Status
14	Cycleaccessimprovements for A40/B4063 Corridor between Cheltenham and Gloucester	Indicative Offer Made
21	Chel tenham - Bi shop's Cleeve Corridor cycle scheme	Still Required
22	Cycleaccess improvements linking Honeybourne Line to A40, Lansdown Road, Cheltenham	Secured
23	Cycleaccess improvements for Outer Ring Road corridor, Gloucester	Still Required
24	Gloucester – Sharpness walking & cycling improvements	Secured
27	LCWIP Walking Corridor, Cheltenham	Still Required
28	LCWIP Cycling Corridor, Cheltenham (Phase 1 – 4)	Still Required
29	LCWIP Walking Corridor, Gloucester (Phase 1 -4)	Still Required
30	LCWIP Cycling Corridor, Gloucester (Phase 1 – 4)	Still Required
51	Cycle access improvements to A40 Cheltenham - Andoversford corridor	Still Required
56	Alterations to Horton Road Level Crossing	Still Required
58	Foot/Cycleway bridge infrastructure north of Pirton Fields, Churchdown and link connection to existing highway	Still Required
69	Cycleaccess improvements to the Churchdown - Brockworth (Gloucester Business Park) Corridor	Still Required
70	Cycleaccess improvements to the Bishop's Cleeve, Swindon Village, North West Cheltenham Corridor	Still Required
71	Cycle access improvements to the Gloucester - Tewkes bury Corridor including access to developments at Twigworth and Longford	Still Required
72	Cycle access i mprovements A46 Corridor – Cheltenham - Brockworth	Still Required



Table CPS1 (c) Central Severn Vale – Public Transport (Bus) Scheme priorities up to 2031

Ref	Description	Funding Status
3	Elmbridge Interchange Hub	Still Required
4	Strategic Park & Interchange hub scheme for A46 Brockworth / Shurdington	Still Required
5	Strategic Park & Interchange hub scheme at Uckington, Cheltenham	Still Required
6	Strategic Park & Interchange Hub scheme for M5 J11a	Still Required
7	Strategic Park & Interchange hub scheme for M5 J12	Still Required
10	Strategic Park & Interchange hub upgrade at Cheltenham Racecourse, Cheltenham	Still Required
11	Strategic Park & Interchange upgrade hub at Waterwells, Gloucester	Still Required
12	Arle Court Strategic Park & Interchange expansion	Still Required
19	Gloucester – Cheltenham via Churchdown bus corridor improvements	Still Required
20	A40 Corridor bus priority, Cheltenham	Still Required
25	Innsworth Lane and Oxstalls Lane, Gloucester	Still Required
31	Signal upgrades and capacity improvements to provide bus advantage for Bruton Way, Gloucester	Still Required
45	Bus advantage improvements for A435 Tewkesbury - Cheltenham Corridor	Still Required

Table CPS1 (d) Central Severn Vale – Public Transport (Rail) Scheme priorities up to 2031

Ref	Description	Funding Status
55	Gloucester Railway Station Enhancements	Secured
57	Cheltenham Spa Railway Station Enhancements	Secured

4.2.35 In addition to the above listed schemes, GCC will:

- Working with West of England partnership to develop a business case for the MetroWest rail extension (Phase 2)
- Support railway station travel plans and Investment strategies

- Lobby for providing an improved service linking Gloucester, Cam & Dursley with Bristol (MetroWest)
- Continue work with the Cheltenham Development Task Force
- Continue as part of the A46 Partnership and the WG SNTB
- Continue working with the JCS authorities on the JCS review



4.3. Connecting Places Strategy CPS2 – Forest of Dean

The Place

- **4.3.1** CPS2 is located in the west of the county and is bounded by the M50 to the north, River Severn to the south, the City of Gloucester to the east and the River Wye to the west. Key routes converge at Highnam where the A40 and A48 meet to provide access across the River Severn.
- **4.3.2** CPS2 is also served by the A4136, linking Coleford and Cinderford to the A40 and the A4151 linking the forest with the A48. The A417 connects the very eastern part of the area with Gloucester and Ledbury. Lydney Railway station serves this CPS catchment, although some trips are better met by Gloucester or, from the north of the CPS area, Ledbury. Chepstow Railway station is also a key transport hub for residents in the CPS2 area and is an alternative to Lydney for Gloucester/Cardiff bound services.
- **4.3.3** The Forest Place Strategy encompasses the Forest of Dean District Council administrative area, which includes the market towns of Lydney, Coleford, Cinderford and Newent which equates to approximately 15% of Gloucestershire's total population. The area has a higher proportion of over 65s, compared to the county average⁹³.
- **4.3.4** The Forest of Dean District Council adopted its Core Strategy in 2012, setting the vision, spatial strategy and policies for development in the district for the period up to 2026. The Core Strategy is supplemented by the Allocations Plan that sets out the distribution of development in the Forest District. The main focus of development during the plan period is at Lydney, Cinderford, Coleford

and Newent. Lydney and Cinderford in particular have been subject to strategic development over the plan period with notable development at Lydney East and the Cinderford Northern Quarter Regeneration which has seen the first phases completed. This also sets the context for the districts Local Plan review up to 2041.

- **4.3.5** Despite the Forest of Dean Core Strategy (2026) and LTP plan period (2031) not aligning, housing and employment growth in CPS2 is anticipated to be 4,070 new homes from 2020 up to 2031 with 25-30 hectares of new employment land creating between 2,500 and 12,000+ jobs.
- **4.3.6** The vision for the Forest of Dean is one of supporting a thriving sustainable community within a high quality environment providing a range of employment opportunities to reduce commuting and other journeys.
- **4.3.7** The Cinderford Northern Quarter recently saw investment from GFirst LEP which supported the delivery of a new Gloucestershire College campus, medical facility and the first phase of a spine road. The construction of the spine road and college campus is a vital part of the drive to regenerate the area and opens up the possibility of delivering up to 1000 new jobs ⁹⁴, bringing investment and business to the Forest of Dean of up to £100m ⁹⁵ and helps to unlock land for further growth. The college and employment can be accessed sustainably and the enabling of jobs will allow skilled young people to live and work in the area with additional health and wellbeing benefits resulting from the ability to opt for Active Travel modes and reduce the need to use the private motorcar for commuting.

https://www.gfirstlep.com/case-studies/construction-education-centre/



⁹³ Census Data, KS102UK – Age Structure https://www.nomisweb.co.uk/reports/lmp/wpca/1929380023/report.aspx

Gfirst LEP Gloucestershire Collage Cinderford Campus https://www.gfirstlep.com/case-studies/construction-education-centre/
 Gfirst LEP Cinderford Northern Quarter Spine Road -

- The Forest of Dean communities are spread across a large 4.3.8 topographically diverse area including one of the last surviving ancient woodlands in the country. There is also growing support for the area to be recognised as an AONB according to the Glover report 96. As with any predominantly rural area, travel patterns are dominated by the private vehicle. However, the high quality woodland environment serves a strong cycling culture with the economic benefits recognised and the opportunities to strengthen local cyclinglinks identified. The Neighbourhood Development Plans are supportive of measures to strengthen local transport links through modes such as walking and cycling where this can be made practicable and safe. The north of CPS2 is less wooded hinterland dominated by the growing settlement of Newent. Although Newent sits remote from other forest settlements it is conveniently placed to access Gloucester and the Strategic Road Network to the north allowing access to economic centres.
- Many residents of the district are drawn to other competing retail 4.3.9 destinations outside of the Forest of Dean including: Ross-On-Wye, Cribbs Causeway, Cheltenham, Gloucester and Cardiff.
- **4.3.10** In December 2018 the Severn Bridge tolls were removed which is a significant event in the CPS2 areas recent history. A Highways England (HE) and Welsh Government commissioned study in October 2018 concluded that, initially, the removal of the toll would increase traffic flows over the Severn crossings by around 23%. Early signs from Highways England surveys undertaken after the toll removal have shown during January 2019 a 12.2% increase in westbound traffic entering Wales via both bridges, compared to the previous

- January. 97 Combining the two-way flow, the observed increase in traffic is in-line with initial Highways England predictions.
- **4.3.11** In the longer term the removal of the tolls has the potential to open up CPS2 for significant growth as it may be seen as a desirable place to live within easy commuting distance of Bristol and the significant employment opportunities it has to offer. The removal of the tolls may also improve connectivity to other CPS areas such as Stroud and the Cots wolds and help to remove the barrier to movement that the Severn has been previously.
- **4.3.12** Figure CPS2 (A) shows that 40% of the total work trips in the CPS are to destinations beyond it, with 75% of these travelling to other parts of the county via the A40 at Highnam to access Gloucester, which is the biggest trip attractor, and the remainder to Herefordshire, Wales or Bristol. The CPS only attracts 16% of its work trips from outside its CPS area while the majority of trips are contained. Figure CPS2 (B) shows that there is high containment (15,379) and outbound (14,637) trips which are more than double the trips attracted to the CPS2 area (6,015). Figure CPS2 (B) demonstrates that the in and outbound trips are heavily car dominate, which is expected of a rural area. The CPS2 area also has the lowest percentage of contained walking trips of all 6 CPS (16%). The topography of the CPS area is challenging with limited pedestrian facilities away from the more urban areas, in combination with limited local employment opportunities which results in fewer walking trips.
- Although CPS2 has a strong Agri-Tech industry, strengthened by 4.3.13 Hartpury Colleges Agri-Tech to plate project that received £1m of Growth deal funding, the industrial make up of CPS2 is diverse with a proportion of the population working in professional and scientific sectors reliant on connectedness. There is also a strong employment base in manufacturing and transportation sectors

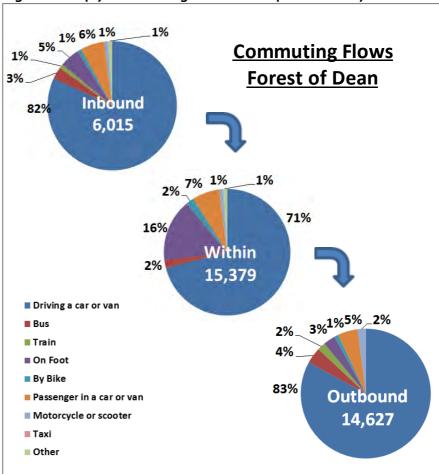
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachmen t data/file/833726/landscapes-review-final-report.pdf



Figure CPS2 (A): Forest of Dean Commuting Breakdown (Census 2011)



Figure CPS2 (B): Commuting Flows – FoD (Census 2011)





Issues and Opportunities

4.3.14 Access to the Forest of Dean is impacted by key networkpinch points, for example on the A40, into Gloucester, or along the A48 in Chepstow. This needs to be better understood and addressed. Monmouthshire County Council and the Welsh Assembly are seeking funding for a means to address congestion in Chepstow. Any scheme to improve journey time reliability and accessibility to CPS2 is to be encouraged. GCC will liaise closely with the Welsh Assembly and Monmouthshire Council to support proposals for the development of a scheme to resolve the congestion issue in Chepstow. In addition, there are network resilience issues relating to the flooding of the A417 at Maisemore and A40 around Gloucester.

4.3.15 Congestion within Lydney has resulted in an AQMA being declared within the town centre. Measures to improve air quality have proven difficult to implement, largely due to the constraints of the Bream Road junction. However, there have been no exceedances in 2017 or 2018. A possible reason could be in response to the 20mph speed limit implemented in the town centre. Monitoring of air quality will be continual.

4.3.16 An hourly bus service provides access between, the market towns within the Forest of Dean and the new Gloucester Transport Hub. There are no very high frequency bus services in CPS2 with limited high frequency services serving the key growth areas to Gloucester hourly. This level of network coverage is indicative of the rural nature of the CPS with existing service timetables not able to provide flexible access to employment or educational facilities. Community transport or demand responsive transport (DRT) may benefit rural settlements in the CPS where commercial public transport services are not economically viable. Such provision gives opportunity for more flexible and accessible community-led travel solutions that can be specifically tailored to specific local needs. If the potential can be maximized in the CPS and county as a whole, community transport has good scope for providing social and economic

benefits and help to combat social and spatial isolation. Community transport is available for all people despite some misconceptions, although on some services a membership is required. CPS2 has established community transport and DRT with the creation of the Forest of Dean Community Transport Partnership's 'Forest Routes' service but the coverage is limited.

4.3.17 There is just one railway station in the Forest CPS area, located in the town of Lydney. Direct trains access Cardiff and Newport in the west and Gloucester and Cheltenham in the east. The station's patronage was 199,000 in the year 18/19 according to the latest available statistics 98. The railway station is located between the town centre and Lydney harbour with growth giving the opportunity to improve pedestrian and cycling access between them. £1m has been awarded towards improving access between the town centre and station by the Local Growth Fund. The outcome would promote active travel, increase station patronage, improve air quality and create a sustainable interchange hub. The creation of an interchange hub may help to support further increases in rail services and maximise linkages to Bristol with direct services, reducing the pressure on the A48 pinch point at Chepstow.

4.3.18 Chepstow, although located outside the CPS2 area, is also a key rail station for Forest residents although the A48 pinch point constrains access somewhat. Furthermore, rail services are impacted by a lack of available rolling stock to accommodate current and potential demand.

⁹⁸ Office of Rail and Road estimates of station usage https://dataportal.orr.gov.uk/statistics/usage/estimates-of-station-usage/ - select Lydney



- **4.3.19** Almost, half of all work trips in the area are less than 2km; highlighting the opportunities to increase active travel and reduce the pressure from short car-borne trips. However, the rural character of the strategy area means there are limited opportunities to provide dedicated cycle routes beyond the main urban settlements. The Countywide Strategic Cycleway Network desire lines (Figure PD2 (C)), identifies the following desire lines that link key CPS2 areas;
 - Lydney Cinderford via Parkend.
 - Cinderford Highnam via Westbury-on-Severn
 - Lydney Highnam along the A48

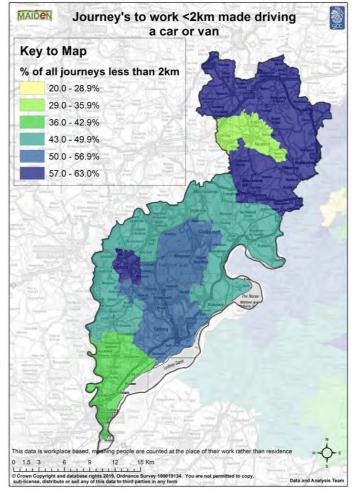
Figure CPS2 (C) provides the journey to work data for Forest of Dean CPS2.

- **4.3.20** There is significant potential to provide leisure routes in association with tourist trails; such as the Gloucestershire Way, the Wye Valley Walk and those within the Forest of Dean. Where opportunities exist to improve walking and cycling opportunities within settlements and for local trips, the Neighbourhood Development Plans are highly supportive.
- **4.3.21** Tutshill and Sedbury have been subject to growth over recent years with new residential developments, most notably adjacent to Gloucester Road. As a result, these two settlements offer strong southern linkages to Monmouthshire and the proximity of Chepstow railway station offers attractive access to South Wales and Gloucester.
- **4.3.22** LCWIP will work towards the identification of local cycling and walking networks, over time these will come to form a strategy for walking and cycling. This information will become available at www.gloucestershire.gov.uk/lcwip.

- **4.3.23** Emergence of the Western Gateway Power House, which includes Gloucestershire and South Wales, may result in additional freight movements through the Forest district due to increased economic output. This could provide economic boosts to the region but not without issue. The increase in freight could provide added pressure upon the rural routes through the Forest, particularly when the SRN is closed. This is a test of network resilience. GCC will work with regional bodies such as the Western Gateway Power House and SNTB to develop regional freight strategies.
- **4.3.24** Although rural broadband has been improved in many rural areas there are still some parts of CPS2 disadvantaged by slow speeds or lack of broadband capability. Connectedness is important in CPS2 for the growing professional and scientific sectors especially in places such as Mitcheldean which is growing as a key employment centre with 3000 jobs focused around the Vantage Point Business Village.



Figure CPS2 (C): Journey to Work data – FoD (Census 2011)





Strategic Vision

4.3.25 GCC's strategic priority for the Forest CPS area, up to the end of the plan period, is to undertake cross boundary engagement with Monmouthshire Council in order to resolve the A48 capacity constraint in Chepstow. The removal of the Severn bridge tolls may encourage growth along the A48 corridor exacerbating the demand on it towards Cardiff and Bristol.

4.3.26 Lydney is one of the key growths areas in CPS2 and improvements to the pedestrian and cycle network within the Town Centre and between it and the railway station and beyond to the harbour will provide a sustainable active travel link that will help to remove short distance car journeys. The wider vision will see improvements made to the corridors identified on the Countywide Cycleway Map (see PD2, Figure C) in order to encourage increased wider area sustainable travel for both commuting and leisure purposes.

4.3.27 Rail provides a good opportunity to overcome the A48 pinch point constraint in Chepstow; however it is not without its own issues. Therefore GCC aims to work with the GFirst LEP, developers and neighbouring authorities to increase rolling stock capacity to accommodate current and future demand. In addition the strategic vision for CPS2 will aim to engage with key stakeholders to create an integrated transport strategy to improve sustainable multi-modal connectivity to the rail stations and a future ambition to increase directness and services to Bristol, either via Lydney or Severn Tunnel Junction, as set out in the Transport Scenarios, looking to 2041 chapter. Figure CPS2 (D) illustrates scheme ambitions to 2031 for the FoD CPS.

4.3.28 The M50 provides network resilience to the north of the CPS2 area and provides settlements such as Newent with access to the SRN. These links will help provide cross-boundary connectivity to Hereford and Wales as well as economic centres of Worcester and Birmingham. The M50 and A417 are key links to the east of the county, particularly to CPS6, which is anticipating growthin the Tewkesbury area and in turn provides eastward connectivity to the Trans-

Midland Trade Corridor. These routes are important for movement given the limited number of river crossings over the River Severn. The A417 and B4215 provide a link between the M50 and Gloucester. Network resilience of these routes are important, to future economic growth particularly as Newent is recognised as a key centre for the north of CPS2 in the Local Plan and the Forest of Dean District Council Local Plan review Issues and Options paper also outlines this potential. There is a strong Agri-Tech industry in the area, with the presence of Hartpury College strengthening the importance of this industry. The strategic vision will aim to maximise, enhance and safeguard these key links to support FoDDC's vision of making Newent a more effective local centre. The vision will also maximise potential for improved Active Travel links to Hingham and Gloucester via disused railways or quiet lane network.

4.3.29 The strategic vision for the Forest CPS area aims to, support the completion of the Cinderford Northern Quarter spine road to the A4136. This will fully unlock the commercial potential of the Cinderford Northern Quarter, allowing inward investment, skilled job creation and opportunities and boosting the economy of the area. It will also support access to new health care facilities, Further Education and a Growth Hub.

Gloucestershire Local Industrial Strategy, page 7. https://www.gfirstlep.com/downloads/2019/gloucestershire draft local-industrial-strategy 2019.pdf

Strategic Vision, page 22 – Forest of Dean District Council Local Plan. https://www.fdean.gov.uk/media/szzpnzxj/core-strategy.pdf



⁹⁹ FoDDC Issues and Options Paper - https://www.fdean.gov.uk/media/metf0tlh/issue-and-options-document.pdf

Figure CPS2 (D): Forest Scheme Map CPS2 reflecting schemes up to 2031

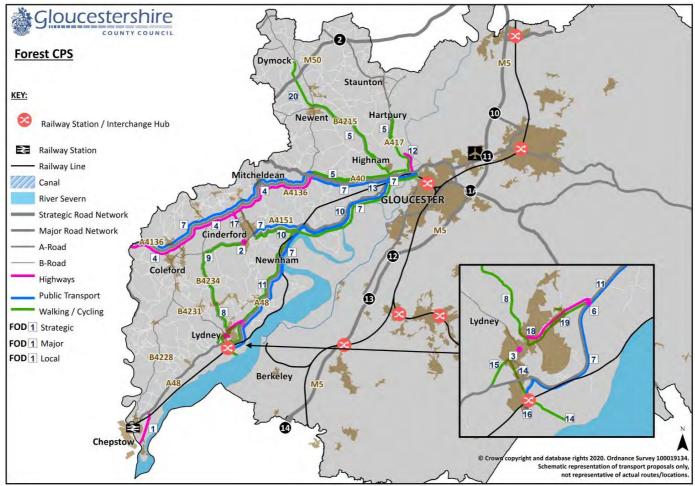




Table CPS2 (a): Forest of Dean - Highway Scheme Priorities up to 2031

Ref	Description	Funding Status
1	Chepstow Congestion Relief	Still Required
2	Junction Improvements – B4226/B4227 Bridge Junction	Still Required
3	Bream Road Junction Improvement - Lydney	Still Required
4	A4136 Corridor highway capacity improvements	Still Required
6	Junction improvements, A48 Highfield Rd / Lydney Bypass	Still Required
12	Replacement of existing A417 highway with elevated section, Maisemore	Still Required
17	Cinderford Northern Quarter Spine Road	Still Required
18	Highway improvement - Newerne Link Road, Lydney	Still Required
19	Junction improvements - Highfield Hill including Traffic Calming, Lydney	Still Required

Table CPS2 (b): Forest of Dean - Active Travel (Walking/Cycling) Scheme priorities up to 2031

Ref	Description	Funding Status
5	Cycle improvements linking Gloucester – Huntley, Churcham , Maisemore, Hartpury, Highnam and Newent	Still Required
8	Cycle access improvements between Lydney and Parkend	Still Required
9	Cycle access improvements Lydney - Cinderford corridor	Still Required
10	Cycle access improvements Cinderford - Highnam corridor	Still Required
11	Cycle access improvements to A48 Lydney - Westbury-on-Severn corridor	Still Required
14	Cycling and Walking access improvements to Lydney Station and Lydney Harbour	Still Required
15	Cycling and Walking access improvements – Lydney Town Centre	Secured
20	Newent to Dymock Active Travel route	Still Required



Table CPS2 (c): Forest of Dean - Public Transport (Bus) Scheme priorities up to 2031

Ref	Description	Funding Status
7	Bus stop and bus advantage improvements for Gloucester - Lydney / Coleford / Cinderford corridors	Still Required
13	West of Severn Transport Interchange Hub	Still Required

Table CPS2 (d): Forest of Dean - Public Transport (Rail) Scheme priorities up to 2031

Ref	Description	Funding Status
16	Lydney Railway Station Enhancements	Still Required



4.4. Connecting Places Strategy CPS3 – North Cotswold

The Place

- **4.4.1** The North Cotswolds Connecting Places Strategy (CPS3) is located in the north-east of the county and is bounded by Worcestershire and Warwickshire to the north, the South Cotswold CPS4 area to the south, West Oxfordshire to the east and the Central Severn Vale CPS1 area to the west. The CPS3 encompasses the market towns of Stow-on-the-Wold, Moreton-in-Marsh, Chipping Campden and Bourton-on-the-Water.
- **4.4.2** Situated in the Cotswolds AONB (The Cotswolds National landscape), the area has a low population density and a higher proportion of over 65 year olds compared to the county as a whole, with the exception of Moreton in Marsh. This is as a result of housing growth in the area which has provided new homes for those of working age with the added benefit and attractor being the railway station and its links to employment located in the Oxford London corridor.
- **4.4.3** The Cotswold District Local Plan (2011 2031), adopted in 2018, outlines the spatial strategy for the district. During the plan period, provision will be made to meet the need for approximately 8,400 new homes minimum and land to support 24ha of B-Class employment. The North Cotswold CPS area has been allocated approximately 3,321 new homes with potential for a further 548 windfall homes. Of the new homes over 60% has either been built or have extant planning permissions according to the latest housing trajectory figures. The focus of development is in Bourton-on-the-Water (419 dwellings), Moreton-in-Marsh

(1,103 dwellings) and Upper Rissington (401 dwellings). ¹⁰³ The Local Plan recognises Moreton-in-Marshas the main centre for the north Cotswolds while Bourton-on-the-Water, Chipping Campden, Fairford, North Leach and Stow-on-the-Wold are recognised as service centres for the surrounding areas.

- **4.4.4** The vision for the Cots wolds is one of "enabling a strong, competitive and innovative local economy which capitalises on the district's high quality historic and natural environment whilst creating healthy, sustainable and mixed communities". ¹⁰⁴ Development within the North Cotswolds will occur in the most sustainable towns and larger villages so the majority of services and facilities will be met from within those settlements, reducing the need to travel longer distances.
- **4.4.5** Tourism is important for the socioeconomic wellbeing of the Cotswolds. It provides an essential source of income for businesses and communities both within and around the AONB. Due to the rural nature of the CPS area, car access will remain the dominant mode of choice when visiting the area and it is important that vehicle delays at pinch points are managed to not deter people from visiting.
- **4.4.6** Although tourism is important, CPS3's rural economy is much more expansive and varied with a strong agricultural and associated Agri-Tech industry as well as manufacturing and service sector industries with finance and insurance employment. A number of UK multi-national companies are located in the area.

¹⁰² Census Data, KS102UK – Age Structure. https://www.nomisweb.co.uk/reports/lmp/wpca/1929380023/report.aspx



¹⁰³ Cotswold District Council – Housing Land supply report June 2018. Windfall and homes outside principal areas have been split 50/50 between CPS3 and CPS4 due to their final locations being unknown. Actual number of houses built may vary.

¹⁰⁴ Cotswold District Local Plan (2011 – 2031) https://www.cotswold.gov.uk/planning-and-building/planning-policy/local-plan-2011-to-2031/

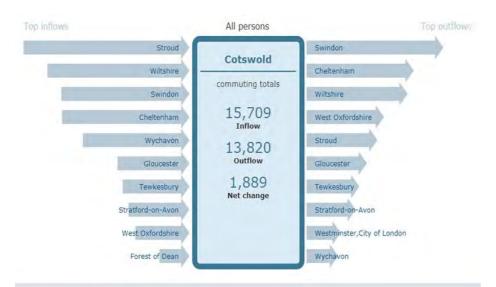
- **4.4.7** Key highway routes include the A429, known as the Fosse Way, A417 and the A40 which connect the North Cotswolds to the West Midlands, Swindon, Cheltenham and Oxford. Census data has been considered for the whole Cotswolds District due to the way this data has been gathered. Figure CPS3 (A) clearly demonstrates that the Cotswolds is cardominant for inbound (85%) and outbound (84%) trips with the exception of contained trips which demonstrates a high walking percentage. The contained trips, as shown by Figure CPS3 (B), demonstrate a high percentage of walking trips (25%) which may reflect people living and working in the same settlements. Rail travel accounted for 4% of the mode share with destinations such as West Oxfordshire accounting for a large proportion of outbound flow. This reflects the accessibility offered by Moretonin Marsh railway station, which also allows sustainable travel to London and Wychavon for Evesham and Worcester.
- 4.4.8 Moreton railway station provides an hourly service to Oxford and London and has seen year on year increases in patronage with 273,018 passengers using the station in the year 2018/19. With improvements to express services due in the near future, Moreton-in-Marsh railway station has the potential to become a key stop in the North Cotswolds. Combined with bus services and walking/cycling routes, there is potential to create a sustainable Integrated Transport Hub to benefit the wider North Cotswolds area. The North Cotswold Line Task Force has been formed from a number of stakeholders and neighbouring authorities to promote improved journey times and service frequency, as well as identify future infrastructure requirements which will be of benefit to Moreton in Marsh railway station and other neighbouring stops.

4.4.9 Kingham station, although located in Oxfordshire, is also an important rail station for the North Cotswold residents. For many residents access is easier to Kingham than other Gloucestershire based stations. There are less car parking constraints and costs of travel can be cheaper. There is potential to improve Active Travel links to Kingham station and cross border collaboration can explore the feasi bility of this.

¹⁰⁵ Office of Rail and Road estimates of station usage https://dataportal.orr.gov.uk/statistics/usage/estimates-of-station-usage - select Moreton in Marsh



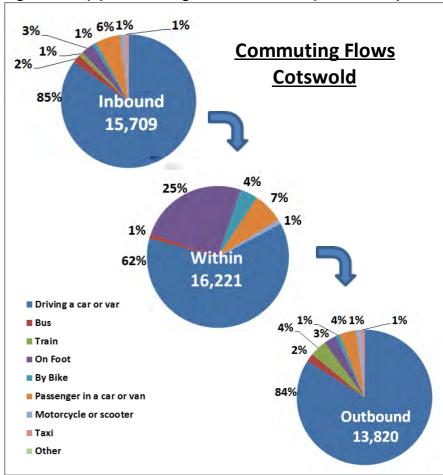
Figure CPS3 (A): Cotswold Commuting Breakdown (Census 2011)



Commuting totals for Cotswold:

- . Inflow: 15,709 all persons commute into Cotswold from other local authorities in the UK.
- . Outflow: 13,820 all persons commute out of Cotswold to other local authorities in the UK or abroad.
- . Net change: Overall, commuting results in a population increase of 1,889 all persons in Cotswold.

Figure CPS3 (B): Commuting Flows – Cotswold (Census 2011)





Issues and Opportunities

The A429 links the key CPS3 settlements and serves a primary function to accommodate local and regional passenger and freight needs as well as tourist traffic. However, the A429 has a number of pinch points such as Unicorn Junction at Stow-on-the-Wold, the double mini-roundabouts and railway overbridge in Moreton-in-Marsh. These pinch points result in congestion and delay with emissions from slow moving vehicles affecting health and well-being.

4.4.11 Cycle links are poor, with infrastructure limited to town centres, and existing facilities along key corridors such as the A429 are perceived as unpleasant and unsafe. The issues were recognised in the A429/A433 corridor study which recommended exploring the potential to provide improvements to alternative routes such as NCN route 48 that runs parallel to the A429 between Stow on the Wold and Moreton-in-Marsh. This provides a quieter route of approximately 5 – 6 miles for the benefit of commuting and leisure purposes. 80% of all short distance cycle trips are 5 miles or less 106, this alternative route is slightly longer than that but does provide a safer and more attractive route to that of the A429. There is potential to utilise dis-used railways and quiet lane networks to provide improved links within the Cotswolds from Cheltenham to Bourton-on-the-Water via Andoversford. The link from Bourton on-the-Water could be extended to Kingham station.

4.4.12 There may be an increased desire for cross border travel, particularly to the east into Oxfordshire, in order to benefit from anticipated future growth associated with the 'Growth Arc'. 107 However, connectivity to Oxfordshire is limited in the number of direct principal routes available. Cross border growth in Worcestershire, which is also seeing significant future growth within proximity to Gloucestershire's border, may put additional pressure upon the local highway network, particularly the A429. Addressing the pinch point issues on the A429 allows the opportunity for improved access to external growth areas as well as unlocking potential development land for new mixed housing and employment. This will provide a range of jobs within sustainable travel distance and maximise the potential regional and national links that Moreton Railway station will also provide creating the opportunity for an economic centre in CPS3.

4.4.13 There is the potential to grow the use of rail for Gloucestershire residents; to provide a viable and sustainable cross-border travel option. Improving access, facilities and service frequencies from Moreton and Kingham stations can realise this opportunity.

There are no very high frequency bus services in the CPS3 area with limited high frequency hourly services to Chipping Camden and Moreton-in-Marshonly with the remainder of CPS3 poorly served by public transport. Like the other rural areas in Gloucestershire, the CPS3 may benefit from expanded community transport or demand responsive transport. This will help to resolve socialisolation for a large proportion of the population, particularly the elderly who will be provided with a flexible means of accessing goods, services and healthcare facilities. Furthermore it will also provide access to educational facilities for young people. Community transport is available on a very limited scale in the Moreton-in-Marsh area and does provide an excellent service for those most in need. However, there is scope to further expand community transport and DRT so that residents are better connected to key growth areas and sustainable interchange hubs such as Moreton-in-Marsh railway station. Community transport and DRT may also be of great benefit in the tourist sector whereby groups of individuals could join together to travel to the more rural tourist spots, relieving pressures on inadequate local roads as well as reducing parking demand and associated issues. Such collaboration may be facilitated or supported by Total Transport / Thinktravel web-based initiatives that inform individuals of the best means of accessing a destination with the ability to book and/or arrange travel all in one place.



Department for Transport: Walking and Cycling Statistics, England.
 Growth Arc - https://nic.org.uk/studies-reports/growth-arc/

- **4.4.15** Improvements in broadband technology or provision of a hub and spoke community facility will change the way services are delivered and for some individuals this may reduce the need to travel. This would have particular benefit at the key pinch points within the CPS such as Stow's Unicorn Junction and the double mini-round abouts on the A44/A429 in Moreton-in-Marsh.
- **4.4.16** A consequence of the rural nature of the area, coupled with the standard of many of the roads, is the disproportionate impact of HGVs on many local communities. This is sometimes due to the reliance on Satnavs' directing freight to use the shortest route rather than the most appropriate one. This includes trips bisecting this area from neighbouring authorities accessing the Vale of Evesham in Worcestershire. Open source and/or real time data technology may be able to provide HGV operators with up to date information that could better inform their drivers of recommended routes or routes more suited to their specific delivery needs. This has the potential to re-route HGV trafficaway from key pinch points or settlement centres. This will benefit the deliverability of goods and services and have health and wellbeing benefits for local residents who will no longer be subject to the emissions generated by the largest road traffic. Stow-on-the-Wold's Unicorn Junction and Moreton-in-Marsh's double mini-roundabouts and northern railway over bridge are pinch points subject to regular congestion exacerbated by the largest road traffic. Any scheme to improve journey time reliability and accessibility to CPS3 is to be encouraged.
- **4.4.17** LCWIP will work towards the identification of local cycling and walking networks, with consideration given to equestrian users in the more rural settings. Over time these will come to form a strategy for walking and cycling. This information will become available at www.gloucestershire.gov.uk/lcwip.

Strategic Vision

4.4.18 The strategic vision for the North Cots wold CPS area, is to resolve the capacity and accessibility constraints on the A429, particularly the A429 Over-

- bridge, Moreton-in-Marsh double mini-roundabouts and Unicorn Junction in Stow-on-the-Wold. Once the constraints on the A429 have been resolved, a wider vision of connecting CPS3 to the Oxford—Cambridge Growth 'Knowledge' Arc, and Cyber Central UK in West Cheltenham can be realized, as well as maximise local employment opportunities such as those offered by the Fire Services College which will benefit from improved accessibility and the delivery of goods and service.
- **4.4.19** The potential that the railway station in Moreton-in-Marsh offers, for onward sustainable travel, is to be maximised, as well as multi-modal car-free connections to it. This is particularly important for those living in the more remote rural areas in order to reduce social isolation. Moreton-in-Marsh has the scope to become a key North Cots wold interchange hub and the establishment of a parking strategy will help this function efficiently. The North Cots wold Line Task Force has been set up to improve journey times and increase service frequency with a wider vision to work with key stakeholders and authorities to explore the potential to reinstate line, such as the route towards Honeybourne Junction and Stratford upon Avon as stated in Rail policy chapter. This would also improve rail resilience as well as encourage additional commuting and tourism related trips.
- **4.4.20** Demand Responsive Transport solutions will improve access to key services and provide connections to core bus services at rural interchange hubs. This will improve accessibility, reducing social isolation and improving opportunities for the CPS3's most vulnerable residents.
- **4.4.21** In addition to Moreton railway station, Kingham station is also important for regional and national travel for many residents in CPS3. The strategic vision will see accessibility improvements by way of DRT services and cross boundary Active Travel routes to encourage sustainable door to door travel. Figure CPS3 (C) illustrates scheme ambitions to 2031 for the North Cotswold CPS area.



Figure CPS3 (C): North Cotswold area scheme Map reflecting schemes up to 2031

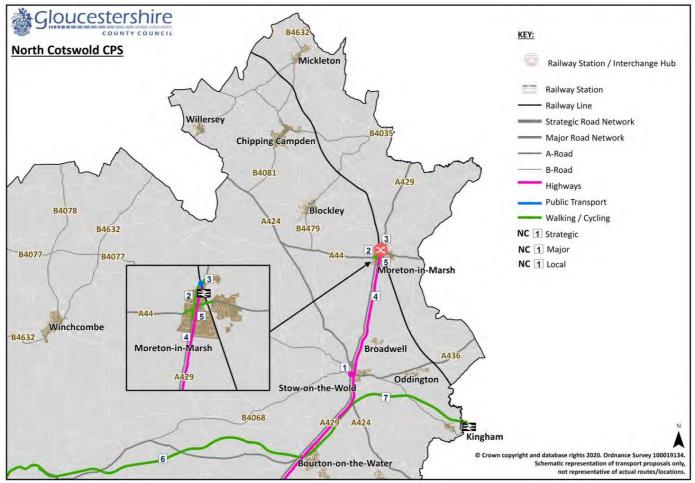




Table CPS3 (a) North Cotswolds – Highway Scheme priorities up to 2031

Ref	Description	Funding Status
1	Junction improvement A429 - Unicorn Junction (A436/B4068) - Stow-On-The-Wold	Still Required
4	Highway capacity improvement - A429 Fosseway	Still Required
5	Highway improvement, A44/A429 mini-roundabouts	Still Required

Table CPS3 (b) North Cotswolds – Active Travel (Walking/Cycling) Scheme priorities up to 2031

Ref	Description	Funding Status
2	Resolve pedestrian access arrangements in Moreton in Marsh	Still Required
6	Andoversford – Bourton on the Water Active Travel route	Still Required
7	Bourton on the Water – Kingham Active Travel route	Still Required

Table CPS3 (c) North Cotswolds – Public Transport (Rail) Scheme priorities up to 2031

Ref	Description	Funding Status
3	Moreton-in-Marsh Railway Station car park enhancements.	Still Required

4.4.22 In addition to the above listed schemes, GCC will look into the need for a Moreton-in-Marsh Global Transport Issues study and how to resolve pedestrian access arrangements in Moreton.



4.5. Connecting Places Strategy CPS4 – South Cotswold

The Place

- **4.5.1** CPS4 is located in the south-east of the county. With a population of 50,000, the area is characterised as semi-rural with the majority of the CPS area designated as part of the Cotswold AONB (The Cotswolds National Landscape).
- 4.5.2 CPS4 is bounded by the North Cotswold CPS3 to the north, Wiltshire to the South, Oxfordshire to the east and the Stroud and Central Severn Vale CPS areas to the west and encompasses the affluent market towns of Cirencester, Tetbury, Fairford and Lechlade-on-Thames. In addition CPS4 accommodates a large part of the Cotswold Water Park between Cirencester, South Cerney and Fairford which is a key tourism draw to the CPS. Due to its sustainable location and good transport links there are significant growth proposals in the current Cotswold Local Plan for Cirencester. There are also notable future developments coming forward in Swindon which are likely to have an impact on transport demand in this area.
- **4.5.3** The Cotswold Local Plan (2011–2031), adopted in 2018, outlines the spatial strategy for the district. During the plan period, provision will be made to meet the need for approximately 8,400 new homes minimum and land to support 24ha of B-Class employment. CPS4 has a housing allocation of 5,555 new homes with potential for a further 548 windfall homes. Of the new homes over 40% have either been built or has extant planning permissions with an additional

- 1,019 windfall homes and homes allocated outside of the principal settlements. $^{108}\,$
- **4.5.4** Chesterton is CPS4's strategic development, located south of Cirencester, with planning consent for 2,350 dwellings. It is anticipated that approximately 1,800 new homes will be constructed within the Local Plan Period up to 2031. In addition sites which have already been built or have extant planning permission includes: South Cerney (270 dwellings), Fairford (530 dwellings) and Tetbury (916 dwellings).
- **4.5.5** The vision for the Cots wolds is one of "enabling a strong, competitive and innovative local economy which capitalises on the districts high quality historic and natural environment whilst creating healthy, sustainable and mixed communities". Development within the South Cotswolds will occur in the most sustainable towns and larger villages so the majority of services and facilities will be met from within those settlements reducing the need to travel longer distances.
- 4.5.6 Cirencester is the most dominant centre, not just for CPS4 but the Cotswolds as a whole, accommodating 25% of the districts population and 30% of the total jobs. Cirencester is also home to the Royal Agricultural University (RAU) which is an important asset to the town with the graduation of skilled individuals. Growth in the vicinity of the RAU has resulted in the creation of FARM491, a GFirst LEP funded project, as well as a new business park at the College Triangle. These provide high end job opportunities which have the potential to aid retention of skilled young people in the area as well as develop potential sustainable travel modes within Cirencester.

¹⁰⁹ Cotswold District Local Plan (2011 – 2031) https://www.cotswold.gov.uk/planning-policy/local-plan-2011-to-2031/



¹⁰⁸ Cotswold District Council – Housing Land supply report June 2018. Windfall and homes outside principal areas have been split 50/50 between CPS3 and CPS4 due to their final locations being unknown. Actual number of houses built may vary.

- There is strong existing cross border travel demand towards Wiltshire 4.5.7 and, in particular Swindon, given its convenient access to employment areas via the A419. Cross border travel desire may also increase to the east towards Oxfordshire to benefit from the anticipated future 'Growth Arc'. 110 A constraint of such movements is the lack of high quality connectivity to Oxfordshire from CPS4 as there are no direct principal routes from the major settlement areas without the need to travel north or south east first, or take lesser A and B Roads.
- 4.5.8 Cross border growth in Oxfordshire and Wiltshire, which is also seeing significant future growth within proximity to Gloucestershire's border, may put additional pressure upon the local highway network, however, there is potential for improved local and cross border public transport, via bus and/or rail from Cirencester and Kemble. Kemble Station is a key commuter hub for CPS4, with 387,798 passengers using the station in the year 2018/19. 111 Recent redoubling of the line provides the possibility of improved rail service frequency and significant potential for the station to grow in line with the expected increased demand.

Key routes in the area converge in Cirencester where the A417/A419, 4.5.9 A429 and A433 meet. Travel to work data indicates that the Cotswolds as a whole has more inbound trips than outbound. This data has been considered for the whole Cots wolds District due to the way the census data has been gathered. The data demonstrates that the Cotswolds is car dominant for inbound (85%) and outbound (84%) trips with the exception of contained trips which demonstrate a high walking percentage. The contained trips demonstrate a high percentage of walking trips (25%) which may reflect people living and working in the same settlements. The biggest draw for outbound trips was towards Swindon, which is facilitated by good rail links from Kemble. Figure CPS4 (A) illustrates the commuting flows for the Cotswold.

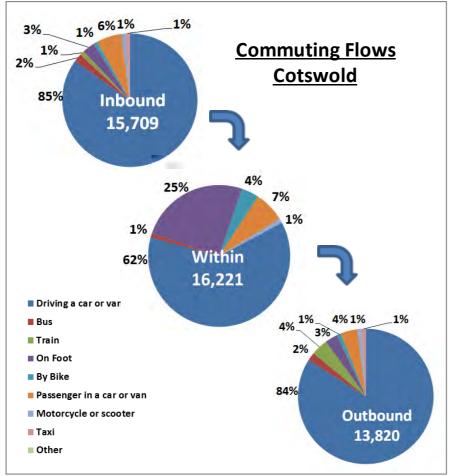
https://dataportal.orr.gov.uk/statistics/usage/estimates-of-station-usage/-select Kemble



¹¹⁰ Growth Arc - https://www.nic.org.uk/publications/partnering-prosperity-new-deal- <u>cambridge-milton-keynes-oxford-arc/</u>

111 Office of Rail and Road estimates of station usage -





Issues and Opportunities

- **4.5.10** A consequence of the semi-rural nature of the area is the limited availability of connected cycle routes between market towns. Busy roads are a safety concern and are barriers to active travel (cycling and walking). Improvement initiatives include personalised travel planning in new developments, low cost schemes to fill gaps in the cycle network and an ambition for a dedicated cycle link between Cirencester and Kemble railway station, with future scope to provide additional cycle links between Cirencester and South Cerney, Lechlade, and Tetbury via Kemble and a cross CPS route from Cirencester to Stroud as shown on the Countywide Strategic Cycleway Network desire lines, (PD2 (C)). The aim of these routes is to encourage a range of sustainable travel modes as well as encouraging health and well being and they will, over time, form part of the County's strategic cycle network.
- **4.5.11** Public Transport provision is poor with only Cirencester benefiting from a high frequency hourly service to Chel tenham and a cross boundary hourly service to Swindon. The remainder of CPS4 is served by low frequency services, often not accessible in peak commuting or educational travel times. The development at Chesterton provides scope for improved bus infrastructure and services with an added benefit to services towards Kemble. Settlements close to the county border such as Lechlade have cross border connectivity to locations such as Highworth, Swindon, Carterton and Oxford. Given their location outward travel desire may be higher for employment opportunities but sustainable travel is hindered by lack of options.
- **4.5.12** Public transport provision to the smaller settlements in CPS4 is unlikely to change in the future however; community transport and DRT will play its part in resolving social isolation. There is an established community transport network with routes serving Tetbury, Fairford and Cirencester. Community transport and DRT willhelp to resolve social isolation for a large proportion of the population, particularly the elderly who will be provided with a flexible means of accessing goods, services and healthcare facilities. It will also provide



access to educational facilities for young people. However, there is scope to further expand community transport and DRT so that residents are better connected to key growth areas such as Cirencester, Stroud and the CSV as well as sustainable interchange hubs in Cirencester and Kemble. Community transport and DRT may also greatly benefit the tourist sector whereby groups of individuals could join together to travel to the more rural tourist spots, relieving pressures on inadequate local roads as well as reducing parking demand and associated issues. Such collaboration may be facilitated or supported by Total Transport / Thinktravel web-based initiatives that inform individuals of the best means of accessing a destination with the ability to book and/or arrange travel all in one place.

- **4.5.13** LCWIP will worktowards the identification of local cycling and walking networks, with consideration given to equestrian users in the more rural settings. Over time these will come to form a strategy for walking and cycling. This information will become available at www.gloucestershire.gov.uk/lcwip.
- **4.5.14** CPS4 accommodates the large RAF Fairford airfield. Over recent decades the airfield has seen increases and decreases in use. As of 2020 it is currently in use by the USAF with regular flights into and out of the airfield. It is anticipated that further squadrons are to relocate to RAF Fairford by 2024. This may result in a significant increase in location population and create additional pressures on the local highway network and key services in the area.
- **4.5.15** In addition to increased activity at RAF Fairford, the anticipated growth in Oxfordshire with the Growth Arc and the emergence of the Western Gateway Powerhouse, as well as A417 Missing Link improvements may increase east-west travel demand. Other than the A40, there is a lack of highway connectivity east with the A417 being the principle highway. Growth will increase demand upon the network and increase flows within Fairford and Lechlade. Both have typical historic high street settings that are narrow and may not be suitable for the modern demands of a principle A-road.

Strategic Vision

- **4.5.16** Central to the LTP's vision for the south Cotswolds are a step change in cycling connectivity between settlements as well as within large settlements such as Cirencester and Tetbury. This needs to be combined with maximising the potential of Kemble station which is a key sustainable rail connection for CPS4 for services to major regional and national destinations such as London. Its proximity to Cirencester and, to a lesser extent, Tetbury means it is within accessible range to sustainable travel modes such as buses and the bicycle. Public and/or community transport services offer additional sustainable travel opportunities which may help to relieve car parking capacity constraints.
- **4.5.17** The A417 Missing Link remains a strategic scheme for the South Cotswold CPS and its implementation will resolve congestion and safety constraints. The South Cotswold CPS will be better connected to the core urban areas of Cheltenham and Gloucester as well as the M5 for travel to Birmingham and Bristol. Likewise, Cirencester and surrounding areas will be better accessed from the wider area to the west, which may encourage further inward investment, improved accessibility to employment and improved delivery of goods and services efficiency.
- **4.5.18** The Cotswold Waterparkis a major tourist attraction in CPS4 and the strategic vision will aim to open it up for sustainable travel methods along routes identified on the Countywide Strategic Cycleway Network desire lines (Figure CPS2 (C)). This will allow the formation of sustainable leisure and tourism routes between the water park, South Cerney, Fairford and Cirencester which in turn provides the opportunity to reduce reliance on car use which tests the local road network resilience in the busy summer months.



4.5.19 The strategic vision for CPS4 will also aim to support and encourage growth in the varied rural economy. Tourism is important, but CPS4 has a strong agricultural and Agri-Tech industry as well as manufacturing employment. The finance and insurance industry is also represented with CPS4 facilitating multinational employers and headquarter activities. Figure CPS4 (D) illustrates scheme ambitions to 2031 for the South Cotswold CPS area.



Figure CPS4 (D): South Cotswold area scheme Map reflecting schemes up to 2031

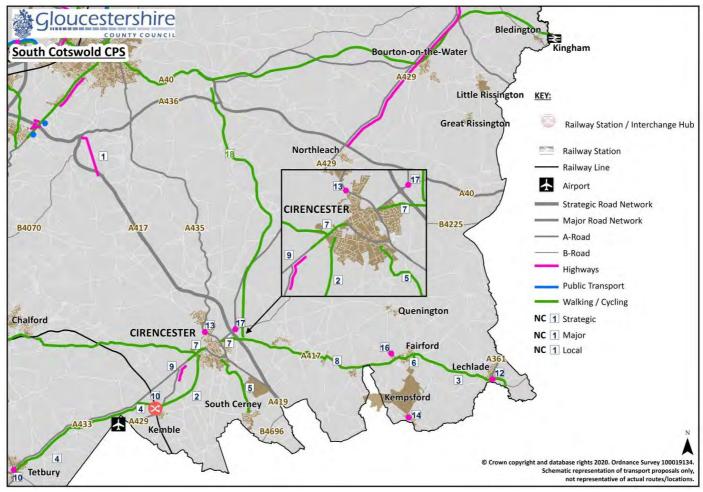




Table CPS4 (a) South Cotswolds – Highway Scheme priorities up to 2031

Ref	Description	Funding Status
1	A417 Missing Link	Secured
9	Junction Improvements – A429/A433, Kemble	Still Required
11	Junction Improvement – A433 London Road, Tetbury	Still Required
12	Highway Improvement – Thames Street – High Street, Lechlade	Still Required
13	Junction Improvement – Five Ways junction, including crossing facilities, Cirencester	Still Required
14	Junction Improvement – Allotment Corner, Kempsford	Still Required
15	Junction Improvement – Tetbury Town Centre	Still Required
16	Junction Improvement – A417 – Whelford Road Junction, Fairford	Still Required
17	Junction Improvement – A428 – Cherry Tree Junction, Cirencester	Secured

Table CPS4 (b) South Cotswolds – Active Travel (Walking/Cycling) Scheme priorities up to 2031

Ref	Description	Funding Status
2	Cycle access improvements linking Cirencester to Kemble Railway Station	Still Required
3	Access improvements 'Active Travel Route' - A417 corridor between Fairford and Lechlade	Still Required
4	Cycle access improvement, reuse of old railway line between Tetbury and Kemble	Still Required
5	Cycle access improvements between South Cerney and Cirencester	Still Required
6	Cycle access improvements for Cotswold Water Park, Fairford	Still Required
7	Access improvements for Tetbury Road and London Road	Still Required
8	Cycle access improvements, Cirencester – Fairford corridor	Still Required
18	Andoversford – Cirencester Active Travel Route	Still Required



Table CPS4 (c) South Cotswolds – Public Transport (Rail) Scheme priorities up to 2031

Ref	Description	Funding Status
10	Kemble Railway Station enhancements.	Still Required

4.5.20 In addition to the above listed schemes, GCC will continue to work with Highways England to progress the A417 Missing Link, continue to lobby for rail service enhancements from Kemble to Swindon and London and look into the need for a Cirencester transport study.

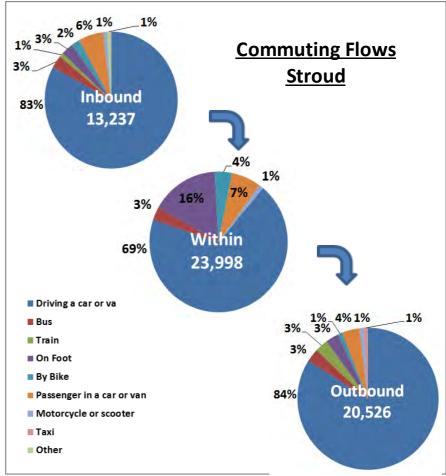


4.6. Connecting Places Strategy CPS5 – Stroud

The Place

- **4.6.1** The CPS covering Stroud is located in the south-west of the county. The area is bordered to the north by the Central Severn Vale (CSV) CPS1, to the east by the South Cots wold CPS4, to the south by South Gloucestershire Unitary Authority and to the west by the River Severn. Stroud town is a key service centre for surrounding communities, where education, health care and retail outlets are accessed. The town is a central transport hub for rail and bus travel to surrounding towns and villages.
- **4.6.2** The M5 is located almost centrally in the CPS and provides good access to the CSV to the north and Bristol to the south. There are three rail stations within CPS5 on separate lines which provide connectivity between Cheltenham/Gloucester to Bristol via Cam and Dursley and London via Stroud and Stonehouse.
- **4.6.3** Stroud District Local Plan was adopted in 2015. It is currently undergoing review and sets out the need to provide an additional 12,800 new homes and sufficient employment to meet development needs over the next 20 years. This is an additional 5,700 new homes over and above the total stated in the Local Plan when adopted.
- **4.6.4** Stroud exhibits the effects of its proximity to Bristol with high commute distances and working out of the county. Figure CPS5 (A) demonstrates journey to work data that shows more outbound (20,256) than inbound (13,287) commuting trips. The effects on community cohesiveness and levels of traffic rat running need to be factored into managing transport demand in this area. The benefits of sustainable connectivity to the economic growth in and around Bristol as well as towards Swindon should be maximized.

Figure CPS5 (A): Commuting Flows – Stroud (Census 2011)





- **4.6.5** Figure CPS5 (B) shows that approximately 41.5% of travel to work journeys start and end in the strategy area, 35.5% travel to other parts of the county and 22.9% travel into the CPS area. The trips are primarily car-dominant with 83% of the inbound/outbound trips occurring by private motorcar.
- **4.6.6** 9% of journey to work trips are made by bus on the A419 corridor, this is the highest concentration of work related bus travel in the county. Conversely, away from this corridor, public transport use is very limited due to the sparsely populated rural communities with just a 3% mode share. Evening bus service access to Cheltenham and Gloucester is also limited.
- 4.6.7 There is strong ambition to increase cycle use among local communities along with the promotion of leisure cycle routes for tourists. Stroud district has good scope to identify and create new foot/cycle routes to key locations and services. These 'Active Travel Routes' have the potential to encourage modal shift to sustainable means of travel, as well as promote health and wellbeing. On review of journey-to-work data, cycle usage for all trips (inbound, outbound, and contained) averaged at 3% of total mode share, which is slightly below the county average of 5.3% but above the national average of 2.8%. The Stroud Valleys, particularly along the canal network, and Cam and Dursley have potential to provide high quality cycle infrastructure that will link to the strategic cycle desire line as shown on the Countywide Strategic Cycleway Network desire lines (Figure PD2 (C)) in order to encourage greater mode share.
- **4.6.8** Community transport or DRT may benefit rural settlements such as Stroud's numerous market towns in the CPS where commercial public transport services are not economically viable. Such provision gives opportunity for more flexible and accessible community-led travel solutions that can be specifically tailored to local needs. These solutions can connect direct to service centres or link to existing high frequency bus services at local interchange hubs. If the potential can be maximized in the CPS (and county as a whole) community

transport has good scope for providing social and economic benefits and combating social and spatialisolation. Community transport is available for all, although on some services a membership is required.

Figure CPS5 (B): Stroud Commuting Breakdown (Census 2011)



Commuting totals for Stroud:

- . Inflow: 13,287 all persons commute into Stroud from other local authorities in the UK
- . Outflow: 20,526 all persons commute out of Stroud to other local authorities in the UK or abroad.
- . Net change: Overall, commuting results in a population decrease of 7,239 all persons in Stroud.

¹¹² LTP Summary Evidence Base



Issues and Opportunities

4.6.9 The M5 motorway junctions in the CPS are subject to significant demand which results in congestion, delay and at times safety concerns as a result of mainline queuing. M5 Junction 14, although in South Gloucestershire, exceeds capacity at peak periods and is likely to be subject to additional pressures as a result of strategic housing and employment allocation sites in Gloucestershire and South Gloucestershire. This will also impact the local highway network within CPS5 and as such GCC will seek to engage with discussions regarding planned and co-ordinated improvements to Junction 14 with key stakeholders and neighbouring authorities.

4.6.10 Future development should prioritise sustainable interventions where possible. This can be achieved, by providing access to bus and rail service interchanges and by providing suitable dedicated pedestrian and cycle infrastructure.

4.6.11 There are ambitions to improve rail access and service frequency through the Greater Bristol MetroWest project¹¹³ which, during phase 2, it could see a service extension to Gloucestervia Cam and Dursley. Although passenger numbers are modest, there has been year on year increases in patronage, with the exception of the year 2017/18 which saw a decline in passenger numbers to 189,000 (-12,000 on the previous year) according to the Office of Road and Rail¹¹⁴. However, it is believed that this isolated reduction was due to engineering works occurring in the Greater Bristol area. Cam and Dursley station can therefore become a key focal point for sustainable travel for the central/southernareas of the CPS area allowing residents access to regional

economic growth areas and the employment opportunities in the South West. Cam & Dursley station has the potential to accommodate additional MetroWest rail services which would provide a half hourly service to Bristol and potentially onwards to Gloucester which is an improvement on the current hourly service which is often very busy at peak times.

4.6.12 Canals and their towpaths, are a special feature of the Stroud Valleys. The restoration of the Cotswold Canalshas the potential to provide for leisure and commuter cycle routes as do the use of disused railway lines. Stroudwater Navigation has received heritage lottery funding for detailed design work to provide a four mile section of canal to Saul Junction which will provide access to and from the Gloucester and Sharpness canal. Highways England has provided an additional £4million to fund the 'Missing Mile' which was lost during the construction of the M5. A second stage bid for heritage lottery funding is to be submitted to seek funds to implement the restoration.

4.6.13 The settlements of Wotton-under-Edge and Kingswood are located towards the south of the CPS and struggle with accessibility to public transport and services There is a cross border initiative to provide an 'Active Travel Route' or greenway linking the two settlements to Charfield and a potential new station with MetroWest connectivity to Gloucester and Bristol. This will provide an attractive and sustainable alternative to single occupancy car journeys. The identified routes allow for good scope to increase cycle mode share for both employment and leisure trips as well as trips for schooling, health and retail purposes. This may have the potential to alter the dynamic of travel in the south of the CPS5 area and in combination with the potential reopening of Charfield station will allow further opportunity for viable sustainable travel and boost the local economy. Currently there are few or no viable sustainable travel options from this area of CPS5 that saves journey times over the private car.

https://dataportal.orr.gov.uk/statistics/usage/estimates-of-station-usage/-select Cam & Dursley



¹¹³ MetroWest https://travelwest.info/projects/metrowest

Office of Rail and Road estimates of station usage -

- **4.6.14** CPS5's topography varies greatly from flat low lying areas to steep sided valleys and escapement that leads to common land. This creates a wide range of highway and transportation issues for resident accessibility to environmental and biodiversity constraints. Market Towns such as Minchinhampton are susceptible to such issues which are compounded by a strong tourist presence as well as local growth that increases traffic demands. The area is popular with walkers, those travelling by bike and horse riders, but is often seen a rat-run for road based traffic. This creates conflicts between users and wildlife. There is also a lack of parking provision to accommodate tourists which causes harm to the environment by vehicles parking inappropriately. These issues are identified in the Minchinhampton Neighbourhood Development Plan. 1115
- **4.6.15** LCWIP will worktowards the identification of local cycling and walking networks, over time these will come to form a strategy for walking and cycling. This information will become available at www.gloucestershire.gov.uk/lcwip.

Strategic Vision

4.6.16 The strategic vision for the Stroud CPS area, is to maximise the potential of the rail stations in the district to provide opportunities for sustainable travel to key urban areas within the county and on a regional and national level. GCC will engage with appropriate stakeholders to increase service frequency and rolling stock capacity, particularly on the Birmingham – Bristol mainline. MetroWest provides a strong opportunity to provide a half hourly service to Bristol and potentially Gloucester and engagement will be made to ensure this opportunity is maximised.

- **4.6.17** GCC will work with key stakeholders and Highways England in order to resolve potential capacity and safety constraints at Junction 12 and Junction 13 of the M5 thus enabling growth in the CPS. GCC will also engage cross boundary discussion to ensure Junction 14 of the M5 is sufficiently improved to accommodate growth in Gloucestershire and South Gloucestershire.
- **4.6.18** In combination with the improvements to the SRN junctions, GCC's visionis to provide interchange hubs in order to capture inbound traffic direct from the SRN. In addition, improvements to the cycling network in the CPS, particularly maximising the potential of the canal tow paths and existing cycle routes, will provide infrastructure for sustainable onward travel reducing the demand upon the network from single occupancy vehicles.
- **4.6.19** A large proportion of CPS5 is rural; the strategic vision, by aligning with the Stroud District Local Plans patial vision, will aim to ensure that rural residents are not disadvantaged by this, particularly those in rural villages and market towns. DRT can be a solution to improving transport choice. If delivered in combination with the development of rural interchange hubs the DRT will provide residents access to key services or with a link to core public transport services that accesses larger service towns. The interchanges themselves will encourage multi-modal travel with facilities to support walking and cycling to and from them for residents that live in closer proximity. Active Travel routes, particularly utilising dis-used railways, will be provided within the rural areas. This in combination with the rise in popularity of e-bikes can provide active and sustainable longer distance cycle trips linking rural settlements to service centres.
- **4.6.20** GCC will aim to address issues of increased tourist demand and ratrunning issues in the common areas to reduce conflicts between users and to minimise environmental impacts. Figure CPS5 (C) illustrates scheme ambitions to 2031 for the Stroud CPS areas.

https://www.minchinhampton-pc.gov.uk/uploads/minchinhampton-ndp-sdc.pdf

Figure CPS5 (C): Stroud CPS5 area scheme Map reflecting schemes up to 2031

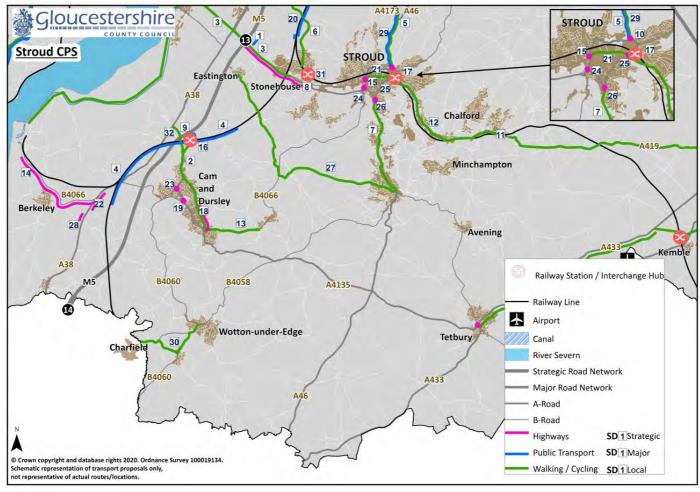




Table CPS5 (a) Stroud – Highway Scheme priorities up to 2031

Ref	Description	Funding Status
8	Highway capacity improvements for A419 Corridor, Stonehouse	Secured
10	Highway Improvement – Merrywalk	Still Required
14	B4066 corridor improvements, Berkeley	Still Required
15	Access improvements for Cainscross roundabout, Stroud	Still Required
18	Highway improvements Dursley Relief Road	Still Required
19	Junction improvement - A4135 / B4066 Dursley Road roundabout, Dursley	Still Required
22	Junction improvements - A38 / B4066	Still Required
23	Junction improvement - A4135 / B4060, Woodfield roundabout, Dursley	Still Required
24	Junction improvement - A419 / A46 Dudbridge Road roundabout, Stroud	Still Required
25	Junction improvement - A419 / Dr Newton's Way, Stroud	Still Required
26	Junction improvement A46 / Bath Road (Dudbridge Road)	Still Required
28	Junction improvement - A38 / Alkington Lane	Still Required

Table CPS5 (b) Stroud – Active Travel (Walking/Cycling) Scheme priorities up to 2031

Ref	Description	Funding Status
2	Access improvements for Cam & Dursley 'Active Travel Route' to Railway Station.	Still Required
3	Stroudwater Navigation to Gloucester & Sharpness Canal – Active Travel route	Secured
6	Access improvements 'Active Travel Route' – B4008 between Little Haresfield (M5 J12) and Stonehouse corridor	Still Required
7	Cycle access improvements to National Cycle Network, Route 45 Stroud	Still Required
11	Cycle access improvements Chalford and Cirencester	Still Required
12	Cycle access improvements Stroud and Chalford	Still Required



13	Cycle access improvements for Cam and Dursley 'Active Travel Route' to Uley Still Requir			
21	1 Access improvements for Stroud Town Centre Still Required			
27	Cycle access improvements between Eastington and Nailsworth Still Required			
29	29 Cycle access improvements to Stroud Road, Gloucester - Stroud Corridor Still Required			
30	Creation of an Active Travel Route between Wotton-Under-Edge, Charfield Still Required			
32	Walking and cycle access improvements, A4135 Box Road – A38 corridor Still Required			

Table CPS5 (c) Stroud - Public Transport (Bus) Scheme priorities up to 2031

Ref	Description	Funding Status	
1	Strategic Park & Interchange hub scheme for M5 J13 / A419	Still Required	
5	Bus stop and bus advantage improvements for Stroud – Gloucester Corridor St		
9	Park and Interchange hub at Cam and Dursley Railway Station Still Required		

Table CPS5 (d) Stroud - Public Transport (Rail) Scheme priorities up to 2031

Ref	Description	Funding Status	
4	Rail junction and capacity improvements (Dynamic Loops) to rail lines between Cam & Dursley and Charfield	Still Required	
16	Cam & Dursley Railway Station enhancements Still Required		
17	Stroud Railway Station enhancements Still Required		
20	A new railway station(s) south of Gloucester, north of Bristol Still Required		
31	Stonehouse Railway Station improvements	Still Required	



4.6.21 In addition to the above listed schemes, GCC will:

- Work with West of England Partnership to develop a business case for the MetroWest Rail extension Phase 2
- Seek improved service linking Gloucester, Cam and Dursley with Bristol (MetroWest)
- Seek rail service enhancement from Kemble to Swindon and London
- Working with Highways England to resolve capacity issues at M5 Junction 12 and 13
- Collaborative working with South Gloucestershire, Highways England and stakeholders to resolve M5 Junction 14 capacity issues
- Support the Stroud Local Plan Review



Connecting Places Strategy CPS6 - Tewkesbury

The Place

- **4.7.1** CPS6 is located in the north of the county and focused on the A438 / A46/ M5 travel corridor. The CPS area is bounded by Worcestershire to the north, the urban Central Severn Vale to the south and the rural CPS areas of the Forest of Dean to the west and North Cotswolds to the east.
- **4.7.2** Tewkesbury Borough accommodates approximately 14% of Gloucestershire's population with 85,800 residents within the 160 square mile area. It recorded the highest population increase outside of London in 2018. 116 Although the Tewkesbury Borough administrative area is large, CPS6 narrows the focus upon Tewkesbury Town, the M5 J9 and A46 corridor to the east, the A38 corridor to the north and south, and finally the rural area towards Winchcombe. 5% of the total population of Gloucestershire resides within the Tewkesbury Town area which is the largest urban settlement in the CPS area according to Census data. 3% of the total population of Gloucestershire resides along the A38 corridor with Winchcombe, the largest of the more rural settlements in CPS6, accounting for approximately 1% of Gloucestershire's total population.
- **4.7.3** The adopted JCS outlines the spatial strategy for Gloucester, Cheltenham and Tewkesbury consisting of 35,175 new homes and 39,500 new jobs over 192ha of allocated employment land. The JCS is subject to immediate review so these figures may increase.
- 4.7.4 The strategy is to be delivered by development within existing urban areas through district plans, existing commitments, and urban extensions. The MOD site at Ashchurch was earmarked for approximately 2,500 dwellings in the JCS, however after an MOD review the site was retained for another 10 years.

This resulted in a significant housing shortfall. This shortfall is to be addressed as part of the JCS review as well as a Tewkesbury Borough Council led proposal for approximately 10,000 houses and significant levels of employment in the wider Ashchurch area which has achieved Garden Town status. 117

- **4.7.5** The Tewkesbury Local Plan, currently undergoing review with an expected adoption date of summer 2021, will meet the local need in Tewkesbury town in accordance with its role as a market town, and at rural service centres and service villages within the Borough.
- Key highway routes converge on the A46/A438 corridor providing 4.7.6 access to the M5 at junction 9. The A46 is an important strategic link providing access between the M5 and M69 near Coventry. The M5 provides good North/South links for internal and external trips meaning people are well placed for travelling between Cheltenham and Gloucester, Worcester, Birmingham and Bristol ensuring connectivity throughout Gloucestershire and the UK. Businesses, their supply chains, workers and consumers collectively depend upon a good quality highway network to move goods, deliver services and travel to work and other service facilities, which makes the M5 corridor area of the CPS attractive employment land and a magnet for growth. The Creation of a Growth Zone as promoted in the Strategic Economic Plan by the GFirst LEP ensures the availability of quality employment land in proximity to the M5 motorway. Travel to work data indicates that approximately 85% of trips are to destinations outside of the CPS area towards Cheltenham, Gloucester, Worcester and the West Midlands.
- **4.7.7** There are a number cycle routes in and around the Tewkesbury area such as the Newtown cycleway which is one of the most well used routes in Gloucestershire. 9% of contained trips are undertaken by bicycle, which is the

https://jointcorestrategy.inconsult.uk/consult.ti/consult_draft_jcs/viewCompoundDoc?docid=4116692&partid=4119732

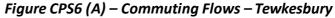


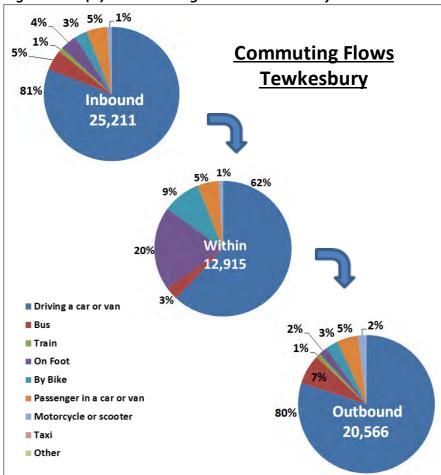
 $[\]frac{116}{\text{https://www.ons.gov.uk/people population}} \frac{116}{\text{https://www.ons.gov.uk/people population}} \frac{116}{\text{https:/$

¹¹⁷ Ashchurch Garden Town

second highest of all CPS areas, however there are few utility routes across the wider area and the M5 Motorway and railway line cause severance.

- **4.7.8** CPS6 Tewkes bury borough exhibits the effects of its proximity to the SRN with high commute distances and working out of the county. Figure CPS6 (A) demonstrates journey to work data that shows more inbound (25,211) than outbound (20,566) commuting trips. The effects of this are vehicle delay and congestion within the A438 /A46 corridor and around M5 Junction 9, including queuing on the M5.
- **4.7.9** The local consequence of such delays is traffic reassigning along less suitable country highways. Bozard Lane, connecting the A435 to the A38/A4019, and Fiddington Lane, connecting the A46 with the A38/A4019 are impacted by such reassignment.







Issues and Opportunities

4.7.10 M5 Junction 9 and the A46 corridor suffers from congestion in peak hours and is recognised as a pinch point by Highways England and GCC. In its current form, the M5 junction 9 / A46 will become a blocker to future growth, particularly to the Ashchurch Garden Town proposals. There are also notable development proposals across the county boundary to the north in Evesham. These will have an impact on transport demand across CPS6 and infrastructure improvements are needed in order to meet growth proposals.

4.7.11 The A46 corridor has been subject to much study and debate by Highways England, Midlands Connect, GCC, GFirst LEP and Tewkesbury Borough Council, which has resulted in the formation of The A46 Partnership ¹¹⁸ with the aim to seek Government support for the upgrading of critical points along the extent of the A46 corridor.

4.7.12 The M5 Junction 9 and A46 corridor has been recognised as one of Gloucestershire's primary highway infrastructure priorities by the Western Gateway SNTB which will lobby government for Large Local Majors funding. If successful, this would give the A46 corridor much needed relief from congestion as well as improve network resilience. The realignment of the A46 will also improve safety and accessibility to the Trans Midland Trade Corridor, of which the A46 forms a key part of in the Midlands area, contributing significantly to the UK economy. The corridor supports a range of high tech manufacturing, warehousing, distribution, logistics, and a gri-tech industries as well as 40% of the aviation sector. ¹¹⁹ The realignment will significantly improve the delivery of

goods and services and provide a cross country port to port connection between Bristol and Humberside which has potential to encourage inward investment into the CPS6 area.

4.7.13 The M5/A46 creates severance for those living and travelling between historic Tewkesbury and Ashchurch with an intimidating environment for people walking and cycling, resulting in divided communities and social isolation. Improvements to the M5 Junction 9/A46 provides the opportunity of removing these physical barriers and using the existing A46 alignment as an enhanced multi-modal corridor.

4.7.14 Hourly bus services provide access between Gloucester, Cheltenham and Winchcombe with better than half hourly frequencies within the town itself. Rail access is provided at Ashchurch for Tewkesburyrail station, located on the Bristol-Birmingham main line. The frequency of rail services is poor when compared with the rest of the county, although the significant growth proposals in the area may enable additional services from Ashchurch in the future.

4.7.15 The proposed Garden Town development, presents an opportunity to focus on Ashchurch for Tewkes bury rail station and the creation of a multi-modal transport interchange. This Greenfield proposal will allow for sustainable linkages to be provided to the interchange as well as improve existing links to historic Tewkes bury and reconnect it with Ashchurch which experiences severance as a result of the mainline railway and M5.

4.7.16 The creation of a multi-modal hub, also allows opportunity for wider cycling infrastructure improvements, particularly along the A438/A46 corridors in order to create links between Tewkesbury, Bishop's Cleeve and Cheltenham, which are within reasonable cycling distances. This is important as this would meet the County Council's strategic cycleway desire line as shown in **Figure PD2 (C)** – County Strategic Cycleway Network (desire lines).

 $\underline{Midlands\%20Trade\%20Corridor\%20Proposal\%20for\%20an\%20Economic\%20Developme.p} \underline{df}$



A46 Partnership https://www.gloucestershire.gov.uk/council-and-democracy/joint-ventures/a46-partnership/

¹¹⁹ The Trans-Midland Trade Corridor, Proposal for an Economic Development Strategy - https://moderngov.oadby-wigston.gov.uk/documents/s20347/Appendix%201%20-%20Midlands%20Connect%20The%20Trans-

4.7.17 LCWIP will worktowards the identification of local cycling and walking networks, over time these will come to form a strategy for walking and cycling. This information will become available at www.gloucestershire.gov.uk/lcwip.

Strategic Vision

- **4.7.18** CPS6's strategic Vision is to resolve the severe capacity and congestion constraints along the A46 corridor and improve the safety of M5 Junction 9 by eliminating mainline queuing. This willcreate an express way for through traffic to the M5 leaving the existing A46 alignment for local traffic and multi modal enhancements. These improvements will allow access to external economic growth areas and attract inward growth to create social prosperity. The improvements will also support the delivery of the Garden Town proposal which will help to meet Gloucestershire's housing supply targets as well as overcome severance issues to reconnect the communities of Tewkesbury and Ashchurch. Note scheme ref 1, as shown on Figure CPS6 (B), is an indicative alignment and subject to change.
- **4.7.19** Tewkesbury for Ashchurch rail station will feature as an important focal point in CPS6's strategic vision with the creation of a multi-modal hub and increased service frequencies to regional and national destinations. GCC will work in collaboration with Midlands Connect in order to lobby for these service improvements.

- **4.7.20** CPS6 has a key cycle vision to connect Tewkes bury to Bishop's Cleeve within the plan period to provide a sustainable link as identified on the Countywide Strategic Cycleway Network desire lines (Figure PD2 (C)). Over the plan period this will provide a strategic cycleway between Tewkesbury and Stroud, linking all key growth areas in order to provide for sustainable car free movements. Cross-border cycle improvements will also be considered in order to provide an active travel link to Upton-upon-Severnwhere it will link with South Worcestershire developing cycle and active travel network.
- **4.7.21** Given CPS6's proximity to the County border, GCC will actively engage with neighbouring authorities and statutory bodies to ensure issues such as water management, cross-boundary schemes and planning proposals either side of the border provide benefit to the area and not prejudice residents that may be impacted by them. This will enable sustainable and efficient delivery of growth to CPS6 and neighbouring areas. Figure CPS6 (B) illustrates scheme ambitions to 2031 for the Tewkesbury CPS area.



Figure CPS6 (B): Tewkesbury CPS6 area scheme Map reflecting schemes up to 2031

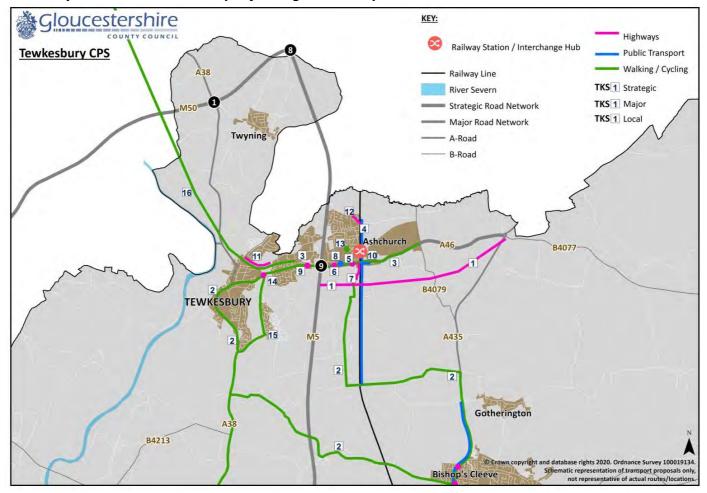




Table CPS6 (a) Tewkesbury – Highway Scheme priorities up to 2031

Ref	Description	Funding Status
1	New Offline A46 and M5 J9 improvements	Still Required
5	Junction Improvements - Northway Lane / A46	Still Required
6	Junction Improvements - Alexandra Way / A46 Still Requ	
7	Junction Improvements - Fiddington Lane / A46	Still Required
9	Junction Improvement to the - Shannon Way / A438 traffic signal junction Indicative Offer M	
11	Highway improvement - Tewkesbury Northern Relief Road Still Required	
12	Closure of Grange Rd/Aston Fields Railway level crossing Still Requir	
14	A438 / A38 Tewkesbury bypass signal upgrade	Still Required

Table CPS6 (b) Tewkesbury – Active Travel (Walking/Cycling) Scheme priorities up to 2031

Ref	Description	Funding Status		
2	Tewkes bury to Bishop's Cleeve 'Active Travel' / Cycle Route	Still Required		
3	Cycle / Walking access improvements for As hchurch Road Corridor including M5 J9 to link Tewkes bury Still Required			
13	Pedestrian and cycle access improvements using disused railway bridge over Northway Lane, Ashchurch Still Required			
15	Cycle access improvements to the Walton Cardiff, Newtown, Ashchurch corridor Still Required			
16	Tewkes bury to Upton upon Severn Active Travel route	Still Required		



Table CPS6 (c) Tewkesbury - Public Transport (Bus) Scheme priorities up to 2031

Ref	Description	Funding Status
8	Strategic Park and Interchange hub for Tewkesbury/Ashchurch near M5 J9	Still Required

Table CPS6 (d) Tewkesbury - Public Transport (Rail) Scheme priorities up to 2031

ĺ	Ref	Description	Funding Status
ĺ	4	Rail junction and capacity improvements (Dynamic Loops) to Birmingham - Bristol Mainline near Ashchurch	Still Required
	10	Ashchurch for Tewkesbury Station improvements	Still Required

4.7.22 In addition to the above listed schemes, GCC will:

- Seek an hourly service at Ashchurch for Tewkesbury, linked to the proposed development at Ashchurch
- Continue the A46 Partnership
- Progress the Pre-SOBC and SOBC for M5 J9 and A46 scheme and M5 J9 and A46 scheme OBC preparation for December 2021
- Support the JCS transport strategy working group for the JCS Review
- Continue Tewkesbury Garden Town officer input
- Continue Ashchurch railway bridge HIF bid officer input



4.7. Transport Scenarios, looking to 2041

- **4.8.1** By 2041, significant investment in Gloucestershire's public transport and active travel infrastructure will be complemented by technological and business model innovations. In combination, these changes will have the potential to support sustainable economic growth by improving Gloucestershire's connectivity through enabling a more efficient use of existing infrastructure and a better integration of all transport modes. Transport will contribute to making Gloucestershire an attractive place to live work and visit for all age groups through the provision of high quality mobility services without the need to own a private car, providing green infrastructure and access to the natural resources Gloucestershire has to offer.
- **4.8.2** Community connectivity is enhanced through the provision of easy access to mobility services in rural as well as urban environments, integrating demand responsive transport offers with mass public transport. This is complemented by the availability of a broadened transport mode mix, with the emergence of electric bikes and low-carbon alternatives (micro-mobility vehicles).
- **4.8.3** A significant investment in infrastructure for active travel will improve community health and wellbeing and increase the overall attractiveness of the County. The resulting significant mode shift towards public and active travel options, combined with cleaner vehicle technology will allow Gloucestershire to achieve its CO₂ reduction targets and conserve the environment.
- **4.8.4** To deliver this vision of transport looking to 2041, cooperation with all delivery partners as well as the private sector is central. GCC will therefore work with the LEP, transport operators and the districts to discuss ways to implement the necessary steps to prepare Gloucestershire for the mobility challenges that lie ahead. Key actions Gloucestershire can already take include:

- Encouraging the sharing and harnessing of data through the creation of standards and platforms that make it easier to access and use transport data, for example at transport hubs; via Thinktravel and smart parking apps, App-based taxi/private hire e.g. Uber, App-based journey planning & real time information e.g. City Mapper, App-based demand responsive bus services.
- Prepare for smart / connected infrastructure / asset management / traffic control systems.
- Continue to support Mobility as a Service.
- Fostering experimentation and trialling especially within the new City Region but also in terms of innovative approaches to rural travel and access needs.
- Identifying where investment will help business benefit from mode shift and increased transport mode capacity.
- Preparing the urban environment by supporting the development of public and urban space which offers mode choice and enables the innovations in transport to be fully delivered.
- Support full public dialogue to explore and build on the new attitudes to and experiences of transport in the county.
- **4.8.5** Gloucesters hire will have to adapt to the profound changes to the movement of people, goods and services outlined in previous chapters. This means investing in our strategic road and rail network to ensure Gloucesters hire continues to strengthen its connectivity to major growth centres in Birmingham, Bristol, Cardiff and London.
- **4.8.6** On a local level, a growth vision for Gloucestershire that goes beyond the currently published Local Plans is being developed by the District Councils, in cooperation with GCC, the LEP and other partners. This chapter will bring together what we understand about future transport trends and innovations with strategic transport considerations based on a number of potential future



spatial development scenarios that go beyond the currently adopted local plan periods.

- **4.8.7** A lot is still unknown about the transport needs that will emerge out of the developing growth vision beyond the current Local Plan periods. However, we hope that by visualising the strategic direction growth in Gloucestershire may take, and by setting out our transport ambitions for these scenarios, we can shape a conversation with communities and businesses in Gloucestershire that will ensure actual positive change.
- **4.8.8** We have already seen the benefits of this approach through the Gloucestershire 2050 conversation, instigated by the University of Gloucestershire, and our growth scenarios are loosely based on the City Region Board established by Leadership Gloucestershire to progress the ideas developed in the Gloucestershire 2050 vision.

Our Vision for Growth in Central Gloucestershire

- **4.8.9** Our vision for growth in central Gloucestershire comprises the Cheltenham and Gloucester conurbations. It is here that the mobility innovations discussed throughout this document are likely to be the most evident. The 2050 vision proposed that, together, Cheltenham and Gloucester and the surrounding areas will grow into a 'City Region' that will co-ordinate growth and development, while ensuring that both urban centres retain their distinct character.
- **4.8.10** With the JCS now being reviewed, it is likely that this area will see additional allocations of housing and employment land beyond what is currently allocated.

- **4.8.11** In our vision, the significant growth centres need to be in sustainable locations, with good public transport, walking and cycle links to existing urban centres. The urban centres of Cheltenham and Gloucester will see significant investment in walking and cycling infrastructure, road space allocations to sustainable transport and with key corridors served by high frequency, high quality public transport. This will enable integrated business growth opportunities and high quality and affordable new homes while reducing the negative impact of transport such as on air quality, thus allowing both urban centres to fully capitalise on their high quality streetscapes and attractive settings.
- **4.8.12** The City Region will be the County's magnet for young people who will find it easily accessible through a seamlessly integrated, multi modal transport offer and without the need for private car ownership. Young people will not only be drawn to the region by Gloucestershire's higher education offer and high quality employment opportunities, they will also be attracted by the high standards of the green transport infrastructure providing ready access to sustainable green spaces and first-class leisure and cultural opportunities.
- **4.8.13** The City Region already hosts a major digital, technology and aeros pace cluster. A further corner stone and driver of economic growth will be the Cyber Central UK in West Cheltenham. With the delivery of proposed 45 hectares of employment land, focussed on cyber industries the region will generate new high skilled jobs, initiated by the new GCHQ Cyber Innovation Centre. The Cyber Central UK project will continue to grow into a cyber hub of national and international importance attracting more business in the cyber and security sector to Gloucestershire.

https://www.cheltenham.gov.uk/info/12/planning and_development/1561/cyber_central garden community



¹²⁰ Cyber Central UK in West Cheltenham -

4.8.14 Transport infrastructure will have a key role in enabling delivery of this vision for cyber as well as the significant wider business and housing growth. This does not only mean the provision of a functioning, high quality and reliable transport network to provide mobility within this new City Region, but also high quality and fast access to key destinations in the City Region and beyond. Mass transit systems will play their part; systems such as; light rail, high frequency bus routes and guided busways. Mass transit systems will be subject to further studies. In addition, there are opportunities to be realised for the local economy to benefit from and to shape the technological and structural changes in transport set out above.

Strategic Transport Priorities

- **4.8.15** The existing highway networks uffers from high levels of congestion, leading to low network resilience and poor journey time reliability, the transport interventions needed to enable growth beyond that currently set out in the Local Plans will have to maximise the efficient use of existing infrastructure and bring forward significant change in the way people and goods move within the City Region. Illustrated schematically in Figure STP (A) and listed in Table STP (a).
- **4.8.16** This movement will be accommodated through the significant investment planned for the Strategic Road Network in the region which will allow the M5 to continue to provide fast road transport connections to Birmingham, Bristol and beyond, easily accessible in both directions from junctions 10, 11 and 11a. The essential Missing Link scheme will contribute greatly to faster, safer and more reliable journeys on the A417, supporting Gloucestershire's economic prosperity by providing a fully duelled link between the M5 and the M4.

- **4.8.17** Efficiency on the road network will be maximised through intelligent transport systems and connected vehicles that will provide real time journey, key event and weather information that will inform and empower drivers to make better journey decisions. The majority of all vehicles will be electric, supported by a network of electric vehicle charging points.
- However, the continued functioning of the M5 as a reliable and fast 4.8.18 link providing regional connectivity can only be ensured with a transport strategy that will also see a significant shift in demand from the M5 to the Birmingham to Bristol rail link that runs in parallel to the M5. The same is true for the City Region's east west connectivity provided by the A40 which is also paralleled by a rail line. The current trend of increasing passenger numbers travelling by rail will continue, 121 with officers lobbying for a 20min service on the Bristol to Birmingham line stopping at Ashchurch, Cheltenham, Gloucester and Cam & Dursley, as well as a 20 min services from Cheltenham/Gloucester to Cardiff (Stopping at Lydney). This will only be possible, if supported by substantial investment in rail infrastructure including the two passing loops listed in the LTP schemes list and substantial line speed and signals improvements. The passing loops are lengths of tracks everal times longer than the train and allow faster services to pass local stopping or freight services to ensure punctuality and additional capacity on the line. Gloucester Station will also see signal upgrades and capacity constrains at Cheltenham Station will need to be addressed by upgrading the existing station or considering a new station between Cheltenham and Gloucester.

 $^{^{121}}$ 61% Increase in passenger numbers between the years 07/08 and 17/18. (Office of Road and Rail)

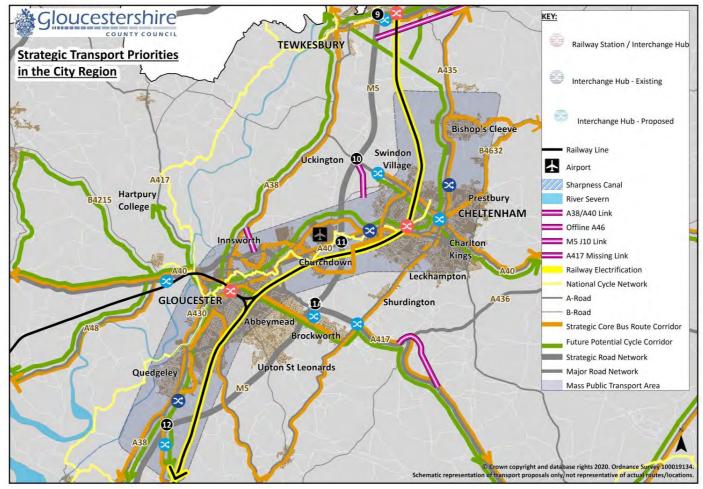


- **4.8.19** With rail services providing regional and inter urban connectivity, a step change in public transport provision within the City Region will be delivered through the introduction of a mass public transport solution on the core strategic link in the city region linking Bishop's Cleeve north of Cheltenham to Quedgeley in the south of Gloucester. Further work is required to establish the feasibility and cost efficiency of a number of solutions that could delivery this core public transport corridor, including a rapid transit bus system with automated shuttle services. It is however key, that this public transport core route links the two urban centres in the City Region, their train stations, with other key interchange hubs and high trip generating destinations, such as Hospitals and key employment sites.
- **4.8.20** Local bus services will be further strengthened through significant investment in bus priority measures, a high quality vehicle fleet and improved accessibility through mobile phone apps providing real time information and integrated ticketing solutions. Strategic interchange hubs at all M5 motorway junctions, all railway stations and some other key locations will link the core public transport corridor and these high frequency, high quality bus services to long distance travel opportunities. Freight deliveries will also be taken to distribution centres located next to the motorway junctions and then transferred onto low emission vehicles for local delivery.
- **4.8.21** Demand responsive transport providers, both private companies and community transport type services provided by the voluntary and charity sector, will complement local bus services. All interchange hubs, strategic and local, will provide seamless interchange with mass public transport, demand responsive transport options, and active modes of transport.

4.8.22 High quality, prioritised cycle routes for mass cycle use on the strategic cycle desire lines will feed into the urban centres of Cheltenham and Gloucester and integrate with the public transport provision. This strategic cycle network will be supported by a high quality local walking and cycle network, continuously updated and improved in line with guidance given through the Local Cycle and Walking Infrastructure Planning process. Over time the strategic cycle network will link to Tewkesbury and Bishop's Cleeve in the north and Quedgeley/Sharpness and Stonehouse/Stroud in the south.



Figure STP (A) - Strategic Transport Priorities in the Cheltenham and Gloucester City Region





Our Vision for Tewkesbury and Ashchurch

4.8.23 Significant growth ambition exists for the north of Gloucestershire, in the Tewkesbury and Ashchurch area. In addition to the already allocated development sites in the JCS, Tewkesbury Borough Council has successfully bid for Garden Town status for the Tewkesbury Ashchurch Garden Community which will receive an initial £750,000 to support the fast-tracking of required specialist survey and planning work necessary for the development. This Garden Town community would see up to 10,195 houses for Tewkesbury at Ashchurch and between 11,000-16,000 new jobs depending on employment densities over the period to 2041.

4.8.24 This vision for the Tewkesbury and Ashchurch growth area, is one of sustainable growth of two distinct, but integrated centres in Tewkesbury town centre and around Ashchurch station. The Tewkesbury Area Draft Concept Masterplan sees Tewkesbury Town Centre maintaining its role as the main historic centre, while the Ashchurch Local Centre provides a gateway to Tewkesbury, while keeping its own distinct identity as the new contemporary core of the emerging community. The Ashchurch Local Centre will be located around an improved local railway station and the area around St. Nichol as Church.

4.8.25 This vision will enable the Tewkesbury and Ashchurch growth area to build on its already high number of cycle trips to create a community that uses active modes of transport for the majority of local trips making best use of existing infrastructure and natural assets.

4.8.26 The outstanding historical and natural setting, stunning views and easy access to three Areas of Outstanding Natural Beauty (AONB) and the proximity to local universities, will attract highly skilled graduates and professionals who will find fast regional connectivity and local high quality employment opportunities. The associated employment land will allow local business to grow and will attract

new businesses in the energy, engineering, cyber security and information technology related sectors.

Strategic Transport Priorities

4.8.27 The Tewkesbury and Ashchurch growth area clearly looks to Birmingham and the West Midlands in the north and Gloucester and Cheltenham in the south. These strategic road and rail connections will have to be strengthened if the proposed growth ambitions are to be accommodated. An upgrade of junction 9 on the M5 and a new offline dual carriage way for the A46 is an LTP scheme to create a strategic and viable express alternative to the M5/M42 and allow the opportunity to connect with other regional economies. The A46 is a core distributor for the logistics, warehousing and manufacturing industry with 20% of all goods from these sectors in the midlands transported via the A46.



A46 corridor forms access to 2.8million jobs

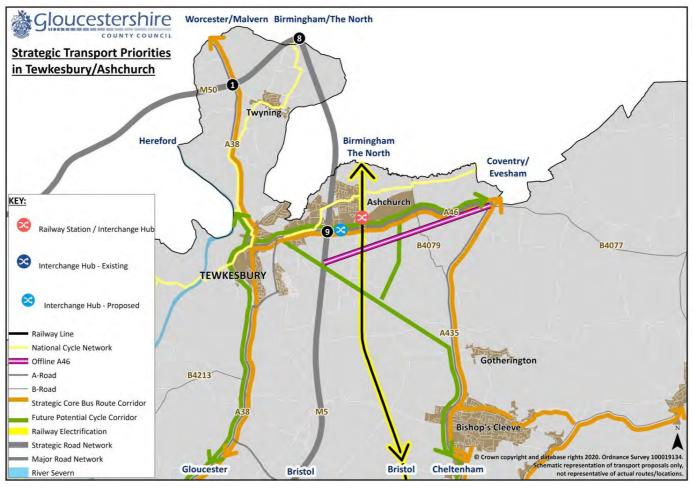


- **4.8.28** Tewkesbury/Ashchurch's local economy is centred upon those industries and will improve the efficiency of the delivery of goods and services. This would encourage inward investment and the spread of growth along the A46 corridor. The improvements will also provide convenient connectivity to the Trans Midlands Trade Corridor which forms a £115bn economic spine of the country with access to a potential 2.8m jobs. The improvements would also have national benefits with the A46 providing a cross country national route connecting the ports in Humberside to those in Avonmouth via the A46/M5.
- **4.8.29** However, as in other parts of the County, conventional highways infrastructure alone will be unable to facilitate the level of development planned for this area. At Ashchurch Station, increases to service frequencies to three trains an hour will be supported by the Ashchurch passing loop referenced in Rail policy chapter. The station itself will be made more attractive through a high quality station building and will serve as a multi modal strategic interchange hub with easy access for walking, cycling bus and rail.
- **4.8.30** Like Ashchurch Station, the town centre of Tewkesbury will also function as an interchange hub for active travel and public transport services, with a particular focus on providing mobility as a service and link to demand responsive transport options.
- **4.8.31** A dense network of local cycle routes, will feed into a high quality, prioritised cycle routes for mass cycle use on the strategic cycle desire lines between the northern growth area, Bishop's Cleeve, Cheltenham and Gloucester, with a particular focus on active travel links into Tewkesbury town centre and into the new Ashchurch Local Centre. Cycling and walking connectivity will be supported by new cycle and walking infrastructure to overcome barriers between new and existing sites, amenities, facilities and developments. Illustrated schematically in Figure STP (B) and listed in STP Table (a).

- **4.8.32** Similar to the Gloucester and Cheltenham City region, the Tewkes bury and Ashchurch growth area will be connected through a core sustainable transport corridor. The new junction 9 on the M5 and offline carriageway for the A46 have significantly reduced vehicle flows on the existing A46 alignment allowing for the creation of a high quality, convenient and safe pedestrian, cycle and mass public transport sustainable travel corridor between the two growth area centres in Tewkesbury and Ashchurch. The creation of this sustainable corridor will have wider social benefits as the severance issues that are occurring today will be overcome and the barriers that currently divide the communities will be removed.
- **4.8.33** A new strategic Interchange Hub and freight distribution centre located in close proximity of the new A46 alignment and the new M5 Junction 9, will further manage traffic levels on the local road network and directly link to core public transport corridors, made more attractive by bus priority measures, a high quality vehicle fleet and improved accessibility through mobile phone apps providing real time information and integrated ticketing solutions.



Figure STP (B) - Strategic Transport Priorities in Tewkesbury/Ashchurch





Our Vision for Rural Ambition

- **4.8.34** Gloucestershire's rural areas with their attractive landscape and strong rural communities are a key asset to the attractiveness of Gloucestershire as a whole. The transport vision for this area is one that improves connectivity to support a vibrant rural economy that compliments the vision for growth elsewhere in the County. Tourism and the visitor economy is an important sector for the rural economy and the entire County. Latest figures show that total visitor spend for the county is over£1.1 billion, employing over 26,000 people, which represents 8% of all employment. 122
- **4.8.35** While many transport challenges such as congestion pinch points, air quality and transport reliability are similar to those in urban areas, rural areas face specific challenges to provide an inclusive transport system that provides connectivity to all residents, and links not only to the urban centres near by, but also beyond the county.
- **4.8.36** However, it is not just about connectivity to bigger centres, there is significant growth potential in the rural areas thems elves, with 35% of premises in our rural areas now being connected to world leading digital connectivity with 1GB fibre to the premise. This will drive further investment including agritech, which has an enormous global potential and is already emerging through the RAU's Farm 491 Innovation and Incubation Hub.

Strategic Transport Priorities

4.8.37 Technological interventions will affect rural areas like the more urban growth areas of Gloucestershire. However, technologies advances will pose slightly different challenges to be addressed. For example, it needs to be ensured, that there is a high enough coverage of electric vehicle charging points in rural areas (see Overarching Policy chapter).

- **4.8.38** Digitalisation of information will help to address some of the issues currently faced by local communities, such as lorries using inappropriate routes or road safety, for example if information such as weight restrictions becomes available through mainstream mapping and routing software.
- **4.8.39** Through portals such as the <u>Thinktravel</u> 'Total Transport' project, demand responsive transport services will provide public transport accessibility in rural locations, however, uptake of commercially operated ride share companies may be slower than in urban areas, as the companies providing these services may see less densely populated areas as less commercially attractive.
- **4.8.40** Major growth areas, currently allocated in the relevant Local Plans are in Cirencester in the Cots wolds and Lydney and Cinderford in the Forest of Dean. Should further growth be allocated in the Forest of Dean, accessibility to and from the forest would have to be strengthened, particularly in the north-east, into the Gloucester and Cheltenham City region and south, into south Wales and over the Severn bridge, into Bristol.
- **4.8.41** In the Forest of Dean, Lydney train station will see significant enhancements and frequency increases and will have developed into a multimodal interchange hub. In combination with other modes, services now provide a viable alternative to the car, reliving two road infrastructure bottle necks, i.e., the A40 access to the Gloucester/Cheltenham City Region and the A48 at Chepstow.
- **4.8.42** High frequency bus services, supported by bus priority, will link other towns in the forest to Lydney trainstation, into the Cheltenham and Gloucester City Region and across the Border into South Wales and Bristol. The area west of the River Severn also provides scope for a transport interchange hub to improve access to the City region and relieve the current highway pinch point on entry to Gloucester.

¹²² Great Britain Tourism Survey (GBTS) 2016



- **4.8.43** Increased services from Lydney are combined with better interchange and improvements at Severn Tunnel Junction, providing fast and convenient connections from the Forest of Deanto Bristol and South Wales. Officers will also investigate the possibility of a direct rail connection from Lydney/Chepstow, through the Severn tunnel to Bristol.
- **4.8.44** Strengthening rail services in the Forest of Dean may not be sufficient to alleviate the already apparent capacity constraints on the A48 at Gloucester and more notably Chepstow. If this is the case, a new bypass in Chepstow may be needed to ensure that traffic can flow more freely, opening up the area around Chepstow in both, Gloucestershire and Monmouthshire for additional growth and allowing traffic through Chepstow town centre to be dominated by more active and sustainable modes of transport.

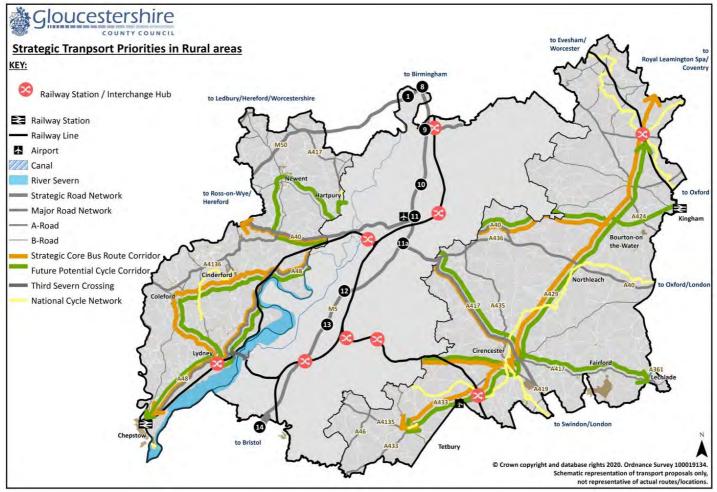
Improve connectivity @ Interchange Hubs



- 4.8.45 In the Cotswolds, Kemble station now has an hourly service to London an addition to an hourly service to London, changing at Swindon. The north Cots wolds will also have direct rail links, to London via Oxford, from Moreton-in-Marshlinking it to the UK 'Growth Arc' with its ambitions for economic growth associated with and supported by university research. The 'Growth Arc' focuses on high-tech industries, particularly manufacturing and research and is anticipated to contribute £90bn to the UK economy. Gloucestershire has a number of high-techindustries, with the Central Severn Vale leading in cyber technologies; this gives great scope to contribute and benefit from this market. The North Cots wolds is an attractive place to live, which may encourage those who work in these high end jobs to reside here. Moreton in Marsh could be regarded as Gloucestershire's gateway to the cyber hub from the north east and vice versa for the 'Growth Arc' from the west. This allows the potential for the station with its connections to London and Oxford to become a major interchange hub for sustainable travel. Rail station improvements will help encourage much needed mode change on the A429 corridor.
- **4.8.46** Strategic transport priorities for the rural areas are illustrated schematically in Figure STP (C) and listed in STP Table (a).



Figure STP (C) - Strategic Transport Priorities in Rural Areas





Our Vision for the Severn Vale

4.8.47 The Severn Vale area benefits from both; an attractive landscape, including parts of the Cots wold AONB as well as close links to both the Central Gloucestershire City Region, bigger conurbations, such as Bristol and Bath in the South, and a direct rail link to Swindon and London.

4.8.48 It has a strong economic base, with a very important manufacturing industry that generates 22% of all jobs in the area (double the regional and national average) which is the opposite to the national picture of structural decline. The Severn Vale is also home to the recently opened Berkel ey Green University Technical College (UTC) as well as the South Gloucestershire and Stroud College. The Berkeley Green UTC in particular is located on the decommissioned Berkeley nuclear power station site which has been regenerated into a Green Energy and technology park.

Strategic Transport Priorities

4.8.49 The rail network in the Severn Vale offers great potential for growth, with a 40 min rail journey into the centre of Bristol from Cam and Dursley Station (24mins) and a 1 hour 40 min train journey to London from Stonehouse, 1 hour 35 minutes from Stroud and 1 hour 20 minutes from Kemble. The latter service will nowhave an increased service frequency to London which will see an hourly direct service and an additional hourly service to London, changing in Swindon. Cam and Dursley Station would benefit greatly from the extension of the Bristol Metrowest 2 service to Gloucester, providing half hourly services to Bristol. It is our ambition that service frequencies at Cam and Dursley Station would increase to three trains per hour in the future.

4.8.50 All rail stations in the area will develop into strategic interchange hubs, ensuring easy access to major urban centres in Bristol, Swindon and London, as well as the Gloucester and Cheltenham City region. High frequency bus routes will connect these stations to larger settlements, including potential new settlements in the Sharpness area and rural parts of the district will be served through high quality, easily accessible demand responsive transport services.



Rail offers great potential for growth

4.8.51 An additional rail station or sustainable transport hub for high frequency bus travel could be provided somewhere south of Gloucester, north of Bristol to take pressure off the network which, if the station or hub was not provided, would result in residents having to travel north or south into Stonehouse or Gloucester respectively for sustainable onwards travel. Residents in the south of the area may benefit from additional stations outside of the county boundary for travel to Bristol and the South. The creation of sustainable and/or active travel links can support green movement to those facilities if they were to come forward.

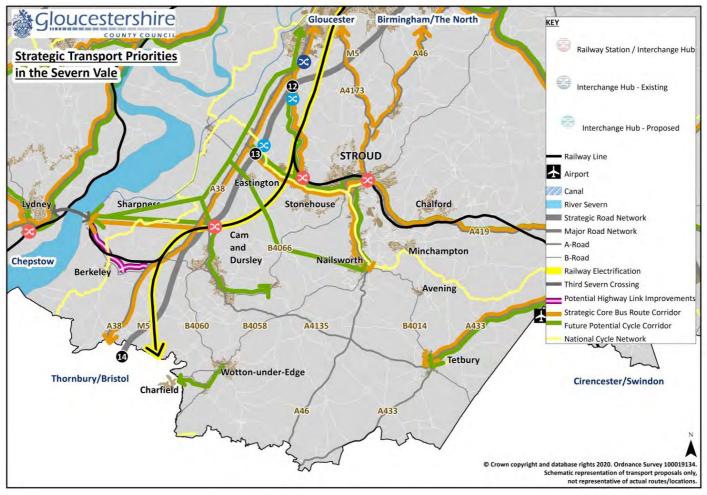


- **4.8.52** Emerging strategic allocations will be highly accessible by cycle, allowing scope for a network of dedicated walking and cycle routes that are located on the key desire lines to local services and facilities within the settlements, as well as between the allocation sites and interchange hubs. These direct links would allow for ease of movement as well as create an attractive and safe environment for all users encouraging an increase in sustainable travel modes for short journeys. Furthermore, the advancement in technology of ebikes will make longer sustainable commuting journeys easier and the variable terrain in the Severn Vale less of a challenge for all users. The e-bikes could be left securely at the interchange hubs at specific charging points whilst the users make the onward journey via bus or rail, or take the e-bike with them, like any conventional bike, and carry on their sustainable journey at their destination.
- **4.8.53** The Severn Vale has a well established Canal Network that links Sharpness and Gloucester via the Gloucester & Sharpness Canal and links the Stroud Valleys to the Gloucester and Sharpness Canal via Stroudwater Navigation. Heritage Lottery and Highways England funding enabled the means of providing the 'Missing Mile' of Stroud Water Navigation under the M5 Motorway to allow its restoration to Saul Junction.
- **4.8.54** Water based freight transport is unlikely to occur, however, the future potential of a water based transport method remains. The primary benefactor of the reconnected canal network is its offering as a viable off-road cycle and walking route which connects key Severn Vale growth areas to the city region and provides an attractive tourist leisure route to boost the local economy.

- **4.8.55** The combination of the increased MetroWest services, express bus services into surrounding settlements and new developments as well as dedicated cycling and walking networks ensures that Cam and Dursley station is the focal point of the allocation sites in the southern part of the Severn Vale and links to it should be prioritised and maximised to their full potential from future development. In addition to the rail network, the M5 will remain a key transport corridor with a number of express bus services that can serve additional interchange hubs located at the junctions on the M5.
- **4.8.56** Glos 2050 vision has considered the potential role of a third crossing of the River Severn between the Forest of Dean and Stroud districts. Whilst to date this has been described as a Lydney-Sharpness bridge, other locations have been suggested through consultation. Significant growth allocations would have to be made both, in the Forest of Dean as well as in the Stroud District area, to justify a transport infrastructure investment of the magnitude of a third river crossing. The wider transport impacts of a third Severn crossing still need to be better understood.
- **4.8.57** Strategic transport priorities for the Severn Vale area are illustrated schematically in <u>Figure STP (D)</u> and listed in <u>STP Table (a)</u>.



Figure STP (D) - Strategic Transport Priorities in the Severn Vale





STP Table (a): Long-term Ambitions for Future Development of the Gloucestershire Transport Network

CPS	MODE	SCHEME			
Reference to	Reference to maps: City Region (CR) Rural Areas (RA) Tewkesbury/Ashchurch (TEWK) Severn Vale (SV)				
CR, RA, TEW, SV	Public Transport - Bus	A network of strategic interchange hubs, including at all M5 junctions and railway stations, including freight distribution centres.			
County	Public Transport - Bus	High frequency strategic bus corridors supported by bus priority measures.			
CR, RA, TEW, SV	Ped/Cycle	High quality, prioritised cycle routes for mass cycle use on the strategic cycle desire lines, linking Tewkesbury/Ashchurch in the north to Cheltenham and then Gloucester, via Bishop's Cleeve. From Gloucester it will link with the Cots wolds from Brockworth and to a West of Severn interchange hub and beyond to include Hartpury, Newent and extend into the Severn Vale, branching off into Sharpness/Berkeley, Cam and Dursley, and towards J12, Stonehouse, Stroud and Nailsworth. LTP scheme Wotton-under-Edge, Kingswood to Charfield.			
County	Highways	New Urban Traffic Control Centre (this will need to be reviewed to better understand the needs of connected vehicles)			
CR	Ped/Cycle	An expanded local and strategic cycle network, including high quality cycle links within the Cheltenham and Gloucester City Region.			
CR	Public Transport	Mass Public Transport Area linking Cheltenham and Gloucester and extending to Bishop's Cleeve – Hardwicke/Quedgeley			
CR	Public Transport - Rail	Address capacity constrains at Cheltenham Station by upgrading the existing station or considering a new station between Cheltenham and Gloucester. Gloucester Station improvements.			
CR, TEWK, SV	Public Transport – Rail	Birmingham-Bristol Linespeed and signal improvements to accommodate substantial service improvement ambitions.			
RA	Public Transport – Rail	Improved connectivity from Lydney/Chepstow, through the Severn tunnel to Bristol.			
RA	Public Transport – Rail	Strategic multi-modal interchange expansion with improved and enhanced walking, cycling and bus accessibility to the surrounding settlements at Lydney, Moreton-in-Marsh and Kemble Railway stations. Consider high frequency rail/bus connections between Kemble and Cirencester.			
RA	Ped/Cycle	An expanded local and strategic cycle network, linking into to Lydney, Coleford, Cinderford and Chepstow in the Forest of Dean and into Moreton and Cirencester in the Cots wolds, with a particular focus on the link between Cirencester and Kemble Station.			
RA	Ped/Cycle	Designated quiet routes/lanes for leisure cycling in the forest of dean and the Cots wolds.			



CPS	MODE	SCHEME	
RA	Public Transport – Rail	In conjunction with growth strategy for the Forest, work with our partners to investigate the potential for a new station west of Severn.	
TEWK	Public Transport - Rail	Further improvements to Ashchurch station, including a high quality station building to support its role as a Strategic multi-modal interchange with improved and enhanced walking, cycling and bus accessibility.	
TEWK	Ped/Cycle	An expanded local and strategic cycle network, into Tewkes bury town centre and into the new Ashchurch Local Centre, supported by new cycle and walking infrastructure to overcome barriers between new and existing sites, amenities, facilities and developments.	
TEWK	Public Transport - Bus	Sustainable travel corridor on the present A46 connecting Ashchurch with Tewkesbury (this is dependant on the M5 junction 9 and A46 scheme listed as strategic scheme in this LTP). Bus corridor linking Winchcombe.	
SV	Public Transport – Rail	Significant improvements to Cam and Dursley station, including a high quality station building to support its role as a Strate multi-modal interchange with improved and enhanced walking, cycling and bus accessibility. Strategic multi-modal interchange expansion with improved and enhanced walking, cycling and bus accessibility to the surrounding settlements at Stonehouse and Stroud Railway stations. A new railway station or transport interchange hub on the Gloucester to Bristol Public Transport Corridor.	
SV	Ped/Cycle	An expanded local and strategic cycle network, into local market towns and new settlements, supported by new cycle and walking infrastructure to overcome barriers between new and existing developments, amenities, facilities.	
SV	Public Transport – Rail/Highways	Third Severn Crossing (in conjunction with significant growth in the Forest of Dean and Stroud Districts)	
SV	Highways	M5 Junction 14 upgrade (in cooperation with South Gloucestershire, where this junction is located).	
SV	Ped/Cycle	Connectivity improvements to create a fully linked canal network, including an active travel corridor along the canal.	
CR	Highways	A38 – A40 Link Road	





Chapter 5

Delivering Gloucestershire's Local Transport Plan



5. Delivering Gloucestershire's Local Transport Plan



5.1. Delivering Scheme Priorities

- **5.1.1** Gloucestershire's vision for transport is to deliver, 'A resilient transport network that enables sustainable economic growth, by providing travel choices for all, making Gloucestershire a better place to live, work and visit'
- **5.1.2** To support the delivery of this vision as well as the objectives and outcomes identified in the LTP, a range of scheme priorities have been identified. The scheme prioritisation process is outlined in this chapter and illustrated in Figure LTP (A).
- **5.1.3** Transport schemes included in the LTP have been selected from a variety of sources, including the transport mitigations developed and agreed as part of the district lead Local Plan development, local studies and other sources of evidence. Schemes were prioritised against their impact on economic growth, carbon emissions, socio-distributional impacts, the local environment and wellbeing. Each LTP scheme identified has been included on the basis of need and compliance with delivering the LTP outcomes. The schemes listed in this LTP do not represent a commitment by County Council for funding but they do reflect Gloucestershire's transport priorities.
- **5.1.4** The priorities identified should not be considered a definitive list as it will be subject to periodic reviews as new evidence emerges through the district led local planning process. Schemes identified will therefore be updated during the lifetime of the LTP as new evidence emerges and funding opportunities arise.
- **5.1.5** It is intended that the LTP will be a living document, and will therefore be updated and amended as necessary to reflect changes in policy, funding opportunities or deliverability at a local and national level. Updates to this policy document will be agreed through discussions with the Lead Cabinet Member with responsibility for Transport Policy. Where significant changes are required approval will be sought from the County Council's Cabinet.



5.1.6 The annual <u>LTP Implementation Report</u> is produced including performance against indicator and any changes in policies and details of scheme delivery.

5.2. Scheme Prioritisation and Appraisal

- **5.2.1** Gloucestershire's Local Transport Plan must clearly define the County's transport priorities for the delivery of Gloucestershire's transport vision. To address the issues raised during our conversation with local stakeholders and support the LTP outcomes identified in the LTP, capital scheme priorities have been identified through a scheme prioritisation process that looks at scheme eligibility and impacts on economic growth, carbon emissions, sociodistributional impacts, the local environment and well-being. Schemes thus identified comply with delivering LTP expected outcomes but do not reflect a commitment by the County Council for funding. The prioritised capital scheme list provides the basis for future funding bids, as opportunities arise through government, and funding partners, including transport operators and developers.
- **5.2.2** A comprehensive list of schemes is provided in <u>LTP Tables (d)-(f)</u>, detailing each scheme with a description as well as listing its primary, secondary and tertiary benefits/purpose and stating whether the scheme is within the existing LTP, a Local Plan or is a new scheme. After reviewing the full list of schemes the following benefits/purposes were determined:
 - Local Plan Growth Schemes (LPG)
 - Active Travel / Health & Wellbeing schemes (AT/HW).
 - Network Capacity Optimisation Schemes (NCO)
 - Environmental Schemes (ENV)
 - Safety Schemes (S)
 - Sustainable Transport schemes (ST)
 - CO₂ Reduction Scheme (CO₂)

S.2.3 LTP Tables (c) – (e), detail the schemes based on their strategic, major or local categorisation. These tables contain information regarding funded schemes; their source of funding, approximate cost banding and the status of the scheme. The remaining scheme priorities are at scoping stage, subject to ad hoc funding opportunities or developer contributions as they arise. LTP Table (f) contains a list of countywide schemes, initiatives and programmes of high priority, with a countywide impact, often encompassing a number of smaller projects. Included in this category are non place specific capital priority schemes and revenue projects.

Scheme selection and prioritisation

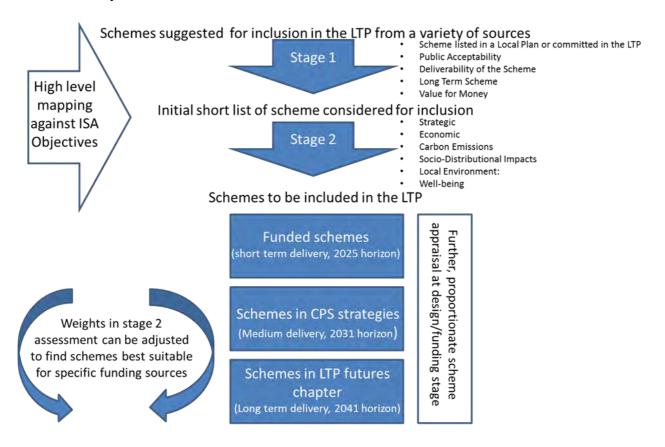
- **5.2.4** To determine, which schemes are to be included, a scheme prioritisation process has been undertaken using a two stage assessment, seen in Figure LTP (A).
- **5.2.5 Stage 1** Assessment consists of 5 categories
 - 1. Scheme listed in a Local Plan or committed in the LTP
 - 2. Public acceptability
 - **3.** Deliverability of the scheme
 - 4. Long-term scheme
 - 5. Value for money
- **5.2.6** Schemes that scored highly were short-listed and progressed to Stage 2. Schemes listed in local plans or listed within the LTP were immediately advanced to stage 2 has they have already been determined to have a specific need or have been subject to examination.



- **5.2.7 Stage 2** assessment consists of 6 core categories, with a number of sub-categories within them;
 - 1. Strategic Case: Considers the scale of impact, whether a scheme provides access to employment or housing as well as key issues such as reducing congestion or promoting active travel.
 - **2.** Economic Case: Considers the estimated Value for Money of a scheme, as well as key issues such as reduced journey times, impacts to network resilience, operating costs and access to key locations.
 - **3.** Reducing Carbon Emissions: Considers whether a scheme reduces distance travelled or relies on carbon fuels.
 - **4.** Socio-Distributional Impacts: Considers the accessibility, affordability, acceptability of a scheme to vulnerable users and whether it targets a known regeneration scheme.
 - **5.** Local Environmental Protection: Considers air pollution, noise and impact on natural/urban environments
 - **6.** Health & Wellbeing: Considers severance, impact on physical activity, public safety and crime.
- **5.2.8** In addition to these priorities, there will be many other initiatives that will emerge through the planning process, in conjunction with new development, as set out in the Local Plans.



Figure LTP (A) – LTP Schemes Delivery Process





5.2.9 Schemes have been categorised as Strategic, Major, Local and Countywide schemes. A 'Scale of Impact' indicator has been applied, to provide objective classifications for these categories as shown in <u>LTP Table (a)</u>. Although schemes are no longer categorised in terms of short, medium and long term, by identifying the funding source, those schemes with secured funding are likely to be delivered by 2025.

LTP Table (a) - Strategic, Major and Local by applying a 'Scale of Impact' indicator

	Strategic	Major	Local
Highways	Schemes on the SRN and/or estimated to cost >£20m	Schemes on the MRN and/or estimated to cost £5m-£20m	Schemes estimated to cost less than £5m, on the local Highway Network
Rail	estimated to cost >£20m	estimated to cost £5m - £20m	estimated to cost <£5m
Bus	Schemes on very high frequency routes	Schemes on high frequency routes	Schemes on low frequency routes
Ped/Cycle	schemes linking growth areas	Schemes linking smaller settlements	Schemes not shown on the County Cycleway

- **5.2.10** Countywide priorities have been identified, which include initiatives and programmes of high priority, with a countywide impact, often encompassing a number of smaller projects. Included in this category are non place specific capital priority schemes and revenue projects.
- **5.2.11** Removal of schemes, through the process of this LTP Review includes; those schemes that have been completed, schemes that fall below minimum cost threshold for LTP schemes (£200k) or schemes that are better suited to be picked up through other processes, such as the GCC Capital Works Programme. Revenue schemes are better reflected as policy or proposal ambitions in the respective policy documents. Proposed feasibility studies are not listed as schemes in the LTP going forward. This is because the need for feasibility studies is often related

to capital investment. Feasibility studies will be undertaken as and when required to implement the policies and scheme priorities outlined in this revised LTP.

5.2.12 The scheme prioritisation process, checked the degree of alignment of schemes with the LTP policies and outcomes, assessment criteria mapped against the Integrated Sustainability Assessment objectives, illustrated in LTP Table (b), as well as anyother relevant considerations at the time. The LTP prioritisation process will consider the schemes impact on environmental and social sustainability.



LTP Table (b) - Stage 1 - LTP Scheme Appraisal

Integrated Sustainability Assessment (ISA) Objectives	No.
Improve Air Quality	1
Reduce carbon dioxide (CO ₂) emissions from transport	2
Protect and enhance protected habitats, sites, species, valuable ecological networks and promote ecosystem resilience and functionality	3
Protect, enhance and promote geodiversity	4
Protect and enhance the character and quality of landscapes and townscapes and visual amenity	5
Conserve and enhance heritage assets and the wider historic environment including buildings, structures, landscapes, towns capes and archaeological remains and their settings.	6
Protect and enhance the water environment	7
Conserve soil and agricultural resources and seek to remediate / avoid land contamination	8
Reduce risk of flooding and increase resilience of the transport network to the effects of a changing climate	9
Promote prudent use of finite natural resources from primary sources, maximise the use of alternative, secondary and recycled materials, reduce the level of waste generated	10
Reduce the need to travel, particularly by car or move goods by road, and promote sustainable modes of transport and patterns of movement	11
Promote economic growth and job creation, and improve access to jobs for all	12
Coordinate land use and transport planning a cross Gloucestershire	13
Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (EqIA specific objective)	14
Improve health and well-being for all citizens and reduce inequalities in health (HIAs pecific objective)	15
Promote community safety and reduce crime and fear of crime for all citizens (CSAs pecific objective)	16



- **5.2.13** While the scheme prioritisation process determines which schemes are to be included in the LTP, a more detailed appraisal process may be required before final funding approval can be given for any scheme. The extent of the appraisal will depend on the size of the scheme, alongside technical and financial considerations. The appraisal should look at how to minimise the impact of transport schemes on the built and natural environment through tools such as the Natural Capital Baseline Toolkit, and the health and well being of residents and visitors to Gloucestershire, through Health Impact Assessments where appropriate.
- **5.2.14** Depending on the size and impact of the scheme, a second stage may require a more detailed, enhanced approach undertaken prior to seeking final approval for funding. The scope of this second stage will need to be proportionate to the stage at which a scheme is in development. Depending on scheme size and impact, this may be assured through potential WebTAG appraisals and the planning application process, which involves statutory Environmental Impact Assessment (including Health Impact Assessment), Equality Impact Assessment and may also involve Habitats Regulations Assessment for certain schemes.
- **5.2.15** Delivery of the LTP schemes will be subject to the availability of funding opportunities, as they arise. A further assessment stage is envisaged at this point, but will need to be proportionate to the scale of the scheme. The extent and focus of the additional appraisal will also depend on the specific funding source. In recent years funding sources have been:

- GCC Capital Programme: Schemes in the capital programme (under £500k), go through the GCC screening assessment process to prioritise capital highway improvements funded by GCC, this is based on various criteria, predominantly on accident data and safety metrics as a screening exercise.
- Government funding: Schemes that receive funding from the Department for Transport, or Homes England will usually follow a 3 stage process; Strategic Outline Case (SOC), Outline Business Case (OBC) and Full Business Case (FBC) and also require assessment against the 5 case model including economic case, strategic case, commercial case, financial case and management case to demonstrate the benefits of delivering the project.
- Single Local Growth Deal: Similarly, schemes that receive funding from the LEP Local growth deal will be required to produce Business Cases structured against the 5 cases listed above, in line with the Gfirst LEP Local Assurance Framework.
- **5.2.16** <u>LTP Tables (d)—(f)</u>, set out the LTP scheme priorities in terms of 'scale of impact'. The key to the schemes tables is in <u>LTP Table (c)</u>.
- **5.2.17** The countywide priorities are listed in LTP Table (g).



LTP Table (c) – Key to Schemes Tables (Strategic Schemes / Major Schemes / Local Schemes)

1 - 7			
Ref	Reference number identifies the schemes in the Connecting Places Strategy (CPS) maps in Chapter 4 The reference CSV (Central Severn Vale), S Cot (South Cotswold) N Cot (North Cotswold), SD (Stroud), SV (Severn Vale), TKS (Tewkesbury)		
Mode	Primary transport mode for each scheme		
Benefits	Highlights the 3 main benefits of each scheme: Local Plan Growth (LPG), Active Travel / Health & Wellbeing (AT/HW), Network Capacity Optimisation (NCO), Environmental (ENV), Safety (S), Sustainable Transport (ST), CO2 Reduction (CO2)		
Funding	√ funding secured Indicative offer made Funding still required		
Scheme Status	Some schemes have progressed further than others in terms of creating detailed plans, or producing business cases and may be at delivery sooner than others.		
Cost Band	High level indication of the likely cost of delivering each scheme		

LTP Table (d) - Strategic Schemes

REF	MODE	SCHEME	BENEFITS			Indicative Funding Status	Scheme Status	Cost Band
CSV1	Highways	M5 Junction 10 'All Movements' access and Link Road to West Chel tenham	LPG	NCO	Road Safety	✓ secured	Pre-design stage	>£20m
CSV 2	Highways	Improvements to M5 J11 and the A40 Corridor, including WCTIS, in West Cheltenham	LPG	NCO	CO2	✓ secured	Design Stage	>£20m
CSV3	Public Transport - Bus	El mbri dge Strategic Interchange hub	ST	CO2	AT/ HW	Still required	Scoping stage	£200k -£5m
CSV 4	Public Transport - Bus	Strategic Park & Interchange hub scheme for A46 Brockworth/Shurdington	ST	CO2	AT /HW	Still required	Scoping stage	£200k -£5m
CSV 5	Public Transport - Bus	Strategic Park & Interchange hub scheme at Uckington, Cheltenham	ST	CO2	AT /HW	Still required	Scoping stage	£200k -£5m
S Cot 1	Highways	A417 Missing Link	NCO	Road Safety		✓ secured	Scoping stage	>£20m



REF	MODE	SCHEME	BENEFITS			Indicative Funding Status	Scheme Status	Cost Band
TKS 1	Highways	'New Offline' A46 and M5 Junction 9 improvements, Tewkesbury	LPG	Road Safety	NCO	Still required	Pre-design stage	>£20m
CSV 6	Public Transport - Bus	Strategic Park & Interchange hub scheme for M5 J11a	ST	CO2	AT/H W	Still required	Scoping stage	£200k -£5m
CSV 7	Public Transport - Bus	Strategic Park & Interchange hub scheme for M5 J12	ST	CO2	AT/H W	Still required	Scoping stage	£200k -£5m
SD 1	Public Transport - Bus	Strategic Park & Interchange hub scheme for M5 J13/A419	ST	CO2	AT/H W	Still required	Scoping stage	£5m-£20m
CSV 8	Highways	Innsworth Gateway New A40 roundabout	LPG	NCO		✓ secured	Design Stage	£5m-£20m
CSV 9	Highways	A40 Via duct widening to increase capacity between Longford and Over Roundabouts	NCO	LPG		Still required	Scoping stage	>£20m
FOD 1	Highways	Chepstow Congestion Relief Scheme	NCO	ST		Still required	Scoping stage	>£20m
CSV 10	Public Transport - Bus	Strategic Park & Interchange hub upgrade at Cheltenham Racecourse, Cheltenham	ST	CO2	AT/ HW	Still required	Pre-design stage	£200k -£5m
CSV 11	Public Transport - Bus	Strategic Park & Interchange upgrade hub at Waterwells, Gloucester	ST	CO2	AT/ HW	Still required	Pre-design stage	£200k -£5m
CSV12	Public Transport - Bus	Arle Court Strategic Park & Interchange expansion	ST	CO2	AT/ HW	Still required	Pre-design stage	£5m-£20m
CSV 13	Highways	M5 J12 capacity and safety Improvements	LPG	NCO	Road Safety	Still required	Scoping stage	£5m-£20m



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REF	MODE	SCHEME	BENEFITS			Indicative Funding Status	Scheme Status	Cost Band
SD 2	Ped/Cycle	Access improvements for Cam & Dursley Greenway 'Active Travel Route' to Railway station	AT/ HW	ST	CO2	Still required	Pre-design stage	£200k -£5m
TKS 2	Ped/Cycle	Tewkes bury to Bishop's Cleeve 'Active Travel' / Cycle Route	AT/ HW	ST	CO2	Still required	Pre-design stage	<£5m
CSV14	Ped/Cycle	Cycleaccessimprovements for A40/B4063 Corridor between Cheltenham and Gloucester	AT/ HW	CO2	ST	✓ secured	Design stage	£200k -£5m
CSV 15	Highways	St Barnabas Roundabout capacity and accessibility Enhancement	LPG	Road Safety	ST	Still required	Pre-design stage	£5m-£20m
CSV 16	Highways	M5 J11a Upgrade	LPG	NCO		Still required	Scoping stage	£200k -£5m
CSV 17	Highways	Junction improvement, A40 Over roundabout. Enhancement for outbound traffic with alternative river crossing	LPG	NCO		Still required	Scoping stage	£5m-£20m
TKS 3	Ped/Cycle	Cycle/Walking access improvements for As hchurch Road Corridor including M5J9 to link Tewkesbury	AT/ HW	Road Safety	ST	Still required	Scoping stage	£200k -£5m
CSV 18	Highways	C&G Roundabout Upgrade	LPG	NCO		Still required	Scoping stage	£200k -£5m
CSV 19	Public Transport - Bus	Gloucester - Cheltenham vi a Churchdown bus corridor improvements	ST	CO2		Still required	Scoping stage	£5m-£20m



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REF	MODE	SCHEME	BENE	FITS		Indicative Funding Status	Scheme Status	Cost Band
CSV 20	Public Transport - Bus	A40 Corridor bus priority, Cheltenham	ST	CO2		Still required	Scoping stage	£200k -£5m
CSV 21	Ped/Cycle	Chel tenham - Bishop's Cleeve Corridor cycles cheme	AT/ HW	ST	CO2	Still required	Design stage	£200k -£5m
CSV 22	Ped/Cycle	Cycle access improvements linking Honeybourne Line to A40, Cheltenham	AT/ HW	ST	CO2	√ secured	Design stage	£200k -£5m
CSV 23	Ped/Cycle	Cycle access improvements for Outer Ring Road corridor, Gloucester	AT/ HW	Road Safety	CO2	Still required	Scoping stage	£200k -£5m
CSV 24	Ped/Cycle	Gloucester - Sharpness walking & cycle Improvements	AT/ HW	CO2		✓ secured	Pre-design stage	£200k -£5m
CSV 25	Public Transport - Bus	Inns worth Lane and Oxstalls Lane, Gloucester	ST	CO2		Still required	Scoping stage	£200k -£5m
SD3	Ped/Cycle	'Active Travel Route' - Stroudwater Navigation to Gloucester & Sharpness Canal	AT/ HW	Road Safety	CO2	√ secured	Pre-design stage	>£20m
CSV 26	Highways	New A40 Junction and Link Road to B4063	LPG	NCO		Still required	Scoping stage	£200k -£5m
SD4	Public Transport - Rail	Rail junction and capacity improvements (Dynamic Loops) to rail lines between Cam & Dursley and Charfield	ST	CO2	NCO	Still required	Scoping stage	>£20m



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REF	MODE	SCHEME	BENE	FITS		Indicative Funding Status	Scheme Status	Cost Band
TKS 4	Public Transport - Rail	Rail junction and capacity improvements (Dynamic Loops) to Birmingham - Bristol Mainline near Ashchurch	ST	CO2	NCO	Still required	Scoping stage	>£20m
CSV 27	Ped/Cycle	LCWIP Walking Corridor, Cheltenham	AT/ HW	Road Safety	CO2	Still required	Pre-design stage	£200k -£5m
CSV 28	Ped/Cycle	LCWIP Cycling Corridor, Cheltenham (Phase 1 - 4)	AT/ HW	Road Safety	CO2	Still required	Pre-design stage	£200k -£5m
CSV 29	Ped/Cycle	LCWIP Walking Corridor, Gloucester (Phase 1 - 4)	AT/ HW	Road Safety	CO2	Still required	Pre-design stage	£200k -£5m
CSV 30	Ped/Cycle	LCWIP Cycling Corridor, Gloucester (Phase 1 - 4)	AT/ HW	Road Safety	CO2	Still required	Pre-design stage	£200k -£5m
SD 5	Public Transport - Bus	Bus stop and bus advantage improvements for Stroud - Gloucester corridor	ST	CO2		Still required	Scoping stage	£200k -£5m
SD 6	Ped/Cycle	Access improvements 'Active Travel Route' - B4008 between little Hares field (M5J12) and Stonehouse Corridor	AT/ HW	ST	CO2	Still required	Scoping stage	£200k -£5m
CSV 31	Public Transport - Bus	Bus advantage improvements for Bruton Way, Gloucester	ST	CO2		Still required	Pre-design stage	£200k -£5m
SD 7	Ped/Cycle	Cycle access improvements to National Cycle Network, Route 45, Stroud	AT/ HW	CO2	Road Safety	Still required	Scoping stage	£200k -£5m
CSV 32	Highways	A40/A48 Highnam round about signalisation	LPG	NCO		Still required	Scoping stage	£200k -£5m
CSV 33	Highways	Junction improvement - Priory Rd providing bus advantage, Glos.	ST	CO2	NCO	Still required	Scoping stage	£200k -£5m



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REF	MODE	SCHEME	BENE	FITS		Indicative Funding Status	Scheme Status	Cost Band
CSV 34	Highways	Junction Improvement - A417 - Brockworth Bypass / A46 Shurdington Rd, Brockworth	NOC	Road Safety		Still required	Scoping stage	£200k -£5m
CSV 35	Highways	Junction improvement - A417 C&G roundabout,	NOC	Road Safety		Still required	Scoping stage	£5m-£20m
TKS 5	Highways	Junction Improvements - Northway Lane / A46	LPG	NCO		Still required	Scoping stage	£200k -£5m
TKS 6	Highways	Junction Improvements - Alexandra Way / A46	LPG	NCO		Still required	Scoping stage	£200k -£5m
TKS 7	Highways	Junction Improvements - Fiddington Lane / A46	LPG	NCO		Still required	Scoping stage	£200k -£5m
CSV 36	Highways	Over Roundabout Upgrade – Left Slip from A40 East.	LPG	NCO		Still required	Scoping stage	£5m-£20m
CSV 37	Highways	A40/A417 Over Roundabout Improvement - Signalisation	LPG	NCO		Still required	Scoping stage	£200k -£5m
CSV 38	Highways	A417 Zoons Court Roundabout	LPG	NCO		Still required	Scoping stage	£200k -£5m
TKS 8	Public Transport - Bus	Strategic Park and Interchange hub for Tewkes bury/Ashchurch M5 J9	ST	CO2	AT/H W	Still required	Scoping stage	£5m-£20m
SD 20	Public Transport - Rail	A new railway station(s) south of Gloucester, north of Bristol	ST	CO2		Still required	Scoping stage	>£20m



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LTP Table (e) - Major Schemes

REF	MODE	SCHEME	BENEFITS			Indicative Funding Source	Scheme Status	Cost Band
CSV 39	Highways	A4019/A4013 Corridor improvements	ST	CO2		Still required	Scoping stage	£5m-£20m
CSV 40	Highways	A430 Llanthony Rd and St Ann Way, Gloucester (South West Bypass)	LPG	NCO		√ secured	Design Stage	£5m-£20m
SD8	Highways	Improvements for A419 Corridor, Stonehouse	NCO			√ secured	Design stage	£200k -£5m
SD 9	Public Transport-Bus	Park & Interchange Hub at Cam & Dursley Railway Station	ST	COS2	AT/H W	Still required	Scoping stage	£200k -£5m
CSV 41	Highways	Highway Improvements A435 Corridor, Bishop's Cleeve	LPG	NCO		Still required	Pre-design stage	£200k -£5m
S Cot 2	Ped/Cycle	Cycle access improvements linking Cirencester to Kemble Railway Station	AT/ HW	CO2	ST	Still required	Scoping stage	£5m-£20m
TKS 9	Highways	Junction Improvement to the - Shannon Way / A438 traffic signal junction	LPG	NCO		Indicative offer made	Scoping stage	£200k -£5m
CSV 42	Highways	A38 / Walls Roundabout	LPG	NCO		Still required	Scoping stage	£200k -£5m
CSV 43	Highways	Highway improvements - A38/A430/B4008 Cole Avenue Junction	LPG	NCO	Road Safety	Still required	Scoping stage	£200k -£5m
SD 10	Highways	Highway Improvement - Merrywalk	LPG	Road Safety	AT/H W	Still required	Scoping stage	£200k -£5m



REF	MODE	SCHEME	В	BENEFIT	rs	Indicative Funding Source	Scheme Status	Cost Band
CSV 44	Highways	Signal Upgrades through CSV	NCO	CO2		Still required	Scoping stage	£200k-£5m
TKS 10	Public Transport - Rail	As hchurch for Tewkes bury Station improvements	ST	CO2	NCO	Still required	Scoping stage	£5m-£20m
CSV 45	Public Transport - Bus	Bus advantage improvements for A435 Tewkes bury - Cheltenham Corridor	ST	CO2		Still required	Scoping stage	£200k -£5m
S Cot 3	Ped/Cycle	Access improvements 'Active Travel Route' - A417 between Fairford and Lechlade	AT/ HW	CO2	ST	Still required	Scoping stage	£200k -£5m
CSV 46	Highways	Highway Improvements A46 (Shurdington Road) Corridor	LPG	NCO	Road Safety	Still required	Scoping stage	£5m-£20m
FOD 2	Highways	Junction Improvements - B4226/B4227 Bridge Junction (Including new highway) - Cinderford Bridge	LPG	NCO		Still required	Scoping stage	£200k -£5m
FOD3	Highways	Bream Road Junction Improvement - Lydney	LPG	Road Safety	CO2	Still required	Scoping stage	£200k -£5m
S Cot 4	Ped/Cycle	Cycle access improvement, reuse of old railway line between Tetbury and Kemble	AT/ HW	CO2	ST	Still required	Scoping stage	£200k -£5m
S Cot 5	Ped/Cycle	Cycle access improvements between South Cerney and Cirencester	AT/ HW	CO2	ST	Still required	Scoping stage	£200k -£5m
S Cot 6	Ped/Cycle	Cycle access improvements for Cotswold Water Park, Fairford	AT/ HW	CO2	ST	Still required	Scoping stage	£200k-£5m
FOD 4	Highways	A4136 Corridor highway Improvements	NCO	Road Safety		Still required	Scoping stage	£5m-£20m
S Cot 7	Ped/Cycle	Access improvements for Tetbury Rd and London Rd corridors, Cirencester	AT/ HW	Road Safety		Still required	Scoping stage	£200k -£5m



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REF	MODE	SCHEME	Е	BENEFI	rs	Indicative Funding Source	Scheme Status	Cost Band
CSV 47	Highways	Junction Improvement - A4019/A4013	LPG	NCO		Still required	Scoping stage	£200k -£5m
FOD 5	Ped/Cycle	Cycle improvements linking Gloucester – Huntley, Churcham, Maisemore, Hartpury, Highnam and Newent	AT/ HW	CO2	ST	Still required	Scoping stage	£200k -£5m
SD 11	Ped/Cycle	Cycle access improvements between Chalford and Cirencester	AT/ HW	CO2	ST	Still required	Scoping stage	£200k -£5m
SD 12	Ped/Cycle	Cycle access improvements between Stroud and Chalford	AT/ HW	CO2	ST	Still required	Scoping stage	£200k -£5m
CSV 48	Highways	Connecting Chel tenham	NCO	Road Safety	AT/H W	Still required	Scoping stage	£200k -£5m
CSV 49	Highways	A38 Crosskeys - Signalisation Upgrades	LPG	NCO		Still required	Scoping stage	£200k -£5m
FOD 6	Highways	Junction improvements, A48 Highfield Rd/Lydney Bypass	LPG	NCO	Road Safety	Still required	Scoping stage	£200k -£5m
FOD 7	Public Transport-Bus	Bus stop and bus a dvantage improvements for Gloucester - Lydney / Coleford / Cinderford corridors	ST	CO2		Still required	Scoping stage	£200k -£5m
CSV 50	Highways	Highway improvements, A38 Outer Ring Road corridor, Gloucester	LPG	Road Safety	AT/H W	Still required	Scoping stage	£200k -£5m
FOD8	Ped/Cycle	Cycle access improvements between Lydney and Parkend	AT/ HW	CO2	ST	Still required	Scoping stage	£200k -£5m
SD 13	Ped/Cycle	Cycle access improvements for Cam and Dursley Active Travel Route to Uley	AT/ HW	CO2	ST	Still required	Scoping stage	£200k -£5m
FOD 9	Ped/Cycle	Cycle access improvements to Lydney - Cinderford corridor	AT/ HW	CO2	ST	Still required	Scoping stage	£200k -£5m
FOD 10	Ped/Cycle	Cycle access improvements to Cinderford - Highnam corridor	AT/ HW	CO2	ST	Still required	Scoping stage	£200k -£5m



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REF	MODE	SCHEME	BENEFITS			Indicative Funding Source	Scheme Status	Cost Band
FOD 11	Ped/Cycle	Cycle access improvements to A48 - Lydney - Westbury-on-Severn corridor	AT/ HW	CO2	ST	Still required	Scoping stage	£200k -£5m
CSV 51	Ped/Cycle	Cycle access improvements to A40 - Cheltenham - Andoversford corridor	AT/ HW	CO2	ST	Still required	Scoping stage	£200k -£5m
CSV 52	Highways	Highway improvement - Westgate Gyratory, Gloucester	Road Safety	NCO		Still required	Scoping stage	£200k -£5m
SD 14	Highways	B4066 corridor improvements, Berkeley	LPG	NCO		Still required	Scoping stage	£200k -£5m
FOD 12	Highways	Replacement of existing A417 highway with elevated section, Maisemore	ENV	Road Safety		Still required	Scoping stage	£5m-£20m
SD 15	Highways	Access improvements for Cainscross roundabout, Stroud	Road Safety	AT/ HW		Still required	Scoping stage	£200k -£5m
CSV 53	Highways	A4019/B4634Old Gloucester Rd/Gallagher Retail ParkJunction	LPG	NCO		Still required	Scoping stage	£200k -£5m
TKS 11	Highways	Highway improvement - Tewkes bury Northern Relief Road	LPG	NCO		Still required	Scoping stage	£5m-£20m
FOD 13	Public Transport-Bus	West of Severn Transport Interchange Hub	ST	CO2		Still required	Scoping stage	£5m-£20m
S Cot 8	Ped/Cycle	Cycle access improvements, Cirencester – Fairford corridor	AT/ HW	CO2	ST	Still required	Scoping stage	£5m-£20m



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LTP Table (f) - Local Schemes

REF	MODE	SCHEME	BENEFITS			Indicative Funding Source	Scheme Status	Cost Band
N Cots 1	Highways	Junction improvement A429 - Unicorn Junction (A436/B4068) - Stow-On-The-Wold	LPG	NCO	Road Safety	Still required	Preliminary Design	£200k -£5m
CSV 54	Highways	Staverton Cross Roads (B4063/B4634)	LPG	ST		Still required	Scoping stage	£200k -£5m
N Cots 2	Ped/Cycle	Res ol ve pedes trian access a rrangements in Moreton-in-Marsh	AT/ HW	Road Safety		Still required	Scoping stage	£200k -£5m
CSV 55	Public Transport -Rail	Gloucester Railway Station Enhancement	ST	ENV		√ secured	Pre-design stage	£200k -£5m
CSV 56	Ped/Cycle	Alterations to Horton Rd level crossing	AT/ HW	ST	CO2	Still required	Scoping stage	£5m-£20m
TKS 12	Highways	Closure of Grange Rd/Aston Fields Railway level crossing	LPG	NCO		✓ secured	Scoping stage	£5m-£20m
FOD 14	Ped/Cycle	Cycling and Walking access improvements to Lydney Station and Lydney Harbour	AT/ HW	CO2	Road Safety	Still required	Pre-design stage (except harbour section)	£200k -£5m
FOD 15	Ped/Cycle	Cycling and Walking access improvements – Lydney Town Centre	AT/ HW	CO2	Road Safety	✓ secured	Pre-design stage	£200k -£5m
SD 16	Public Transport - Rail	Cam & Durs ley Railway Station enhancements	ST	CO2	ENV	Still required	Scoping stage	£200k-£5m
SD 17	Public Transport - Rail	Stroud Railway Station enhancements	ST	CO2	ENV	Still required	Pre-design stage	£200k-£5m



REF	MODE	SCHEME	BENEFITS			Indicative Funding Source	Scheme Status	Cost Band
CSV 57	Public Transport - Rail	Chel tenham Spa Railway Station Enhancements	ST	CO2	ENV	Still required	Design stage	£200k-£5m
CSV 58	Ped/cycle	Foot/cycleway bridge infrastructure north of Pirton Fields and link connection to existing highway	AT/ HW	CO2	ST	Still required	Scoping stage	£200k -£5m
FOD 16	Public Transport - Rail	Lydney Railway Station Enhancements	ST	CO2	ENV	Still required	Scoping stage	£200k -£5m
N Cots 3	Public Transport - Rail	Moreton in Marsh Railway Station car park enhancements	ST	CO2	ENV	Still required	Scoping stage	£200k-£5m
S Cots 9	Highways	Junction improvement - A429/A433 - Kemble	Road Safety	LPG		Still required	Scoping stage	£200k -£5m
SD 18	Highways	Highway improvements Dursley Relief Road	LPG	NCO		Still required	Scoping stage	£200k -£5m
TKS 13	Ped/Cycle	Pedestrian and cycle access improvements using disused railway bridge over Northway Ln, Ashchurch	AT/ HW	CO2	ST	Still required	Scoping stage	£200k -£5m
TKS 14	Highways	A438/A38 Tewkes bury bypass	LPG	NCO		Still required	Scoping stage	£200k -£5m
FOD 17	Highways	Cinderford Northern Quarter Spine Road	LPG			Still required	Scoping stage	£200k -£5m
SD 19	Highways	Junction improvement - A4135/B4066 Dursley Rd roundabout, Dursley	LPG	NCO		Still required	Scoping stage	£200k -£5m
SD 21	Ped/Cycle	Access improvements for Stroud Town Centre	Road Safety	AT/ HW	CO2	Still required	Scoping stage	£200k -£5m



REF	MODE	SCHEME	BENEFITS			Indicative Funding Source	Scheme Status	Cost Band
SD 22	Highways	Junction improvements - A38/B4066	LPG	NCO		Still required	Scoping stage	£200k-£5m
SD 23	Highways	Junction improvement - A4135/B4060, Woodfield roundabout, Dursley	LPG	NCO		Still required	Scoping stage	£200k -£5m
SD 24	Highways	Junction Improvements - A419/A46 Dudbridge Rd Roundabout, Stroud	LPG	NCO		Still required	Scoping stage	£200k -£5m
SD 25	Highways	Junction improvement - A419 / Dr Newton's Way, Stroud	LPG	NCO		Still required	Scoping stage	£200k -£5m
SD 26	Highways	Junction improvement A46 / Bath Rd (Dudbridge Rd)	LPG	NCO		Still required	Scoping stage	£200k -£5m
SD 27	Ped/Cycle	Cycle and walking access improvements between Eastington and Nailsworth	AT/ HW	CO2	Road Safety	Still required	Scoping stage	£200k -£5m
CSV 59	Highways	Highway improvement London Road/Denmark Road junction, Gloucester	ST	CO2	NCO	Still required	Scoping stage	£200k -£5m
S Cots 10	Public Transport -Rail	Kemble Railway station enhancements	ST	CO2	ENV	Still required	Scoping stage	£200k -£5m
N Cots 4	Highways	Highway improvement - A429 Fosseway	LPG	NCO	Road Safety	Still required	Scoping stage	£5m-£20m
N Cots 5	Highways	Highway improvement, A44/A429 mini-roundabouts	LPG	NCO	Road Safety	Still required	Scoping stage	£200k -£5m
S Cots 11	Highways	Junction improvement - A433 London Rd Tetbury	LPG	NCO	Road Safety	Still required	Scoping stage	£200k -£5m



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REF	MODE	SCHEME	BENEFITS		ГS	Indicative Funding Source	Scheme Status	Cost Band
S Cot 12	Highways	Highway improvement - Thames St - High St, Lechlade	LPG	NCO	Road Safety	Still required	Scoping stage	£200k -£5m
S Cot 13	Highways	Junction improvement - Five Ways junction, including crossing facilities, Cirencester	NCO	Road Safety		Still required	Scoping stage	£200k-£5m
S Cot 14	Highways	Junction improvement - All otment Corner, Kemps ford	NCO			Still required	Scoping stage	£200k -£5m
S Cot 15	Highways	Junction improvements - Tetbury Town Centre	NCO	Road Safety		Still required	Scoping stage	£200k -£5m
S Cot 16	Highways	Junction improvement - A417/Whelford Rd Junction, Fairford	NCO	Road Safety		Still required	Scoping stage	£200k -£5m
S Cot 17	Highways	Junction improvement - A429, Cherry Tree Junction, Cirencester	NCO			✓ secured	Pre-design stage	£200k -£5m
SD 28	Highways	Junction improvement - A38/Alkington Lane	LPG	NCO		Still required	Scoping stage	£200k -£5m
CSV 60	Highways	Highway improvement - B4063 Corridor, Churchdown	NCO			Still required	Scoping stage	£200k -£5m
CSV 61	Highways	Highway Improvements, Down Hatherley Lane Corridor, Gloucester	NCO			Still required	Scoping stage	£200k -£5m
CSV 62	Highways	Highway Capacity improvements A435-Stoke Road/Finlay Road Roundabouts	LPG	NCO		Still required	Pre-design stage	£200k -£5m
CSV 63	Highways	Highway Capacity improvements A435 - Racecourse roundabout	LPG	NCO		Still required	Pre-design stage	£200k -£5m
CSV 64	Highways	Junction Improvement A38/Down Hatherley Ln Junction Upgrade	LPG	NCO		Still required	Scoping stage	£200k -£5m
CSV 65	Highways	Highway capacity improvements at A435 / GE roundabout	LPG	NCO		Still required	Pre-design stage	£200k -£5m



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REF	MODE	SCHEME	BENEFITS			Indicative Funding Source	Scheme Status	Cost Band
FOD 18	Highways	Highway improvement - Newerne Link Road, Lydney	LPG	Road Safety	CO2	Still required	Scoping stage	£200k -£5m
CSV 66	Highways	Highway improvement - A4019 Honeybourne Railway bridge Cheltenham	NCO	Road Safety		Still required	Scoping stage	£200k -£5m
CSV 67	Highways	Junction Improvement - A430/A417 Castlemeads	LPG	NCO		Still required	Scoping stage	£200k -£5m
FOD 19	Highways	Junction improvements - Highfield Hill including Traffic Calming, Lydney	Road Safety	NCO		Still required	Scoping stage	£200k -£5m
CSV 68	Highways	Close Withybridge lane access to A4019	LPG	NCO		Still required	Scoping stage	£200k -£5m
SD 29	Ped/Cycle	Cycle access improvements to Stroud Road, Gloucester - Stroud Corridor	AT/ HW	CO2	ST	Still required	Scoping stage	£200k -£5m
CSV 69	Ped/Cycle	Cycle access improvements to the Churchdown - Brockworth (Gloucester Business Park) Corridor	AT/ HW	CO2	ST	Still required	Scoping stage	£200k -£5m
CSV 70	Ped/Cycle	Cycle access improvements to the Bishop's Cleeve, Swindon Village, North West Cheltenham Corridor	AT/ HW	CO2	ST	Still required	Scoping stage	£200k -£5m
CSV 71	Ped/Cycle	Cycle access improvements to the Gloucester - Tewkes bury Corridor including access to developments at Twigworth and Longford	AT/ HW	CO2	ST	Still required	Scoping stage	£200k -£5m
TKS 15	Ped/Cycle	Cycle access improvements to the Walton Cardiff, Newtown, Ashchurch corridor	AT/ HW	CO2	ST	Still required	Scoping stage	£200k -£5m
SD 30	Ped/Cycle	'Active Travel Route' Wotton-Under-Edge-to Charfield	AT/ HW	CO2		Still required	Scoping stage	£200k -£5m
SD 31	Public Transport -Rail	Stonehouse Railway Station improvements	ST	CO2	ENV	Still required	Scoping stage	£200k -£5m



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REF	MODE	SCHEME	BENEFITS			Indicative Funding Source	Scheme Status	Cost Band
FOD 20	Ped/Cycle	Newent to Dymock Active Travel route.	AT/ HW	CO2	ST	Still required	Scoping stage	£200k -£5m
N Cot 6	Ped/Cycle	Andovers for d – Bourton on the Water Active Travel route	AT/ HW	CO2	ST	Still required	Scoping stage	£5m-£20m
N Cot 7	Ped/Cycle	Bourton on the Water – Kingham Active Travel route	AT/ HW	CO2	ST	Still required	Scoping stage	£5m-£20m
S Cot 18	Ped/Cycle	Andovers ford – Cirencester Active Travel route	AT/ HW	CO2	ST	Still required	Scoping stage	£5m-£20m
SD 32	Ped/Cycle	Walking and cycle access improvements, A4135 Box Road – A38 corridor	AT/ HW	Road Safety	CO2	Still required	Scoping stage	£200k -£5m
TKS 16	Ped/Cycle	Tewkesbury to Upton upon Severn Active Travel route	AT/ HW	CO2	ST	Still required	Scoping stage	£200k -£5m
CSV 72	Ped/Cycle	Cycle access improvements A46 Corridor – Cheltenham - Brockworth	AT/ HW	S	CO2	Still required	Scoping Stage	£200k-£5m



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LTP Table (g) - Countywide Priorities

Deployment of non-enforceable average speed cameras (operated by	The development of advisory guidance of voluntary quiet delivery service				
Gloucestershire Constabulary)	scheme as part of the NDP/Local Plan process				
Ongoing support for Thinktravel programme	Local Interchange Hub facilities				
Ongoing installation of electric car/bike charging points	Capital Maintenance Programme				
Travel Plans (incl. workplace/rail stations/key corridors & for new	Completing gaps in existing cycle networks and ensuring linkages into new				
development to encourage mode shift in addition to personalised travel	strategic development sites, including improved cycle parking at key				
planning)	destinations				
Promote sustainable travel habits for children, (inc. Bikeability training which	Development of EV Strategy, Climate Change Strategy, Carbon Reduction				
equips children with skills and confidence to cycle more often)	Pathway				
Lorry management gateway system	Highway Safety improvement programme				
On-street parking management system	Ongoing bus stop improvements programme				
Civil parking and bus lane enforcement	Development of advisory guidance on Construction Management Plans				
20mph Zones & investigation of vehicle restriction zones, 'invisible infrastructure'	Feasibility studies and other supporting local studies and plans				
IIIIastructure					

5.3. Funding

5.3.1 The LTP's role is to set out the long-term strategy for transport within the county, agreed by the County Council as local highway and transport authority. Initiatives/schemes are included on the basis of compliance with delivering the LTP outcomes, and do not reflect a funding commitment by the County Council, instead delivery of the schemes will be subject to the availability of funding opportunities. Figure LTP (B) sets out the range of funding sources required to deliver the priorities identified and the County Council will actively seek such funding opportunities to deliver transport schemes identified within the LTP.

Figure LTP (B) – LTP Funding Sources



Proposed Transport Scheme/Intervention

Potential Funding Sources









Examples

- Int. Transport Block
- · Pothole Action Fund
- Highways
 Maintenance
- Supported Bus Fund
- Growth Deal (LEP)
 - Housing Inf. Fund (HIF)
- Pinch Point Funding
- Emergency Active Travel Fund
- CILS106
- S278
- Community Offer

GCC budget and specific schemes initiatives included in the annual Medium Term Financial Strategy (MTFS)

Governance

Funding specific prioritisation and monitoring processes. Sign off: through Council budget Funding specific prioritisation and monitoring processes. Sign off: External partner, GCC Cabinet or Council

- GCC Highway Authority Approval,
- District CIL Governance Structure and/or
- GCC Capital Programme

Through GCC's Budget and MTFS processes.

Sign off: through Council budget

Find Out More Details can be found in the GCC Medium Term Financial Strategy Plan*.

Funding bids submitted by Gloucestershire County Council are usually published on the GCC website**.

District Council Websites and GCC Capital Programme.

Details can be found in the GCC Medium Term Financial Strategy Plan*.



^{*} https://www.gloucestershire.gov.uk/council-and-democracy/performance-and-spending/budget-and-medium-term-financial-strategy/

^{**} https://www.gloucestershire.gov.uk/council-and-democracy/performance-and-spending/bids-and-progress-reports/

- **5.3.2** "Capital" and "revenue" funding is used to deliver highway maintenance improvements, deliver transport improvements (pedestrian crossings, cycle paths and new roads), support public transport services or promote behavioural change initiatives. This is allocated by the DfT to the County Council using a needs based formula.
- **5.3.3** In the past, a large proportion of the capital fund awarded to Gloucestershire by government, which includes road improvement and larger transport schemes, was allocated through the Local Growth Fund (LGF) which the GFirst LEP has the devolved authority to administer. The GFirst LEP funding decisions are informed by the Gloucestershire Infrastructure Investment Pipeline (GIIP), a register of proposed future infrastructure across the county, which is overseen by the Gloucestershire Economic Growth Joint Committee (GEGJC), which incudes GCC, district councils, and the LEP.
- **5.3.4** Ad-hoc bidding opportunities may also arise. GCC will exploit all opportunities where the fund supports the delivery of LTP outcomes.
- **5.3.5** Funding for schemes to mitigate the impact of development is provided through individual planning obligation agreements inline with the policies outlined in the National Planning Policy Framework. The Community Infrastructure Levy (CIL) will also contribute funding towards infrastructure requirements. However, it should be noted that CIL covers a wide range of infrastructure and service provisions and is cannot be expected to pay for all for the infrastructure required.
- Network (SRN), which is the network of motorways and trunk roads within the county. The SRN is managed by Highways England, on behalf of government. Highways England bids for capital funding to improve these roads as part of the Road Investment Strategy (RIS) process. RIS 1 has been allocated for the period up to March 2021. Highways England will be allocating capital for the RIS 2 period April 2021 to March 2026 over the next year or two. There are a range of funds that become available from time to time mainly from DfT/Network Rail to improve rail infrastructure and lever in funding from third parties such as local authorities. These include Access for All, National Station Improvement Plan and the National Rail Discretionary Fund (NRDF). Great Western Railway has introduced the Customer and Communities Improvement Fund for small scale improvements which total £750K each year for three years. GCC seeks to work with the rail industry to attract funding as funds become available.



5.4. Monitoring, Outcomes and Targets

- **5.4.1** LTP Implementation Reports ¹²³ are published annually on the GCC website, to document scheme delivery, changes in policies and performance against monitoring indicators. LTP Table (g) outlines the LTP monitoring indicators used to assess the impacts.
- **5.4.2 LTP Outcomes** are measured against our policies and set out in **Annex 2.0 Logic Map**. The specific expected outcomes for each policy are set out in detail within the LTP Summary Evidence Base by overarching and transport mode policies.
- **5.4.3** In addition, the Highways Asset Management Plan (TAMP) monitors the delivery of the major asset through the Forward Programme as an in-year delivery plan, with subsequent years, second and third, a draft programme allowing for planning and coordinating of works.

LTP Targets

5.4.4 LTP Targets measure performance against our policies and are monitored annually and published in the LTP Implementation Plan. A detailed description of each LTP Target is set out in **LTP Summary Evidence Base**.

¹²³ LTP Implementation Reports - https://www.gloucestershire.gov.uk/ltp/monitoring



LTP Table (g) – LTP Monitoring Indicators

Reference	Indicator name	Target				
LTP PI-1	Journey time reliability on strategic important routes during the AM peak	Maintain annual average variance to + or −1%				
LTP PI-2	Number of peak hour vehicle journeys	Restrict annual growth to 1% per annum				
LTP PI-3	Reduction in the inappropriate freight travel	To maintain the % of HGV traffic on inappropriate roads use to less than 5%				
LTP PI-4	Principal road network condition	Maintain at or below 3%				
LTP PI-5	Non-Principal road network condition	Maintain at or below 6%				
LTP PI-6	Unclassified road network condition	Maintain at or below 14%				
LTP PI-7	Increase us e of rail	Increase by 30% from 2015 to 2031				
LTP PI-8	Increase us e of cycling	Increase by 50% from 2015 to 2031				
LTP PI-9	Increase us e of bus	Maintain bus passenger numbers in line with bus service reviews				
LTP PI-10	Maintain bus passenger access	Maintain access within 45 minutes				
LTP PI-11	Reduce the number of highway casualties	40% reduction (from the 2005-2009 a verage) by 2020				
LTP PI-12a	Reduce the number of child highway casualties	40% reduction (from the 2005-2009 average) by 2020				
LTP PI-12b	Reduce the number of older highway casualties	40% reduction (from the 2005-2009 a verage) by 2020				
LTP PI-13	Reduce Levels of traffic derived Nitrogen Dioxide	To reduce transport derived NO2 at each Air Quality Management Areas				
LTP PI-14	Reduce per capita transport carbon emissions	Zero tonnes per capita by 2045				



5.5. Governance and Review

- **5.5.1** As a strategic policy document the LTP is adopted at a full County Council meeting.
- **5.5.2** The LTP will be a living document, and will be updated and amended to reflect the adoption of local plans or national guidance. Updates to the LTP will be agreed through discussions with the relevant Lead Cabinet Member. Where these are deemed to be significant, approval will be sought from Gloucestershire County Council's Cabinet. Where the decision to amend the strategy is considered to have a significant impact on a local community, local stakeholders will have an opportunity to comment through a targeted local consultation process.
- **5.5.3** Major reviews of LTP will be undertaken periodically and linked to changes in local and national transport policy.
- **5.5.4** At officer level, delivery of the LTP will be overseen by the LTP Management Board, comprising those managers responsible for the delivery of the individual elements of LTP strategy. This Board will be overseen by the Executive Director responsible for economy, environment and infrastructure.





Gloucestershire Local Transport Plan

www.gloucestershire.gov.uk/ltp

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