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Executive Summary

The National Bus Strategy 2021 has set out an ambitious vision for local authorities to dramatically improve bus services across the country. We have been encouraged to work with local bus operators and local communities to deliver an integrated service with better ticketing, improved frequencies and transformative schemes.

Bus patronage has declined sharply due to the pandemic and it is incumbent on local authorities and bus operators to work together to reclaim lost passengers and to further enhance what is a sustainable form of mass transit. Government has pledged £3billion of new funding to support bus improvements. Bus Service Improvement Plans (BSIPs) are the agreed vision for why, what, when and how local services will be improved.

Gloucestershire's BSIP sets out our ambition for the county regarding bus services, an ambition we will jointly deliver through the Enhanced Partnership (EP). We firmly believe that a high functioning bus service can deliver sustainable transport choices for all residents; ensuring equity of access to education, employment and training, as well as access to services and facilities. But more than just these functional uses, buses should aim to be a de-facto choice for all transport requirements in the county. Social and leisure opportunities are equally important and should be accessible through regular and frequent bus use.

We want to play our part in building a new and younger generation of bus users in Gloucestershire – Targeting younger people who may not be able to afford private cars, and who do not need to do so, because they have a comprehensive, efficient, carbon-reducing, congestion-busting and most importantly sustainable transport option. We don't want to stop at the edge of the county when we talk about transport services; we want to see a clear connectivity to the rail network which can make out-of-county travel straightforward and accessible. We will work with partners to make public transport a viable choice for all residents in Gloucestershire by introducing a demand responsive transport service that will provide even greater travel choices for people in remote rural areas. Further to this we have a clear ambition to deliver a new Mass Rapid Transit system across our major urban areas. Mass transit will deliver reduced carbon emissions and improved air quality; it will reduce congestion and help the local economy; it will increase rapid, affordable, access to education, employment and training; it will provide extra connectivity, inter-twined with world-class bus and rail services. Alongside a substantial active travel network; the BSIP will deliver social benefits in terms of better health and wellbeing, better place-making and stronger, well-networked communities.

Gloucestershire cannot afford to fall behind other towns and cities that may have higher levels of public transport patronage. If we are not clear for the delivery of enhanced bus provision we will not fulfil the Gloucestershire 2050 ambitions of being a magnet county, an innovative county and a sustainable county. The transport ambitions we have for Gloucestershire are made real in this BSIP.

1. Overview

1.1. Approach to the Bus Service Improvement Plan

The Bus Service Improvement Plan (BSIP) follows the National Bus Strategy (NBS) that aims to dramatically improve bus services in England through greater local leadership and joint working with bus operators, the public and interest groups. The NBS and BSIP are also in place to reverse the recent shift in journeys away from public transport as a result of COVID-19 and changing travel patterns and to encourage passengers back to the bus. The NBS commits £3 billion of new funding to support the strategy in England.

The BSIP covers the entire administrative area of Gloucestershire County Council (GCC) as illustrated at **Figure 1-1** and will be implemented through an Enhanced Partnership, which will become active on 1 April 2022. GCC's notice of intent to enter into an enhanced partnership can be found on the GCC website.[1]

Figure 1-1 - GCC Administrative Area and Bus Routes (>= 1 bus per hour)
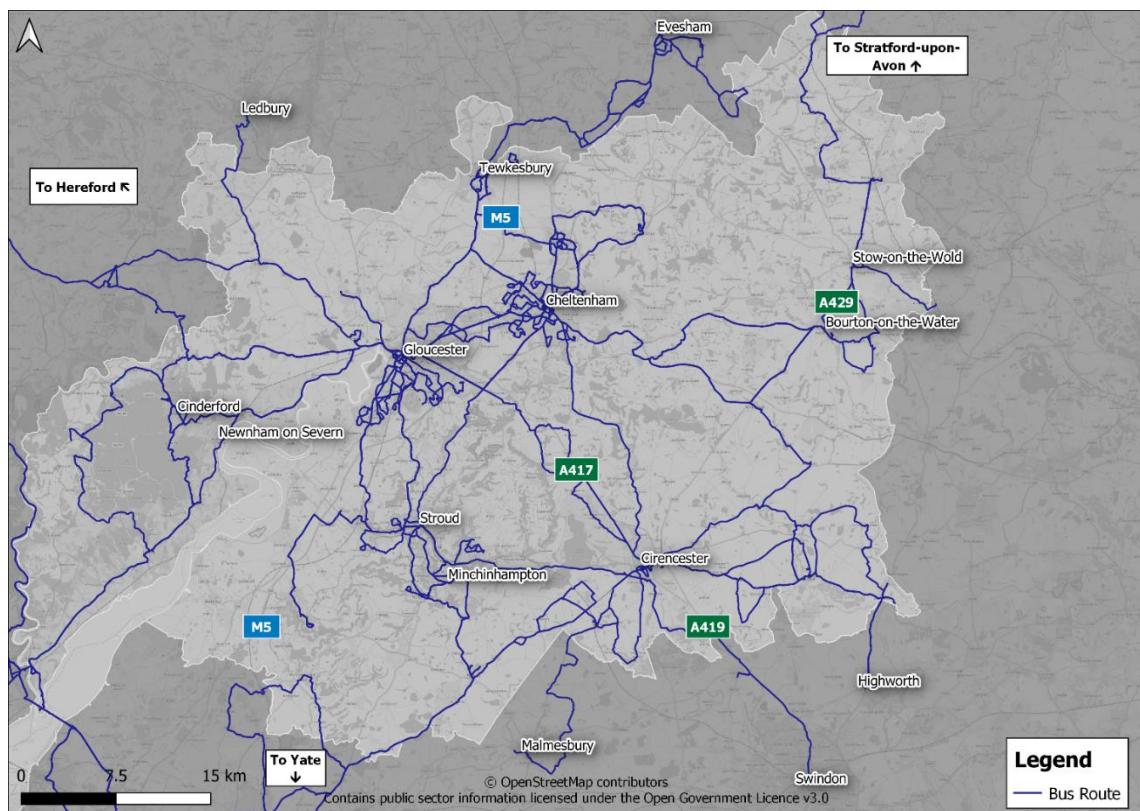
The BSIP is consistent with the Bus Strategy and the wider Local Transport Plan (LTP) covering the period 2020 – 2041 and which can be found here: www.gloucestershire.gov.uk/transport/gloucestershires-local-transport-plan-2020-2041

In line with Gloucestershire's LTP, the BSIP recognises the need to improve rural, urban, and inter-urban connectivity. It sets out a clear ambition to create a transformational Mass Rapid Transit service for Gloucestershire's urban core, fed by a network of express bus services (applying super bus network principles)

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[1] www.gloucestershire.gov.uk/transport/gloucestershire-bus-strategy/

to link in wider urban areas and inter-urban strategic corridors[2]. Good quality bus priority measures will be central to this.

This BSIP will 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.

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[2] Subject to funding

2.   Background

2.1.   Introduction

This document represents the Bus Service Improvement Plan (BSIP) for Gloucestershire. It addresses the following:

- Summary of the existing situation; what the picture is currently in Gloucestershire regarding bus services, patronage, geography;

- The challenges for the county in terms of the future of its bus services; bringing passengers back after COVID-19, managing a complex rural county with substantial urban centres, negotiating substantial route pinch points coupled with increasing car usage on a fixed road network, ensuring active travel modes are not compromised by bus services;

- Aims and objectives of the BSIP; how we will make fundamental improvements to travellers' experience of buses in Gloucestershire, and reinstate buses as a key arm of our sustainable transport strategy for the county; how we will encourage future usage, specifically targeting young people as future regular users (if we can encourage behaviour to be locked in as a sustainable and efficient and cost effective means of transport); and,

- Outputs and outcomes by which the BSIP will be measured; how the benefits of bus use can be further enhanced by working in partnership; how we can use buses as a tool to fight carbon; how buses can return to the position of being a considerably more viable transport option for Gloucestershire residents, how a Mass Rapid Transit system can substantially push forward our carbon reduction, environmental, congestion improvement, and increased access to jobs, education and services ambitions plus leisure and social accessibility; without recourse to private car ownership.

The BSIP aims are for transformative change to the services, infrastructure and vehicles for Gloucestershire within the three year period of the plan. The BSIP prioritises issues raised in the public engagement that was undertaken in August and September 2021, and through consultation with operators. The plan will be developed through the Enhanced Partnership to be published in 2022.

As with all authorities, COVID-19 has had a fundamental impact on the use of buses and all transport across the county. To mitigate this, 2019 data has been used to inform the base evidence case (pre-COVID).

A logic map for the BSIP to summarise the context, challenges, possible interventions/implementations and outcomes is included below as Figure 2-1. This provides a framework for the rest of the BSIP.

Figure 2-1 - GCC BSIP Logic Map
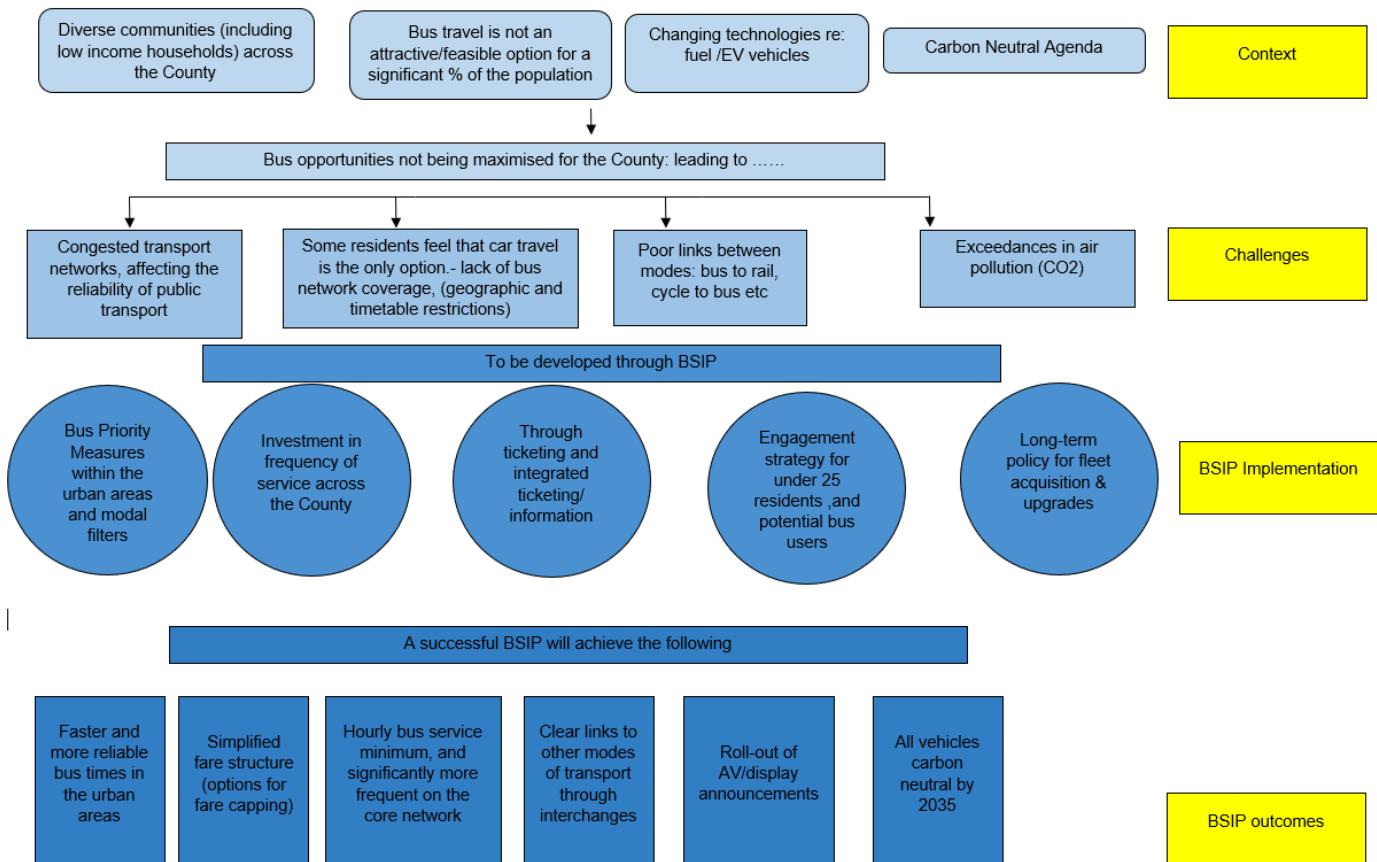
2.2. Key challenges for Gloucestershire

Gloucestershire is a large county, with two conurbations of Gloucester and Cheltenham, plus the smaller towns of Tewkesbury, Cirencester, Stroud and the more rural locations of the Forest of Dean, Stroud district and the Cotswolds. The core bus services are provided by Stagecoach, with a high number of passengers served by core services between Gloucester and Cheltenham (including Services 94 and 10).

The current modal split for Gloucestershire (method of travel to work) demonstrates that bus use is currently low - below 5%, compared to the national average of 8%, and has scope for significant increase (albeit the data is from the 2011 census).

Figure 2-2 - Gloucestershire, percentage of journeys to work by bus
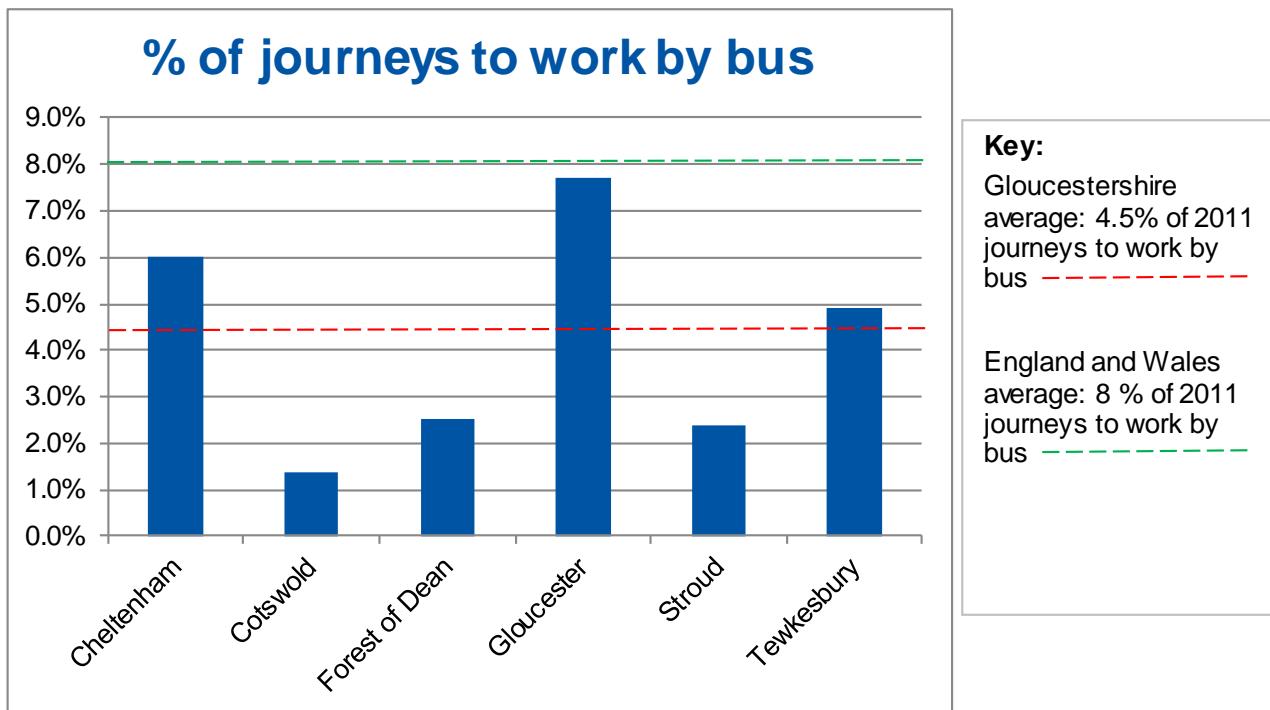
GCC are aware of the many challenges of providing a bus service fit for the future and that the challenge is multi-faceted. The tailoring of future bus services needs to be focused on aims and objectives that are stated within the BSIP. The challenges are linked to a number of key policy documents and specifically focussed on the carbon agenda and making the bus services as accessible and attractive to as many potential customers as possible. It also has a spotlight on enabling the less socially mobile and younger population to access both education and employment.

One of the challenges for the bus provision and future development of the public transport network is to operate efficient key corridors, which are then served by as many potential routes as possible whilst also providing the more rural areas of the network with a reliable and convenient service. It is also important to consider that the rail network primarily serves external trips in/out of the county, including London, Birmingham, Bristol and Cardiff. The route in from the west (South Wales) does provide some internal Gloucestershire trips, and the north Cotswold line covers a few locations in the north east of the county, but as a whole the rail network provides few links within the county and is not a competitor to the bus services. It would be better to consider the two modes as related whilst operating on different scales. Hence the goal is to use buses for shorter journeys, linking to the rail network for longer out-of-county journeys. It is therefore vital to improve the links to the rail stations and all potential interchanges.

There is extensive bus route coverage between Gloucester and Cheltenham. Specifically, along the two main corridors which run to the north and south of the A40, and are served by the main Stagecoach West flagship services 94 via B4063/Churchdown and 10 via A46/Shurdington respectively. The bus service frequency between the smaller towns (e.g. Stroud, Tewkesbury) is lower with limited evening and Sunday services whilst the route coverage of the surrounding villages and rural areas is low to non-existent, especially in the evenings and on Sundays (see Appendix B for rural urban classification of Gloucestershire districts).

The current bus network in Gloucestershire is provided almost exclusively by Stagecoach West (part of the wider Stagecoach Group) which has local depots in Gloucester and Cheltenham and subsidiary depots in Stroud and Ross-on-Wye for the operation of some of their longer distance services into Gloucester. Pulham

and Sons (Coaches) Ltd operate a service from Gloucester to Cheltenham centres via the two main town/city hospitals (Gloucestershire Royal and Cheltenham General) and Arle Court Park and Ride, as well as some other local services in the Cotswolds.

Prior to the COVID-19 pandemic the service network for Cheltenham and Gloucester was provided by the operators on a largely commercial basis with some local authority support to maintain and provide services on some of the less busy routes and/or at less busy times of day (typically evenings and weekends, although several routes and locations lack evening or Sunday services). Again prior to the COVID-19 pandemic, National Express ran coach services from Gloucester/Cheltenham to London and to other major cities in the South West and the Midlands/northern England via Birmingham. These also provided an alternative fast, local service between Gloucester, Cheltenham and Swindon. However, although some of the National Express services from Gloucestershire to London have resumed, their services to other cities have not.

The situation in Gloucestershire is one of a main provider, and two urban areas, surrounded by predominantly rural areas, with local providers. The urban areas house the majority of the employment and education, and hence are an obvious focal point for traffic, and particularly bus services. The BSIP intends to support an invigorated bus service, which can cope with the potential demands of increased patronage and better, more consistent journey times.

2.3. Gloucestershire's growth ambition

Gloucestershire is delivering or planning to deliver growth across the whole county. Tewkesbury, Gloucester and Cheltenham form the Joint Core Strategy (JCS) area, a coordination process for managing large scale growth across these areas. This sits on top of the localised growth that is recorded in the local plans of these areas. Outside the JCS, the Forest of Dean, Cotswold and Stroud also have considerable potential for growth, as outlined in the respective local plans. However, it is worth noting that the JCS and Stroud Local Plan are already under review, with the numbers of homes required likely to increase.

In total, Gloucestershire, with adopted 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. 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.

Given the substantial amounts of growth forecast for Gloucestershire, it is imperative that this growth is supported by sustainable infrastructure. Especially in the more urban areas of Cheltenham and Gloucester, 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. Gloucestershire's LTP clearly states that simply trying to increase highway network capacity will be neither possible nor affordable. The opportunity for old and new Gloucestershire residents to access comprehensive, frequent, reliable bus services is therefore a key feature of delivering growth.

As Gloucestershire takes strides to deliver against our 2050 vision it is imperative that sustainable growth is complemented by long-term, sustainable infrastructure. Being a magnet county means attracting a young work force. We know a young workforce is less interested in owning expensive, carbonising, fossil-fuel powered cars. We need to build on the significant work done already in the county to deliver affordable homes for them to live in, jobs and career opportunities and sustainable transport options.

Through the Enhanced Partnership and in cooperation with District Councils and other partners, Gloucestershire will seek to ensure its LTP ambition that new residential and commercial centres are located

on or close to the existing bus network as possible, such that they support and strengthen the commercial network, rather than dilute it[3].

2.3.1. COVID-19 recovery

The COVID-19 pandemic has had a major impact on bus passenger numbers and therefore revenue. At the height of government restrictions on movement and social distancing, bus service operators saw an average of a 90% drop in passenger numbers, impacting on fare income across commercial and subsidised services. This revenue shortfall has been temporarily bridged by the Department for Transport's (DfT's) Coronavirus Bus Service Support Grant (CBSSG) to bus service operators, and by GCC maintaining our English National Concessionary Travel Scheme (ENCTS) reimbursement payments at 90-100% of pre-pandemic levels. This was done to avoid large scale reductions in bus services. However, it is recognised that such support cannot continue indefinitely and while passenger numbers have generally recovered to around 60-70% of pre-pandemic levels, a strategy is required to assist the public transport network to ensure it both survives and thrives in a post-pandemic county. The most recent data for September 2021 shows that all passenger numbers are at 70% of pre-pandemic 2019 levels.

Traffic levels on local roads are back up to around -3%/+4% of pre-COVID-19 pandemic levels (up to 104%) yet many people are still homeworking. The ending of the COVID-19 restrictions on 19/07/21 and start of the school holidays had little effect on traffic levels. Some schools did not break up until part way through the week. The slightly changed pattern of reduced peaks and flatter distribution throughout day has generally remained, although the peaks are now increasing but are less pronounced than pre-COVID-19 levels. (The latest data from w/c 19/07/21) shows am and pm peak traffic levels at only 1% below the pre-COVID-19 normal, despite less commuting but possibly more by Single Occupancy Vehicles (SOVs) as people avoid car-sharing and public transport. Cycling levels are fluctuating but have gone up to 29% above pre-COVID-19 figures for comparable weeks (w/c 19/07/21 ATC figures) with a sustained increase despite rising vehicular traffic levels (although they are seasonally and weather-influenced).

As schools return full-time, school traffic levels need to be monitored - especially as the recent tendency has been for more car travel to schools as a result of parents avoiding public transport and school buses due to COVID-19 fears and messaging. School run traffic increases could cause even higher peaks around school times leading to increased congestion for buses and other issues.

National Highways monitors traffic flows (weekly, in arrears) on their roads and their latest figures to 22/07/21 show traffic flows now up to 106% of pre-COVID-19 levels everywhere on all NH's major roads. M5 traffic levels fluctuate between 98% and 113% of pre-COVID-19 levels.

Recovery from COVID-19 within the bus industry will depend on a successful BSIP and enhanced partnership agreement as a means of coordinating future public and private sector investment and development. Without this there is an extremely high risk that many bus services in the county will fail once government revenue support ends and, as a consequence, many residents will be left without a viable means of accessing education, employment, leisure activities and vital local services.

As an added challenge, bus service operators along with many other businesses, are currently facing severe staff shortages. This includes shortages of drivers and other operational staff (e.g. cleaners) which adversely affect the efficient operation of bus services and the resultant reliability and customer experience. There is now an increased risk that bus drivers may be enticed from the bus industry to become HGV drivers where HGV pay is being substantially increased. The BSIP seeks to recognise this issue and is highlighting staff/driver shortages and abstraction as a risk. This means that more funding may be needed for higher staff costs as pressure increases for higher wages in the bus industry to compete with the road haulage industry.

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[3] GCC LTP, p.50: www.gloucestershire.gov.uk/media/2108466/ltp-policy-document-final-v132.pdf

3. Policy context

DfT guidance requires that the BSIP should complement and incorporate existing transport projects and development strategies. In Gloucestershire these include a number of flagship public transport projects described in chapter 5, and tie in with existing policy within the Joint Core Strategy; other district local plans; Gloucestershire's Climate Change Strategy, Draft Industrial Strategy and the Local Transport Plan.

3.1. Gloucestershire's Local Transport Plan 2020 to 2041

Gloucestershire Local Transport Plan (LTP)[4] identifies 19 bus related transport schemes and provides detail on the council's existing strategy and policies with regards to the bus network, service quality, bus priority, community transport, information, climate change impact, investment, land use, behaviour change and many more aspects of travel. Gloucestershire's BSIP fully aligns with the LTP and will, through the enhanced partnership, build on these already agreed goals.

The LTP points out, that although car ownership levels generally exceed the national average, almost 20% of households in Gloucestershire do not own a private vehicle, and approximately a third of the population cannot drive. The LTP therefore recognises the role public and community transport services play in enabling communities to function. It also sees public transport at the centre of Gloucestershire's ambitions to reduce emissions. National data in 2018 showed that buses accounted for just **2.5%** of greenhouse 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.

The main public and community transport policies highlighted in the LTP are contained in its **Public & Community Transport Policy Document (PD1)**, one of a suite of policy documents embedded as an integral part of the LTP. Additionally, there are some overarching LTP policies in the **Overarching Policy Document (PD0).** The LTP policies which are particularly relevant to the BSIP are as follows:

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.

Policy LTP PD 1.2 – 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.

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.

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 within and into Gloucestershire.

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[4] GCC LTP; www.gloucestershire.gov.uk/transport/gloucestershires-local-transport-plan-2020-2041/County Council

Policy LTP PD 1.5– Community Transport and Voluntary Car Schemes

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

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.

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.

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.

Policy LTP PD 0.2 – 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.

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.

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 and Carbon Reduction Targets.

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.

Policy LTP PD 0.6 Thinktravel - Influencing Travel Behaviour Change

GCC will continue to use the 'Thinktravel' 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.

Each policy is supported by a list of detailed proposals that set out how the policy will be delivered. These are listed in full in Gloucestershire's LTP[5]. As an example for the Mass Rapid Transit, the following paragraphs are particularly relevant:

LTP – 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.

LTP – 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.

3.2.   Draft industrial strategy

In 2019, Gloucestershire Local Enterprise Partnership (LEP) published Gloucestershire's draft Local Industrial Strategy. It aims to protect and enhance the many positive features that make Gloucestershire a great place to live and work, to build upon and exploit those strengths, and to address the challenges we face.

For the urban core of Gloucestershire, the strategy identifies the need for a mass-transit transport solutions that provides a reliable, quick and clean link between Cheltenham and Gloucester as a key infrastructure investment priority.

However, the strategy also sees the distinct rural quality of the county as a clear asset while highlighting the limited availability of rural transport services, in part caused by infrequent or poor bus services in most rural areas. It expresses a clear ambition "to become a pilot area for innovative technology-driven transport solutions that work in rural areas"[6].

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[5] www.gloucestershire.gov.uk/media/2108466/ltp-policy-document-final-v132.pdf
[6] GFirst LEP 2019: Draft Gloucestershire Local Industrial Strategy:
www.gfirstlep.com/downloads/2020/gloucestershire_draft_local-industrial-strategy_2019-updated.pdf

3.3. Climate change strategy

Gloucestershire County Council (GCC) and all other Gloucestershire authorities each declared a climate emergency in 2019. In December 2019, the county council adopted the Gloucestershire Climate Change Strategy (GCCS) setting out key carbon reduction targets, the scale of the challenge, the type of action that needs to be taken to reduce emissions and a short-term action plan. Medium to long term actions are to be set out in a rolling five-year action plan.

The targets set out in the GCCS were for:

- the county council's own operational emissions to be net zero by 2030;
- emissions from all sources across the county to be net zero by 2050; and
- the county council to work with partners to deliver an 80% reduction in emissions by 2030, relative to 2005.

In 2020, GCC strengthened its targets by signing up to the UK100 Pledge[7], committing to reaching net zero emissions from all sources across the county by 2045. This target is reflected in Gloucestershire's fourth Local Transport Plan (LTP), adopted in March 2021.

The BSIP considers carbon reduction in two ways:

- **Public transport** – it is estimated that public transport vehicles in the county contribute around 1% to the total vehicle emissions in Gloucestershire; whereas private cars contribute around 55%. Whilst emissions can be reduced by upgrading the public transport vehicles operating on the network, the greatest scope to contribute to emission saving targets will be by getting people to use public transport more.
- **Vehicles** – the current fleet of vehicles on the Gloucestershire public transport network are diesel fuelled, ranging from older Euro 3 emission standard engine vehicles to newer Euro 6 which emit far fewer pollutants (e.g., nitrogen oxide and particulates). Discussions with transport service operators as part of the ULEV Strategy and BSIP work are vital to understanding ways to upgrade our public transport vehicles not just to the higher standard of engine, but to alternative fuels like electricity, compressed natural gas and biofuel.

Contributing to the reduction in Gloucestershire's emissions in both ways is a key aim of improving the transport offer and improving access for residents of the county.

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[7] UK Net Zero Targets: www.uk100.org/membership

4. BSIP public and stakeholder engagement

4.1. Engagement with bus and community transport operators

GCC has held meetings with all transport service operators in the county to discuss the Bus Back Better strategy, the BSIP and its role in public transport for the future. Key to the discussions were their ideas as to what barriers exist to growing the use of public transport, what areas we should be jointly focusing on to secure a sustainable future for bus services, and what opportunities are available to include in this BSIP development work.

The meetings also gave operators a chance to raise other issues and shape a significant part of the GCC's BSIP. Partnership working is at the heart of the Bus Back Better project and the BSIP is the first stage towards a fully agreed Enhanced Partnership with all transport service operators.

It is a requirement for GCC to consult with stakeholders prior to the submission of the Enhanced Partnership in March 2022. This will be done in full in a timely manner to both assess the responses, consider them for inclusion in the agreement and enable Cabinet to consider this feedback prior to GCCs submission of the Enhanced Partnership agreement to the DfT.

GCC is currently also gathering public feedback in other ways, i.e. via the transport focus passenger representative group, comments made to transport service operators and councillors, engagement sessions and the existing knowledge of officers with experience engaging with the public regarding transport.

After the BSIP and enhanced partnership agreement are finalised, public engagement will form a key part of GCCs public transport strategy going forward.

4.2. Views of passengers

A snapshot survey of passenger's views and potential for additional bus journeys took place in September 2021 via GCCs online engagement portal. This was specifically to gain views ahead of the BSIP. The headline figures from this new baseline data are as follows:

- 1,300 responses to the survey;
- 54% of the respondents used the bus weekly or more, 46% fortnightly or less so a spread of frequent and infrequent travellers;
- A spread of starting destinations for passengers across the county within the responses.

Over a quarter of all respondents used the bus daily, a further 16% use the bus more than twice a week and 11% use the bus weekly. This means over half of all respondents use a bus service of some description at least once a week.

c.66% of respondents identified as female. Whilst we cannot say how representative this is of bus passengers, it seems likely this is relatively reflective, and future surveys will need to consider whether bus operators are ensuring they are doing all possible to accommodate a predominantly female patronage particularly around issues such as safety.

Gloucester, Cheltenham and Stroud are all relatively similar scores in terms of the trip origin. Whilst the main purpose for most travellers is 'work, school or college'. This is followed closely by 'regular activities', and then 'entertainment/leisure/social'. What this indicates is that there is use of the bus network at all times and for multiple purposes. Therefore, services that offer use for all occasions are essential.

In terms of why respondents use the bus, neither 'most efficient travel choice' or 'Economic choice of transport' rated highly. Top choice was 'sustainable form of transport'. What this means is that passengers are knowingly taking the bus to support an ethical transport choice

Figure 4-1 - Frequency of bus use
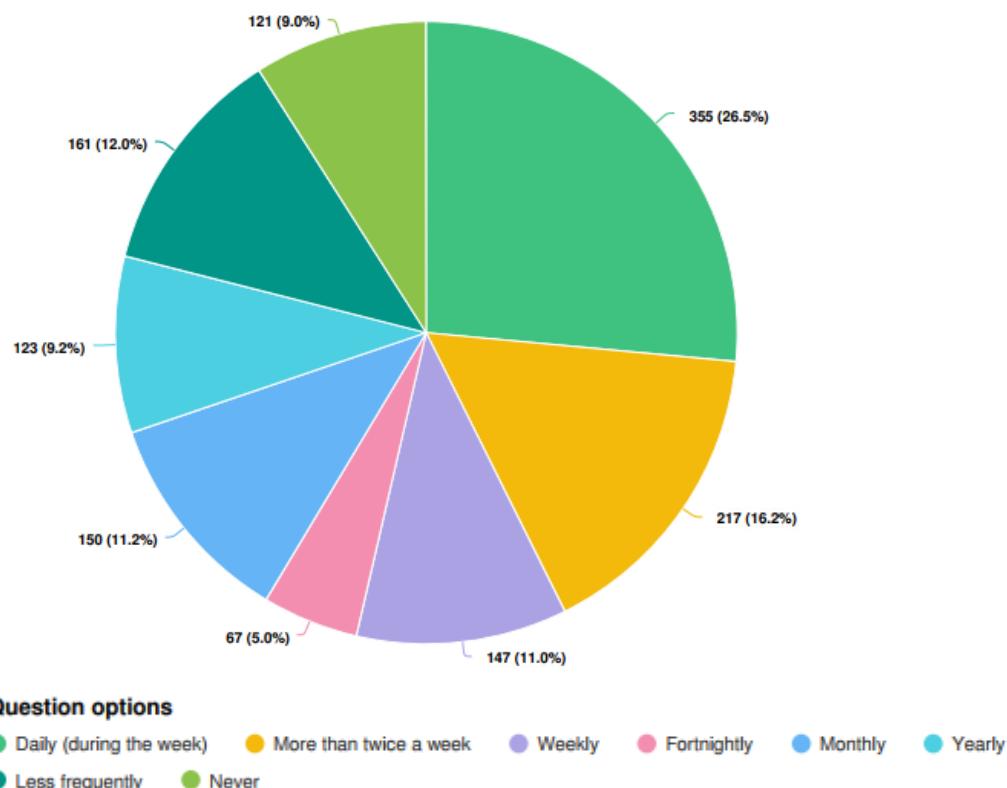
For the question of 'please tell us one main improvement which you would like to see to your bus service?' there were 864 responses. The key themes of these responses were as follows:

- Bus frequency is top, with 35% of respondents referring to topics including per hour frequency, and more weekend, peak time and evening services required;
- Reliability and punctuality - 25%;
- Routes – 19% - new routes and replacing removed routes and services;
- Lower fares – 7%;

Figure 4-2 - What one main improvement would you like to see to your bus service
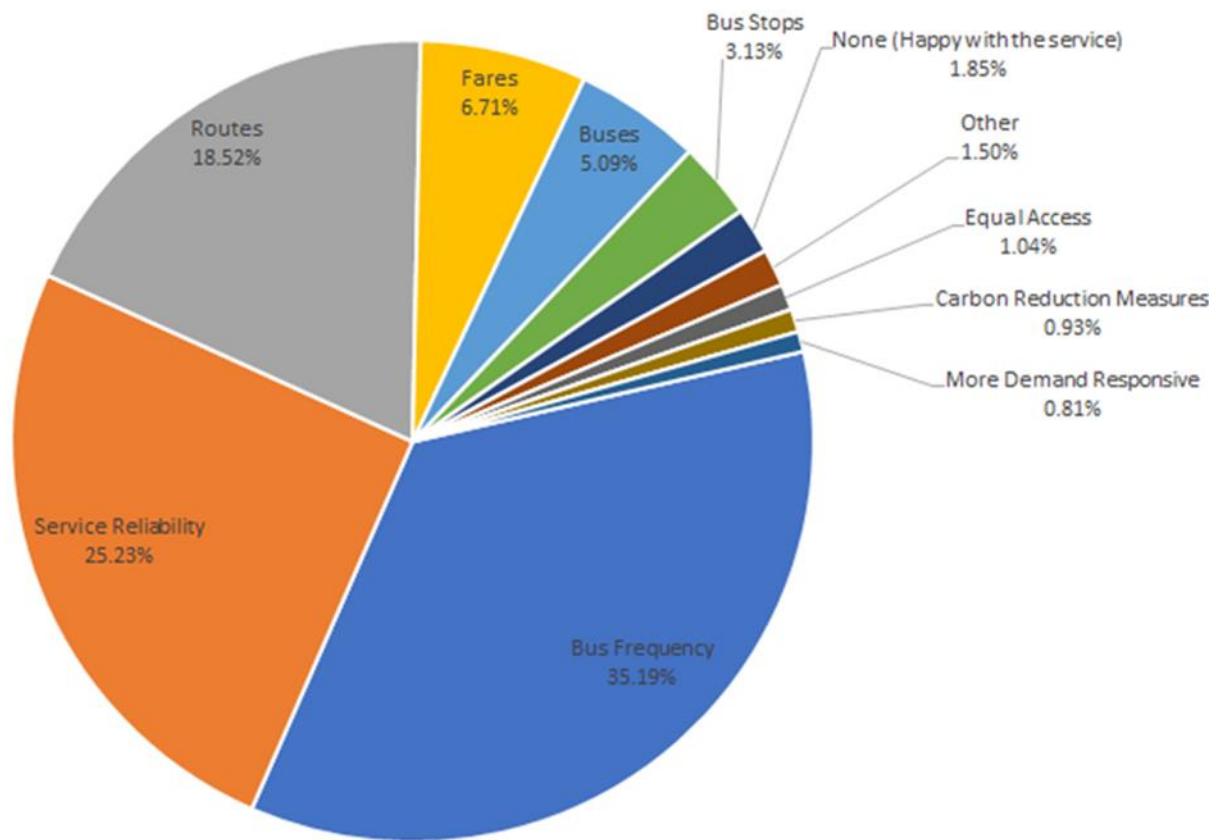
Passengers want their fare to be used to get them to their destinations in a reliable way. They want to be able to use the bus for all of their journeys, rather than only be able to travel during certain times. The push for modern vehicles is important, but it is less valued by survey respondents, if compared to other topics like frequency, reliability and better hours. Fares are relatively low scoring. What this data does is provide a focus for our interventions and improvements. It is clear the BSIP needs to focus on frequency and reliability, backed up with the right routes for the county.

5. Delivering public transport progress

GCC has been able to attract significant funding to deliver some of the changes needed to make public transport the attractive travel choice it needs to be, and so that Gloucestershire can achieve its climate change targets and the ambitions set out in Gloucestershire's LTP, and this BSIP. This has resulted in a number of flagship projects listed below.

5.1.   Arle Court Transport Hub

GCC are currently progressing the planning application and plans for a transport hub at Arle Court (currently the park and ride site). The aims of the estimated £20m Arle Court Transport Hub (ACTH) are broadly as follows:

- Improve connectivity within, to and from the west Cheltenham area for sustainable transport as people look for alternatives to cars
- Improve connectivity to enable more journeys to central Cheltenham, Gloucester, the railway station and the hospitals by sustainable modes of travel for example bikes or e-scooter
- Provide a regular, reliable transport solution that will reduce unnecessary car journeys into central Cheltenham
- Offer electrical charging points to those that use it and pleasant waiting area.
- Offer opportunities for other services; such as delivery points, a café, bike mechanics and more.

Figure 5-1 – Arle Court Transport Hub improvements

The planning application for Arle Court Transport Hubs anticipated in autumn 2021, with a plan to start on site in 2022 (subject to planning). More information on this project can be found here:
www.gloucestershire.gov.uk/highways/major-projects-list/arle-court-transport-hub/

5.2.   Mass Rapid Transit study

Central Gloucestershire needs far better connectivity, far greater decarbonisation and far less reliance on car journeys. These issues all point to the need for a mass transit system to deliver economic, environmental and efficiency benefits to residents and businesses in the Central Severn Vale.

Mass transit refers to new types of urban-specific transportation, including bus rapid transit (BRT), light rail transit (LRT) (most commonly trams) and very/ultra-light rail (V/ULRT). These are all (mostly) segregated transport systems designed for urban areas. They are relatively inexpensive compared to constructing heavy rail lines but are more efficient/reliable and are designed to transport greater numbers of people than standard bus services.

The need for greater connectivity between Cheltenham and Gloucester was identified in the Gloucestershire 2050 vision. The concept of introducing a mass transit system in central Gloucestershire was then introduced in the draft Gloucestershire's Industrial Strategy (2019) and further developed in the recently adopted LTP (2020-2041) which also identified a potential mass public transport area.

The benefits of a mass transit scheme in Gloucestershire are substantial:

- **Reduces CO2 and air pollution:** the development of mass transit has been identified as a key intervention to address the climate emergency declared by all Gloucestershire councils in 2019 and aims for carbon zero by 2050 and an 80% reduction by 2030, but work needs to happen at pace to see benefits by 2030.

- **Reduces congestion and supports the local economy:** mass transit is key to encouraging modal shift away from private vehicles, thus reducing congestion. Greater connectivity in urban areas is also central in attracting investment and accommodating sustainable future growth in central Gloucestershire.

- **Increases access to jobs, education and services:** mass transit provides a step change in public transport provision through providing high levels of segregation and connection with other transport modes. This will increase travel opportunities for all and increase access to employment, education and other services.

- **In line with recent government announcements and future funding intentions:** In its Bus Back Better strategy, the UK Government has made a clear commitment to improving public transport services in the UK. A mass transit scheme would be integrated with the wider programme of GCC schemes, including the developing Bus Service Improvement Plan (BSIP). This also closely aligns with the DfT's statement about funding a 'Belfast-style' mass transit system in the Bus Back Better document.

- **Social benefits:** reduced congestion and greater connectivity and inclusion will result in improved mental and physical health and wellbeing and an improved public realm.

5.3. Rural Mobility Fund

Gloucestershire is a largely rural county and 29% of Gloucestershire's population live in rural areas [8]. Rural areas are facing different transport challenges to urban areas and are often more difficult to service with conventional bus services. GCC has been successful in attracting £1.3m Rural Mobility Fund funding to introduce a Demand Responsive Transport (DRT) project in two trial areas of the county.

The project will provide a flexible transport offer providing access to local service centres, education and health providers. It will link into commercial public transport services at new transport interchange hubs in line with the policies and ambitions on the creation of local transport interchange hubs expressed in Gloucestershire's LTP. This will further expand destination choices and link to rural and urban centres further afield.

The trial covers two areas. Pilot area 1 is the south Forest of Dean, where 95% of the population live in a rural environment and project will provide increased accessibility covering an area approximately 260km^2 from the A40 to the north of the area to the B4228 to the west. It will provide two vehicles.

Pilot area 2 is north east Cotswolds. The Cotswolds is the largest of the 46 Areas of Outstanding Natural Beauty (AONB) in the UK. The north east Cotswolds pilot will cover an area approximately 360km^2 with the A40 acting as the southern extent. The project will provide two vehicles.

The BSIP is seeking funding to expand this service across other areas of Gloucestershire, to make it into a corner stone for our vision to deliver accessible public transport for all residents. It is important to note that this it to complement improving evening and Sunday service levels for the rural areas which is a key ambition of the Enhanced Partnership and BSIP in recognition that the demand responsive proposals have to work together with improved scheduled services. The full extent of the ambition for improving rural mobility is dependent on receiving the full level of funding request for the BSIP.

Figure 5-2 – Demand Responsive Transport (DRT) pilot areas

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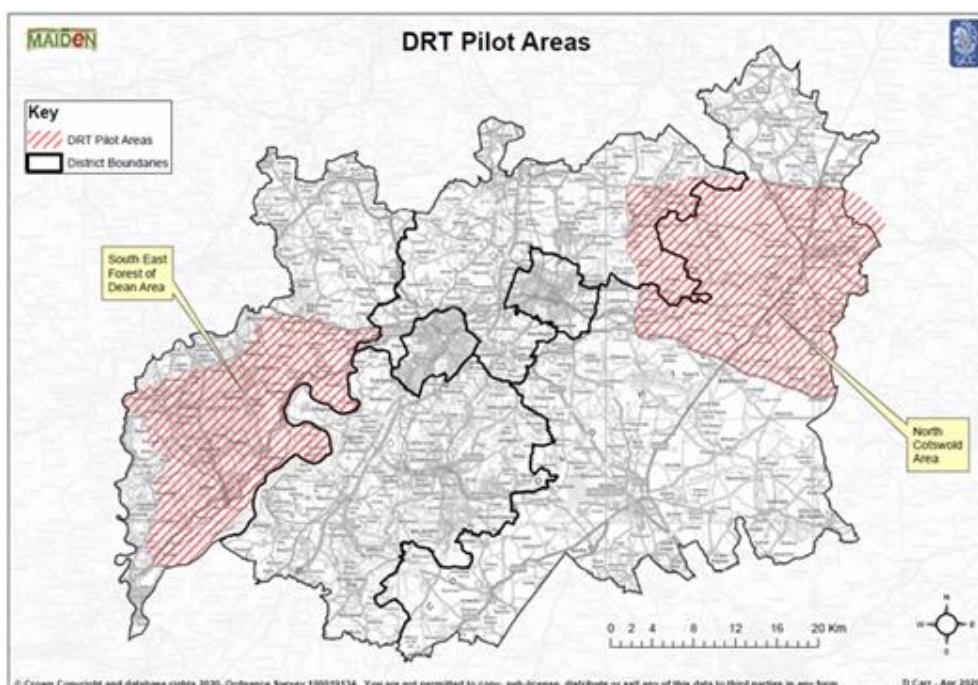
[8] GFirst LEP 2019: Draft Gloucestershire Local Industrial Strategy:
www.gfirstlep.com/downloads/2020/gloucestershire_draft_local-industrial-strategy_2019-updated.pdf

6.   Current bus service provision

This section describes the bus service offer in Gloucestershire, assesses its quality and suitability for Gloucestershire residents, and analyses the impact of background highway and socio-demographic conditions on buses. At a number of points, it refers to the BSIP baseline evidence base which addresses these issues in detail. The full baseline data is included as **Appendix A**.

6.1.   Operator context

Figure 6-1 below displays the spatial distribution of bus operators within Gloucestershire[9]. The analysis only considers operators which have at least one service per hour during the Monday morning peak, finding that there are 11 operators within Gloucestershire.

Figure 6-1 - Bus operators within Gloucestershire (January 2020)[9]

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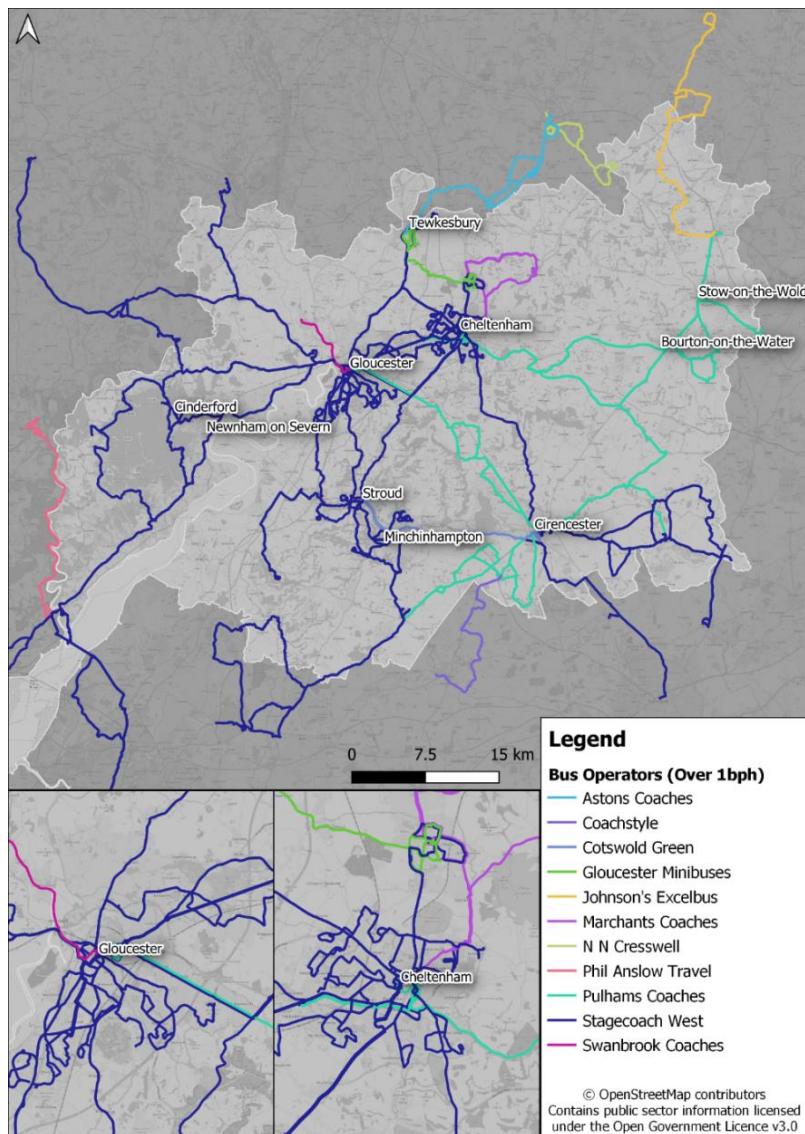
[9] Basemap (2021), Datacutter bus routes for January 2020

Stagecoach West currently has the greatest coverage within the area and provides the majority of the services in the south, west and centre of the county. To the east of Gloucestershire, Pulhams Coaches offer a significant number of services, alongside some smaller operators who operate in the north of the local authority area. Community transport and voluntary services are critical in the rural areas of the county, and will continue to be supported through the BSIP.

When considering Cheltenham and Gloucester specifically, it is evident that Stagecoach West is the prevalent operator within the towns. Issues affecting operators in Gloucestershire can therefore differ and may depend on whether their operation is focused on a more urban or rural setting.

BSIP outcome: Improve engagement and create a closer working relationship with all of Gloucestershire's Bus service operators.

6.2. Bus service frequency and support

Figure 6-2below provides a breakdown of bus services and their frequencies in Gloucestershire. It shows that services with a frequency of more than two buses per hour are concentrated in the urban areas. Other services are regular but relatively low frequency. Conversely this map also highlights those parts of the county where infrequent services operate and reliability may be a factor in explaining why people do not choose to use the bus.

Figure 6-2 - Bus routes in Gloucestershire by frequency of service
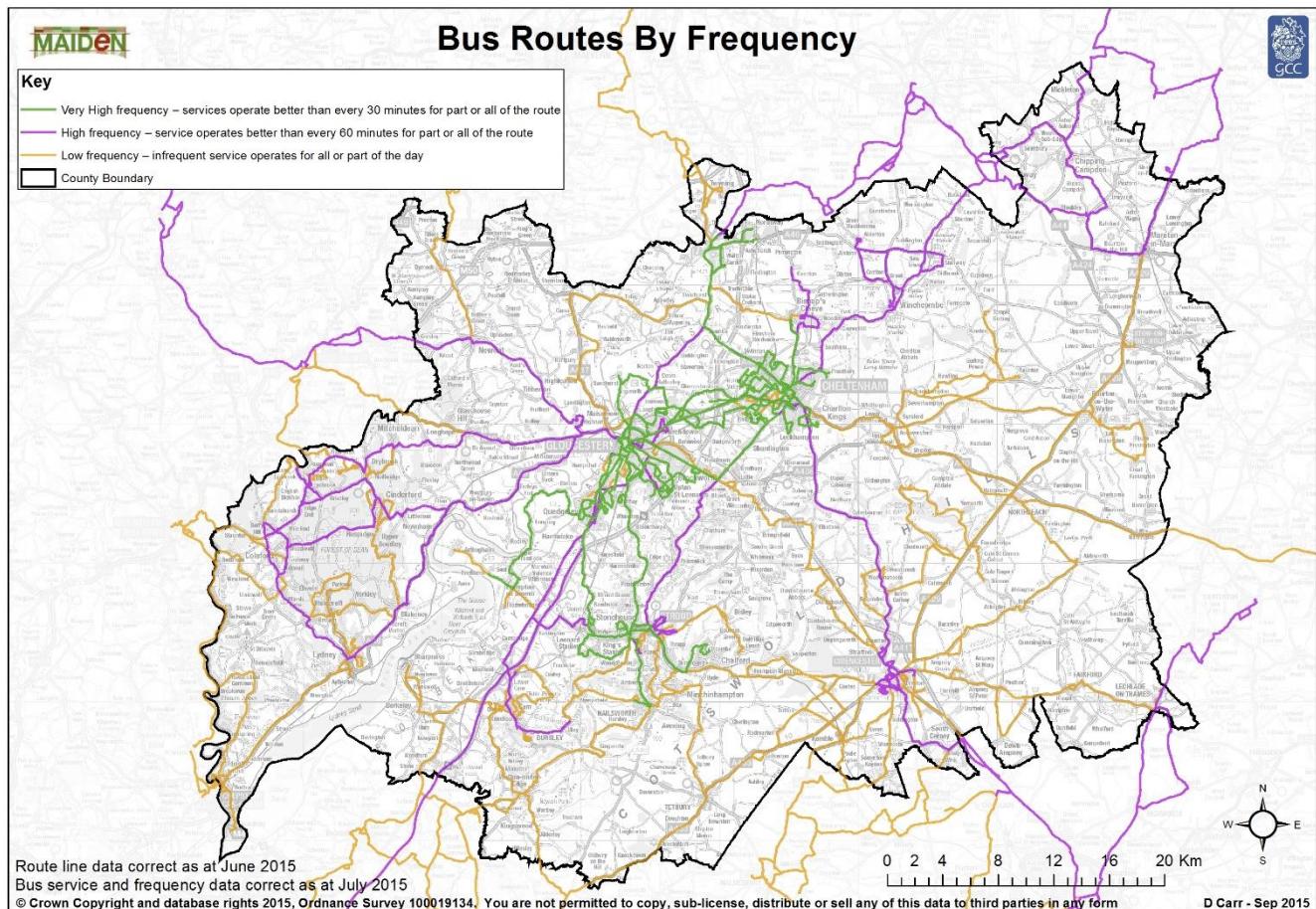
Note that the main operator is Stagecoach – for the last four months pre-COVID-19 (September to December) the total vehicle kms for Stagecoach services (commercial) was just under 1 million, 960,306 vehicle kms per month.

It is noted that bus service frequency and supply was a key response in terms of priority from the BSIP survey. The challenge for the County in terms of the supply is to serve both the corridor core services provided by Stagecoach and the rural services, which include demand responsive services, dial-a-ride, community transport etc.

BSIP outcome: deliver an increase in bus service frequencies. This should provide an hourly bus service minimum on most routes (at peak times), and significantly more frequency on the core urban network where we are aiming for there to be a perception of a 'turn up and wait' bus service. Seek funding to expand the Demand Responsive Transport (DRT) scheme to all areas of the county.

6.2.1. LTA financial support for bus services

The public transport offer in Gloucestershire can be broadly split into two parts; a) the commercial network that operates without direct local authority subsidy, and b) the publicly subsidised network. Currently GCC invests approximately £3.5m annually in subsidy of public and community transport services focused on mainly rural areas where a bus service does not appear to be commercially viable, along with off-peak services in urban areas. GCC also spends over £6m annually reimbursing bus service operators for their acceptance of the English National Concessionary Travel Scheme (ENCTS), a free bus pass scheme for those who qualify on the grounds of age or disability.

The financial support that GCC provides is shown below for bus subsidy, split across the districts. This is in addition to the circa £6.1m fed in to the bus services from the ENCTS (English National Concession Travel Scheme).

Table 6-1 - Gloucestershire County Council Financial Support (2021/2022)

Description	Annual Value	Funding Source
Cotswolds District Council	£1,022,030	Bus Subsidy
Tewkesbury Borough Council	£585,219	
Cheltenham Borough Council	£319,551	
Gloucester City Council	£461,034	
Stroud District Council	£781,382	
Forest of Dean District Council	£828,511	
	£3,997,727	

6.3. Bus fares

A detailed breakdown of bus fares within Gloucestershire are within Appendix A of the BSIP. It highlights the range of fares available within Gloucestershire, displaying a complex fare structure which is dependent both on the operator and the individual route. In terms of key bus operators, Stagecoach West dominates the market, providing the largest variety in ticket type and location.

It is imperative that any fare incentive or promotion from the BSIP is clearly a 'kick-starting' initiative, and will require leverage from the bus operators, as well as a clear commitment to continue the scheme in the medium to long term.

The analysis also suggests that Tewkesbury and Cirencester have access to the cheapest fare prices however, people in these towns are limited in what tickets are available, with no access to Evening Rider tickets, monthly or week-long tickets (Cirencester only). Bus fares within the Forest of Dean are the highest in Gloucestershire. In general, people in rural areas with greater distance to travel are charged more than people in urban areas.

When considering ticketing for children, the immediate complexity lies in the ambiguity of the definition of who is eligible for a child's ticket. Stagecoach West considers those under the age of 16 to be eligible for children's tickets, whereas Community Connexions and Pulhams Coaches offer no such information. In the more rural areas that Community Connexions serve, children's fare prices are noticeably reduced; in some cases, by 50% in compared to adults. In urban areas, the comparison between child fares and adult fares can be extrapolated using Stagecoach West data.

Within Gloucestershire, GCC also provides the statutory minimum concessionary travel for the following groups:

- People of pensionable age; and
- People who are disabled and/or cannot drive for medical reasons.

Overall, the current fare structure for all ages within Gloucestershire could be seen as complicated and difficult to understand. Stagecoach West provides sufficient coverage to urban areas, whereas a wide variety of operators provide coverage to rural areas. These operators have variable ticketing across the space and as such, can be difficult for passengers to easily understand how much it will cost to travel within the county. Due to the lack of competition in urban areas, passengers are offered little choice in terms of price. This, alongside the confusing nature of cost in rural areas, creates a barrier between the public and bus services within Gloucestershire. People may not feel confident in understanding the cost of travelling by bus or may find it too expensive when having to complete a journey across multiple services, or it may not even be clear how to travel to relatively nearby locations that traverse multiple bus services.

The consultation exercises undertaken as part of the BSIP development also clearly indicate that both operators and users (from the initial engagement survey) feel that simplification of fares is required, and that the feasibility of fare capping should be considered especially on the most expensive routes and where journeys require using a combination of operators.

The work undertaken for the BSIP also identifies a need to make fares more affordable for under 25's.

BSIP outcome: integrate and simplify fares and seek funding to introduce fare capping and U25's reduced ticket promotion. BSIP initiatives on fares will be a 'kick-start' subject to clear operator long term commitment.

6.4.   Bus passenger information

Information enables people to make decisions about how and when they travel. It is accepted that a key driver in increasing bus usage is improving the ways in which passengers access bus timetables and information, with this increasingly moving on to mobile portals and information systems.

Extensive information is available on internet channels across the UK: Traveline, Google maps, and a variety of open-source websites such as Citymapper. Currently GCC bus information is available on the county's' website with links to Traveline. However, there are also still significant challenges. For example, there are still many small, independent, bus services which do not have fare information readily available, for example because the bus operator does not have a website.

BSIP outcome; work with bus operators to ensure that simple high-quality, real time information is provided for passengers at bus stops as well as via journey planning websites or apps including the roll-out of AV/display announcements.

6.5.   Bus fleet

The current fleet of vehicles on the Gloucestershire public transport network are diesel fuelled, ranging from older Euro 3 emission standard engine vehicles to newer Euro 6 which emit far fewer pollutants (e.g., nitrogen oxide and particulates). Discussions with transport service operators as part of the ULEV Strategy and BSIP work are vital to understanding ways to upgrade our public transport vehicles not just to the higher standard of engine, but to alternative fuels like electricity, compressed natural gas and biofuel.

The fleet can be split into those provided by Stagecoach, the vehicles provided by smaller operators and lastly the Community Transport fleet. Stagecoach is aspiring to Euro 6 standard on all of their routes (where currently of 200 vehicles 83% are Euro 5 or higher, and 31% of those are Euro 6). Stagecoach is also exploring other options for fuel in the future, including Bio-Methane and Compressed Natural Gas (CNG). At present, electric vehicles look to be prohibitively expensive without government funding and the technology behind hydrogen vehicles is unproven.

For the smaller operators, bus investment is a key barrier and major cost, which is why some operators rely on leasing vehicles so that they can be Euro 5/6 compliant. GCC will consider purchasing their own vehicles and lending back to operators for the length of contracts. A model for GCC owned vehicles is currently being trailed through the Rural Mobility Fund.

BSIP outcome: work with bus operators towards all vehicles achieving Euro standard by 2025, carbon neutral bus fleet by 2035.

6.6.   Bus priority measures

Journey time and bus service reliability are a constantly recurring theme in bus service operator consultation processes as the main barriers to growth. Congestion in urban areas can severely impact the reliability of bus services; it extends journey times and means commercial investment tends to be an attempt to maintain service frequency in the face of increasing congestion rather than improving the service.

The map overleaf shows congestion hotspots highlighted by Stagecoach to GCC, as a partner to the BSIP. GCC would agree with the issues raised.

Figure 6-3 – Stagecoach's Top 25 congestion hotspots
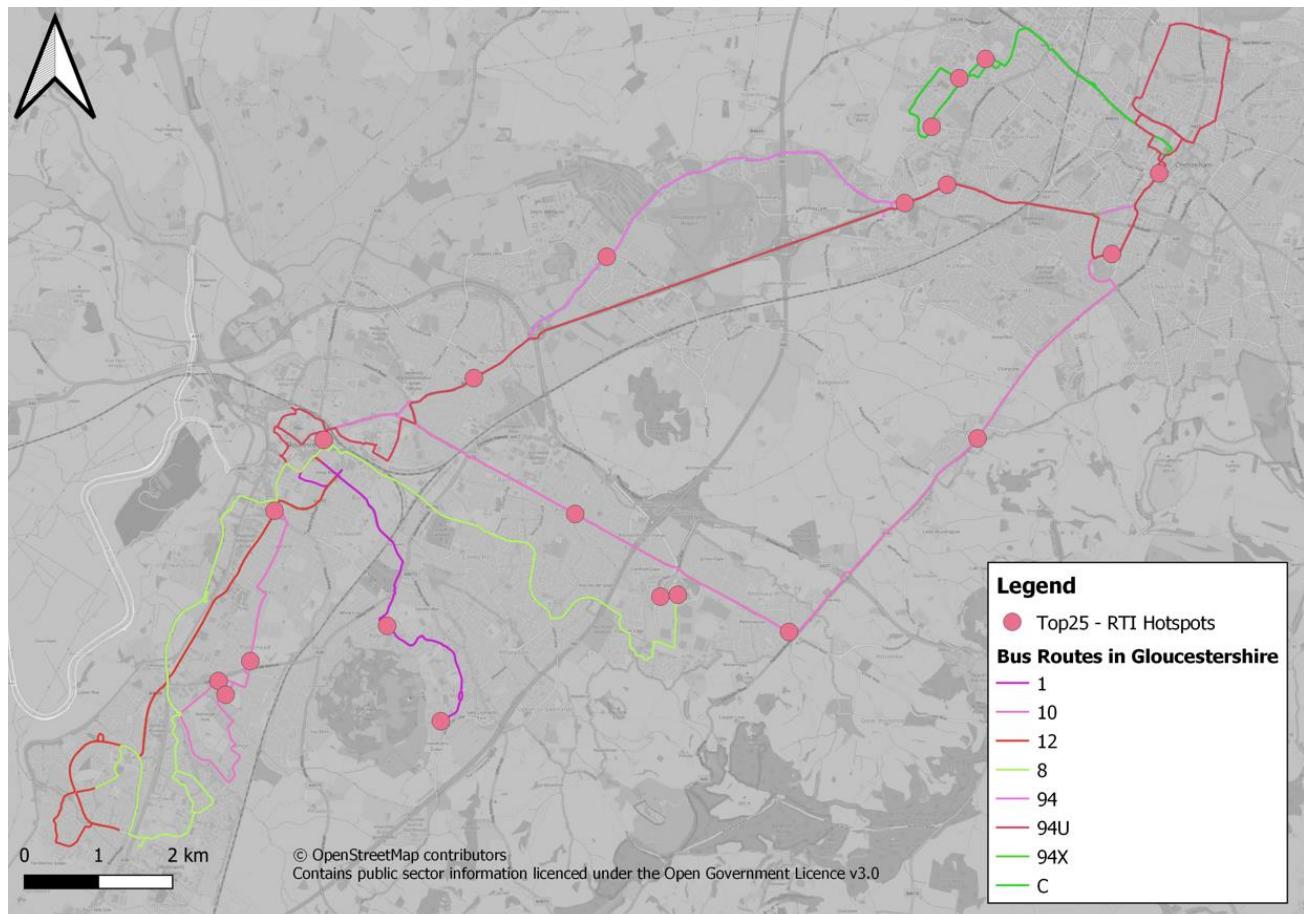
In order to develop the 'spoke and hub' model further, where the demand responsive and less frequent services feed in to the core commercial network, the core bus routes need to have significantly improved journey times and reliability. The hub network is in effect where the express bus services will be connected to the more rural buses - also to be increased by the expansion of demand responsive services. In the long term, express bus services could also connect to the Central Severn Vale Mass Rapid Transit scheme.

BSIP outcome: work with bus service operators to scope and cost schemes to deliver faster journey times and a more reliable journey, particularly in urban areas. Mass Rapid Transit development is progressing at pace, and is aligned to programme management outcomes.

6.7. Passenger satisfaction

The autumn 2019 Transport Focus bus passenger survey[10], provides a range of passenger satisfaction results which are benchmarked against the local context over the previous two years and against operators nationally through 2019. Data is also available for 2018 and 2015, and has been included for comparison to show passenger perceptions over time. The aim is to increase customer satisfaction and exceed the national average.

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[10] Bus-passenger-survey-autumn-2019-main-report.pdf

Please note that data for 2017 is unavailable on the transport focus website, and 2016 data only shows Gloucestershire data combined with the west of England area making it not directly comparable.

6.7.1. Overall satisfaction

The overall satisfaction for Stagecoach services in Gloucestershire is high at 90%, with only 3% dissatisfied or very dissatisfied. As shown **Figure 6-4** in this is only slightly lower than the UK average and the UK median results showing room for improvement, but it is trending downwards.

As shown in **Figure 6-5**, since 2015 Gloucestershire has seen a 1% drop in overall satisfaction compared with a 2% rise nationally. Within the 90% overall satisfaction, Gloucestershire has however seen a drop of 8% of very satisfied and a rise of 7% of satisfied, showing a potential shift toward passengers being overall less satisfied despite the consistent collated figure.

Figure 6-4 - Overall Satisfaction, Gloucestershire vs UK 2015-2019
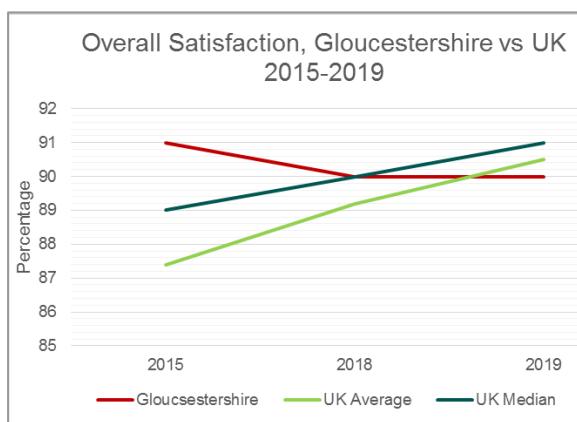
Figure 6-5 - Overall Satisfaction in Gloucestershire 2015-2019
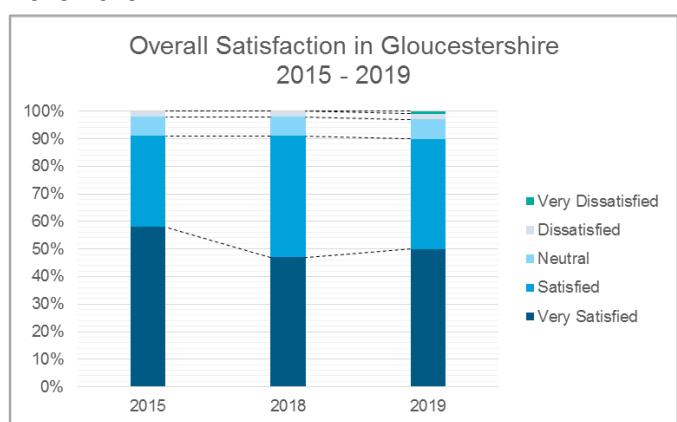
Table 6-2 - Overall Satisfaction

	Very Satisfied (%)	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	Very Satisfied & Satisfied (%)		
						Gloucestershire	UK Average	UK Median
2019	50	40	7	2	1	90	90.5	91
2018	47	44	7	2	0	90	89.2	90
2015	58	33	7	2	0	91	87.4	89

6.7.2. Satisfaction with value for money

Passenger satisfaction with value for money is low at only 58% and as shown in **Figure 6-6** GloucestershireError! Reference source not found. has seen a significant fall from 2015 to 2019. It is still ignificantly better than the lowest UK result (41%), but well below the UK average and median. This change in Gloucestershire is not reflected nationally where the average and median rates are relatively consistent. The highest result nationally is 81%.

As shown in **Figure 6-7** Gloucestershire has seen a significant drop in overall satisfaction with value for money of 11%, this is backed up by a 10% drop in very satisfied passengers and a rise from 14% to 21% in overall dissatisfaction – though it should be noted that the proportion of very dissatisfied passengers has dropped 5%.

Figure 6-6 - Satisfaction with value for money

Satisfaction with Value for Money, Gloucestershire vs UK - 2015-2019
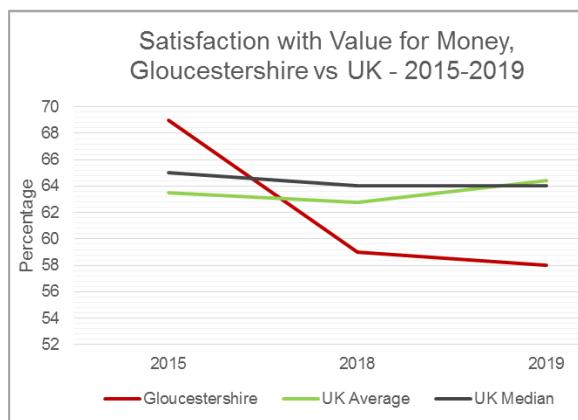
Figure 6-7 - Satisfaction with value for money in Gloucestershire (2015-2019)

Satisfaction with Value for Money in Gloucestershire 2015-2019
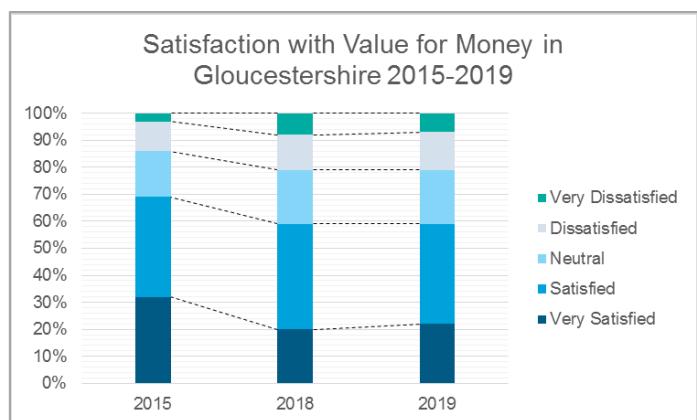
Table 6-3 – Satisfaction with Value for Money

	Very Satisfied (%)	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	Very satisfied and satisfied (%)		
						Gloucestershire	UK Average	UK Median
2019	22	37	20	14	7	58	64.4	64
2018	20	39	20	13	8	59	62.8	64
2015	32	37	17	11	3	69	63.5	65

6.7.3. Satisfaction with punctuality

The overall satisfaction with punctuality for Stagecoach is good but shows there is room for improvement. As shown in **Figure 6-8**, at 82% it is significantly higher than the UK average and median.

As shown in **Figure 6-9**, satisfaction with punctuality has remained relatively consistent for Gloucestershire between 2015 and 2019, though a significant drop was seen locally in 2018 before returning in 2019.

Figure 6-8 - Satisfaction with punctuality, Gloucestershire vs UK

Satisfaction with Punctuality, Gloucestershire v UK - 2015-2019

Figure 6-9 - Satisfaction with punctuality in Gloucestershire (2015-2019)
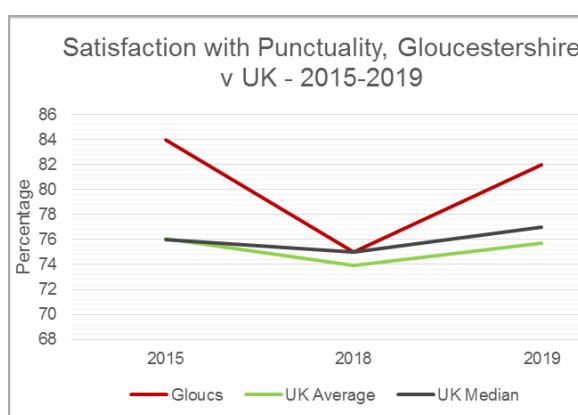
Satisfaction with Punctuality in Gloucestershire 2015-2019

Table 6-4 – Satisfaction with Punctuality

	Very Satisfied (%)	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	Very Satisfied & Satisfied (%)		
						Gloucestershire	UK Average	UK Median
2019	51	31	9	4	5	82	75.7	77
2018	43	32	11	8	6	75	73.9	75
2015	55	29	10	3	3	84	76.1	76

6.7.4. Satisfaction with on bus journey time

As with punctuality, on bus journey time is a good result for Stagecoach Gloucestershire, and only 3% are dissatisfied or very dissatisfied. However, at 84% this is 2% lower than the UK average and median and has seen a significant drop from 2018 to 2019. This indicates that traffic congestion was generally not causing significant dissatisfaction with journey time. Again, as with bus punctuality, on bus journey time has remained relatively consistent, though has seen a slight drop locally, though the proportion of very satisfied, has dropped significantly (11%), suggesting an overall shift toward less satisfaction.

Figure 6-10 - Satisfaction with on bus journey times in Gloucestershire vs UK
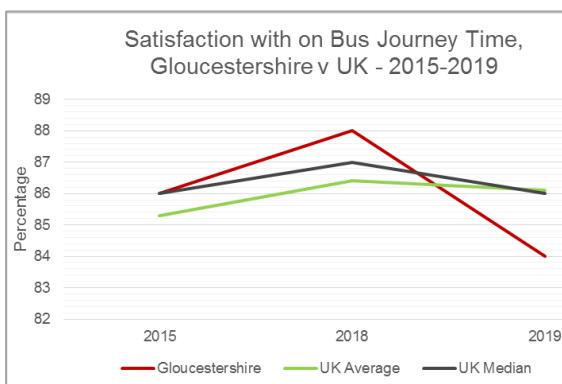
Figure 6-11 - Satisfaction with on bus journey time Gloucestershire (2015-2019)
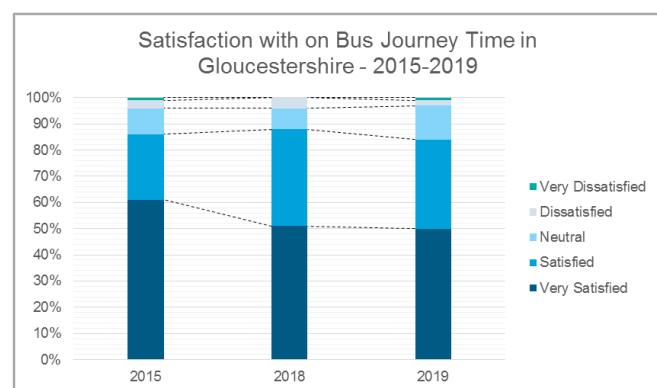
Table 6-5 – Satisfaction with on bus journey time

	Very satisfied (%)	Satisfied	Neutral	Dissatisfied	Very dissatisfied	Very Satisfied & Satisfied (%)		
						Gloucestershire	UK average	UK median
2019	50	34	13	2	1	84	86.1	86
2018	51	37	8	4	0	88	86.4	87
2015	61	25	10	3	1	86	85.3	86

BSIP outcome: Maintain high passenger satisfaction results and achieve a 50% increase in passenger satisfaction with regard to value for money and punctuality

6.8.   Bus service integration with other modes

It is important to consider that the rail network for the county primarily serves external trips in/out of the County, including London, Birmingham, Bristol and Cardiff. The route in from the west (South Wales) does provide some internal Gloucestershire trips, but as a whole the rail network does not provide links within the County and is not a competitor to the bus services.

It is however critical that the links to the railway stations by bus are improved significantly. Important stations for bus/rail links are Kemble (for Cirencester and links between the two), Stroud, Stonehouse, Lydney and Ashchurch (for Tewkesbury).

In order to provide an attractive alternative to cars, sustainable modes of transport need to seamlessly integrate into a holistic transport offer that enables people to complete each trip or trip stage with the most convenient mode of transport that best suits their individual needs. We therefore aim to integrate Gloucestershire's bus network with demand responsive services in rural areas, through the provision of interchange hubs. Where people can change from a demand responsive option to more mainstream bus services. We will also consider our strategic cycle corridors and make sure that bus stops located near these provide adequate cycle and e-bike parking.

BSIP outcome: improve bus – rail connectivity and deliver a system of transport interchange hubs across Gloucestershire to integrate regular bus services with demand responsive services and other modes such as rail, bike, e-bike and cars (dependent on interchange size).

6.9.   Parking within the urban areas and link to public transport

6.9.1.   Parking overview

The relationship between parking and use of public transport is accepted by GCC, and that the impact of adding permit zones for example, can impact significantly on bus use. GCC have a comprehensive set of maps that show the existing permit zones, which are located predominately in Cheltenham and Gloucester.

Full permit zone details and maps can be found on the link:
www.gloucestershire.gov.uk/highways/parking/parking-permits-and-zone-maps/

An interactive map can be found on the link:
www.gloucestershiretraffweb.co.uk/main.html

6.9.2.   PCN Issue and street parking income

As supporting information, information is included below from the GCC Parking Annual Report (2019/2020), with regard to compliance and on-street parking and expenditure: gcc_3154-parking-annual-report-2019-20-final-02032021.pdf (gloucestershire.gov.uk).

Figure 6-12 - Countywide on-street/off-street PCN issue and % of PCNs paid (2019-2020)[11]
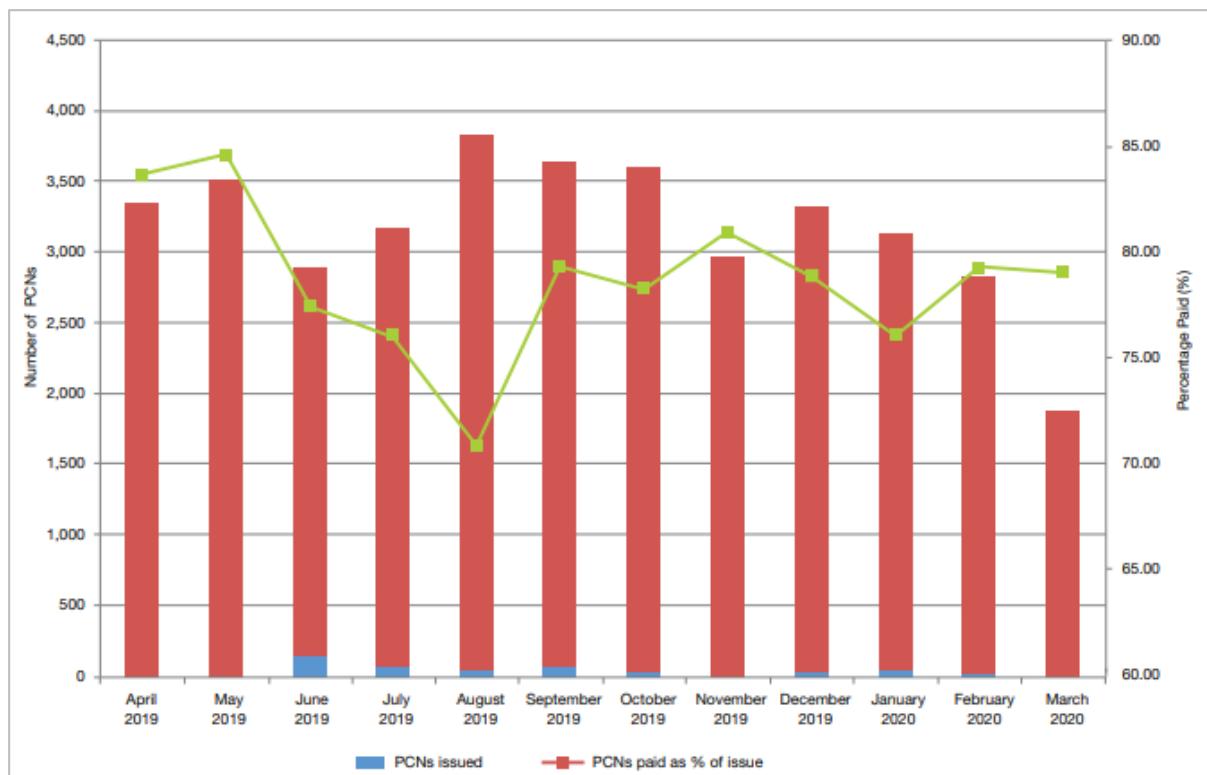
Figure 6-13 - On street parking income and expenditure (2019-2020)[12]

	£'000	£'000
Income		-6,173
Expenditure		
Employee Related	320	
Premises Related	3	
Transport Related	20	
Supplies and Services	128	
Third Party Payments	2,256	
Support Services	0	
Depreciation & impairment	46	
Inter GCC Transfers	9	
Reserve Movements & Gen F	-150	
Capital Financing Costs	150	
Central Support Recharge Elements	68	
		2,850
Net Income		-3,323

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[11] GCC Parking Annual Report – Civil Parking Enforcement in Gloucestershire 2019-2020
[12] www.gloucestershire.gov.uk/media/2106172/gcc_3154-parking-annual-report-2019-20-final-02032021.pdf

7.   Headline targets

The targets for the BSIP are related to:

- Journey times – 10% reduction on all journey times across the County;

- Reliability – 5% improvement in reliability;

- Passenger numbers – 10% increase from pre-COVID-19 levels by 2025 – when taking into account that current bus patronage is 30% down due to COVID, this represents a 40% (30% + 10%) increase from current levels;

- Average passenger satisfaction – 10% increase in overall passenger satisfaction by 2025 (Transport Focus Survey)

7.1.   Journey times

7.1.1.   Target Development

We estimate an average journey time saving of an approximate 10% reduction across the County, as a result of implementation of bus priority and other traffic management measures for the urban areas.

We will review the target as design work on bus priority and traffic management measures proceeds, and as the team gains a more in-depth understanding of the scope for journey time improvements.

It is anticipated that the journey time improvement will be split according to the location, and urban and rural routes. Service 94, as an example, can vary currently from 50 minutes peak running time to 35 minutes off peak, and it is essential to close this differential. For all services as a whole, the aim is for vastly improved predictability of running times, and headline reductions of 10% or higher.

7.1.2.   Journey time monitoring

We propose to measure performance in two ways:

- Analysis of bus scheduled journey times within the Gloucestershire boundary; and

- Analysis of real-time data from bus operators, both including and excluding bus stop dwell times.

In addition, it is proposed to monitor the journey times for both buses and cars on the B4063, where the key 94 service runs and GCC is also making changes for the cycling provision from Gloucester to Cheltenham. It is important to understand the effects of bus priority on bus journey times in the context of the change in car journey times, in response to changes in traffic volumes and other capacity effects on the highway network. The 94, although only a single route, would provide a valuable comparison on a key transport corridor.

7.2.   Bus journey time reliability

7.2.1.   Target development

According to the DfT definition of high frequency services (at least six buses per hour), the flagship Stagecoach routes in the county (10 and 94) are high frequency in the core periods with up to seven buses per hour. Note there are other services from Stagecoach which are at times meeting this frequency, including Cheltenham Services A,D, E and Gloucester Services 1 and 12. The bus services are detailed in Appendix A baseline data report.

Reliability of bus services in Gloucestershire has been reviewed using DfT bus statistics[13] for the percentage of non-frequent bus services running on time between 2010-2019, as shown in Figure 7-1 below. Between 2009/10 and 2011/12 bus punctuality within Gloucestershire increased from a low baseline of 77% to 95% with punctuality remaining fairly static until 2013/14. Data is not available for Gloucestershire for both 2014/15 and 2015/16, however when data is available for 2017/18 and 2018/ it indicates that punctuality has decreased slightly to 87%.

Reviewing the regional and national picture, the South West's bus networks performance has been relatively consistent between 2009/2010 and 2018/19, with no significant change in punctuality seen. There is a similar trend within England where punctuality over this period is also consistent with around about a 2% increase in punctuality within this period. As such, the bus network in Gloucestershire has performed better than both the regional and national averages both in terms of percentage of punctual services and the fact that punctuality increased over the period of 2009/10-2013/14 however the most recent data shows a narrower gap of 5% more punctual services than the regional and 4% the national averages.

Figure 7-1 - Bus service reliability
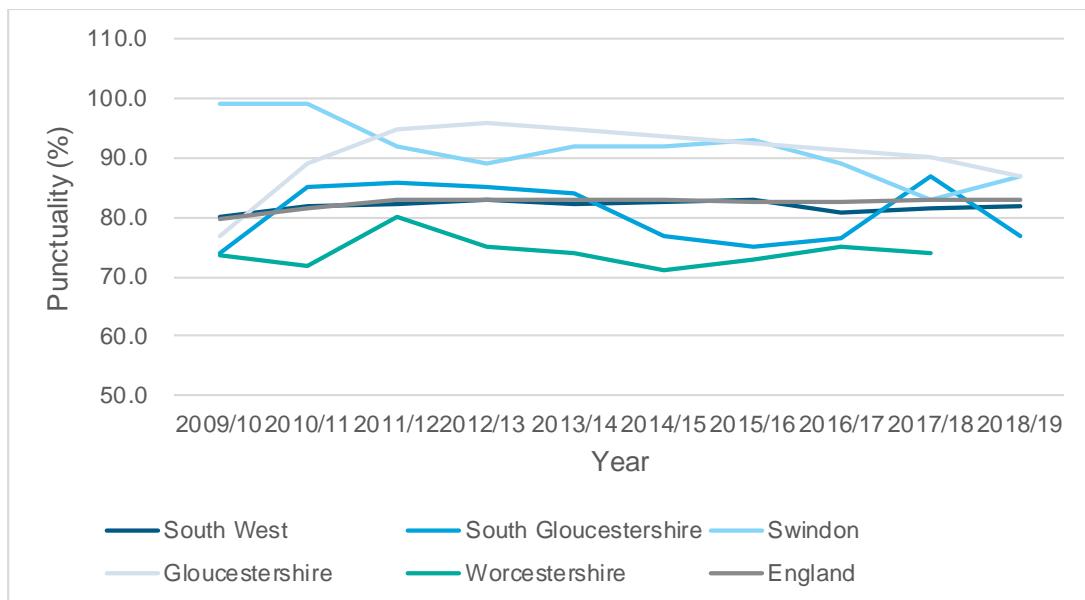
We propose to implement a target of a 10% improvement in reliability to be achieved by 2024/25, for the Stagecoach commercial service.

7.2.2.   Reliability monitoring

Reliability will be monitored using real-time data provided by operators and by GCC's real-time passenger information system. Reference will also be made to the DfT annual report on reliability.

7.3.   Passenger numbers

As shown in the baseline data report (Appendix A), Gloucestershire follows a similar reduced propensity to travel by bus as the national average in recent years. It will be a challenge to return to pre-COVID-19 levels as patronage is currently 30% below, but the ambitious BSIP target is for a 10% increase from 2019 levels by 2025 – this represents an overall 40% increase from existing 2021 patronage.

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[13] www.gov.uk/government/statistical-data-sets/bus09-frequency-and-waiting-times

However, the growth of bus trips is anticipated to be exponential and rapid. We will implement incentives for increased frequencies and reduced ticket process first, to increase patronage in the first years after BSIP adoption, while capital investment in bus infrastructure will start to attract passengers in the second and third year after BSIP adoption. In future years, bus patronage in Gloucestershire has potential to be supported by the proposed Mass Rapid Transit and other schemes with longer build out times. It is therefore anticipated that the full impact of the BSIP proposals will not be shown immediately, and will take a few years to take full effect. Figure 7-2 and Figure 7-3 show the indexed passenger journeys and actual number of passenger journeys.

Figure 7-2 - Passenger journeys on local bus services per head by local authority indexed to 2009/10 values[14]
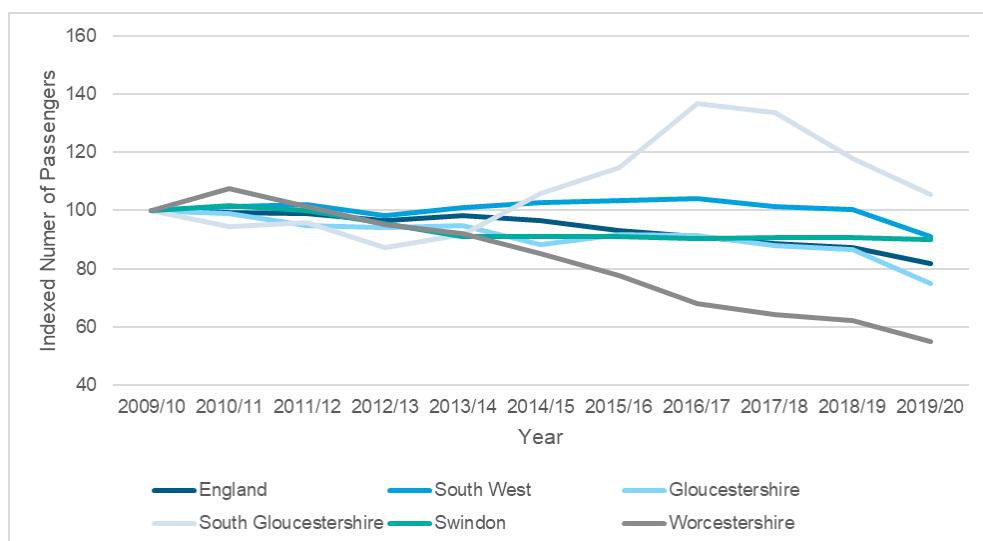

Figure 7-3 - Passenger million journeys on local bus services per head by local authority indexed to 2009/10 values
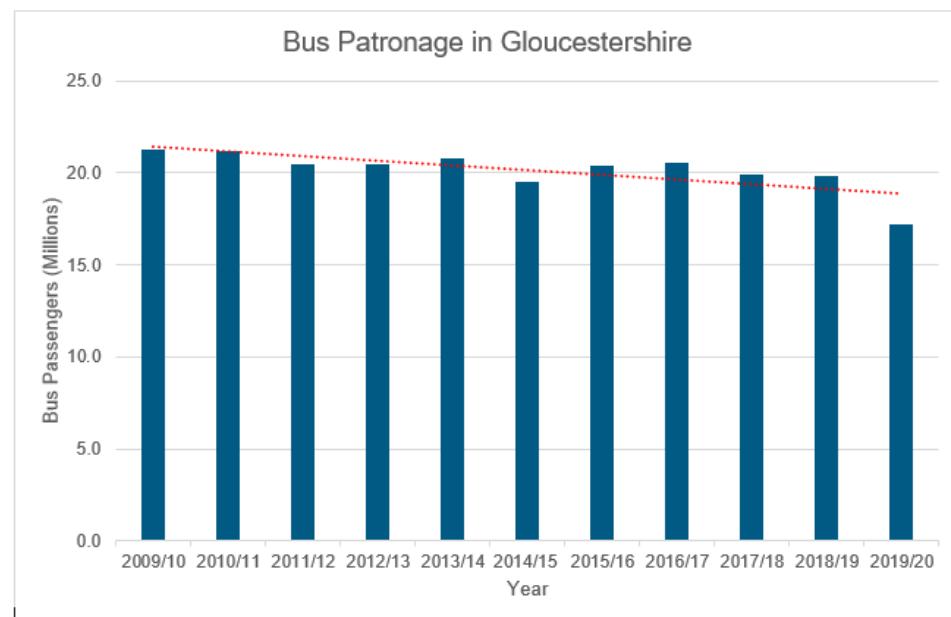
In terms of million passengers per year, the last 3 years figures are 19.9m, 19.8m and 17.2m.

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[14] www.gov.uk/government/statistical-data-sets/bus01-local-bus-passenger-journeys

It is to be noted that the latest data from Stagecoach for Gloucestershire is that patronage for September 2021 compared to September 2019 is at 70%, therefore patronage for all passengers is 30% down.

Our target is for a 10% increase from 2019 levels by 2024/2025, but this is dependent on funding for the full proposals outlined at Section 8 being secured. Our second target is a return to pre-pandemic patronage figures of 2018/19. Note that a 10% increase by 2025 equates to over 1.7m additional trips.

7.3.1. Monitoring proposal

We propose to monitor the patronage target using data from the bus operators in Gloucestershire, using passenger boarding consistent with the DfT's bus statistics.

7.4. Passenger satisfaction

7.4.1. Target development

The passenger satisfaction survey by transport focus, summarised in the BSIP for the most recent period, will provide the reference for passenger satisfaction. In addition, we also had valuable feedback from the BSIP survey that underpins the document. From the transport focus survey, it is proposed to increase the level of 'very satisfied passengers' by 10% at 2025, to 60%.

7.4.2. Monitoring proposal

The transport focus annual survey will be the key metric for customer satisfaction. It is also proposed to undertake another snapshot survey, provisionally in 2023 when some of the changes as a result of the BSIP approach have started to take an effect.

8. Delivery

8.1. Enhanced Partnership and collaborative working

Delivering an improved engagement and closer working relationship with all of Gloucestershire's bus service operators

Integral to the BSIP is the improvement of bus services and planning. This will be achieved through the shared vision set out in Gloucestershire's BSIP, a joint delivery plan set out through the Enhanced Partnership (EP) and closer working relationships through the governance structure to support the EP.

The form of the changes will be confirmed through the work with the Enhanced Partnership and in collaboration with the operators. Stagecoach, as partners for the commercial services in Gloucestershire will continue to advise and propose changes to the bus services within the core hub of the network.

To ensure these structures and new ways of working can be successful, GCC is using DfT capacity funds to employ additional members of staff who can add to the development of the BSIP, lead on the creation of the Enhanced Partnership and deliver the actions agreed upon from April 2022 onwards:

- This will result in the transformative change we are aiming for focused on the areas stated in this document and with the full support of the transport operators.

8.2. Transforming journey time and reliability

Work with bus service operators to scope and cost schemes to deliver faster journey times and a more reliable journey, particularly in urban areas. The Mass Rapid Transit scheme development is progressing at pace and is aligned to programme management outcomes.

Instances of extended journey times in rural areas are often determined by a lack of direct connections and poor connectivity between public transport services. In urban, suburban and some inter-urban corridors, bus journey times and reliability are adversely impacted by highway congestion. Congestion 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. Protecting bus services from the negative impacts of congestion is therefore a key objective of this BSIP and a key part of the council's plan to maximise the efficiency of its highways.

In combination with the bus priority measures and proposed fare proposals identified below, we believe that (subject to funding and feasibility) Gloucestershire will be able to deliver a network of "express bus services" in the urban core of the county. These services would be closely integrated to the Mass Rapid Transit scheme and the wider public transport network, but would provide additional routes and higher frequencies branching out from the Rapid Transit corridor.

The BSIP will improve journey time and reliability through the following 3 interventions:
1. Seek funding to implement a Mass Rapid Transit scheme to transform public transport journey time and reliability in Gloucestershire's urban core.
2. Build on the Bus network identified as Tier 1 in Gloucestershire's LTP to create express bus services using "superbus" network principles.
3. Provide convenient, direct and responsive access to the core bus routes of rural areas.

This will result in:

- Improvements to connected bus services and planning
- More frequent and more reliable services
- A Mass Rapid Transit Scheme
- Lower congestion
- Decarbonisation
- Fast, affordable accessible transport
- Healthy, commercially viable bus services
- Continued public and private investment in transport

8.2.1. Delivering a Mass Rapid Transit scheme

As outlined above, GCC are progressing a Mass Rapid Transit (MRT) study. The need for Mass Rapid Transit has been established to deliver a transformative change to address the dominance of private cars in the central corridor between Gloucester and Cheltenham (where MRT would be feasible). A key component of the BSIP is to develop the MRT to a point where there is an identified and designed scheme, where we are in a position to bid for the funding required to progress the design phase of the scheme and to produce the required documents for further development of the scheme. GCC would like to be considered as one of the five potential cities to be taken forward for further development, as outlined in the 'Bus Back Better' national guidance.

GCC has started work on developing a mass transit system for central Gloucestershire. We have completed pre-feasibility, which was positive, and has led to a feasibility study being commissioned. The prefeasibility study suggested that:

- Central Gloucestershire would be a strong contender for a Mass Rapid Transit system
- Bus rapid transit may be the most financially viable mass transit mode to adopt
- The proposed patronage levels would make mass transit financially viable
- Specific corridors were available for consideration (e.g. Cheltenham to Gloucester)
- A phased approach would give most benefits most quickly

In order to take forward the idea of a Mass Rapid Transit system we will need to take a sequential and fast-paced approach to development. Following pre-feasibility we would need to move to feasibility, then Options Appraisal Report (OAR) and Appraisal Specification Report (ASR). This will be followed by development and submission of a Strategic Outline Case (SOC), leading to the subsequent stages of case development. If it were possible to deliver these at pace, and receive full funding, the ambition remains of a 'shovel-ready' scheme potentially by 2025.

8.2.2. Creating a network of Express Bus Services

In addition to a Mass Rapid Transit, the BSIP seeks to create a network of Express Bus services, using "super bus" network principles where bus priority interventions will be focused. Key areas of focus and research will be in physical bus priority at notable congestion points and a continued roll-out of the Traffic Light Priority (TLP) scheme.

Figure 8-1 - Virtuous circle of bus service improvements

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)

Bus Priority is key to achieving the ambitious carbon pathway targets to which GCC is committed GCC recognise the importance of the link between implementation of bus priority measures and consequently reducing the bus journey times. This can enable additional services to run without the full cost of new buses, as shown in **Figure 8-1**. Reliability and consistency on routes, as well a reduced journey time will minimise the need for contingency in the bus timetables, particularly during the peak periods and address the most important priority voiced by passenger in our recent survey. It is vital to tackle issues of congestion to allow us to build on the significant investment in transport made in recent years by both GCC and transport providers.

While further work is required, the identification of the Express Bus network will build on bus routes identified as tier 1 in Gloucestershire's LTP. The LTP sets out minimum service frequencies, passenger numbers and population density of the area served as key criteria for bus routes to be considered as tier 1. In addition, future growth ambitions will be taken into consideration when identifying the Express Bus network.

Figure 8-2 - Tier 1 Bus Network
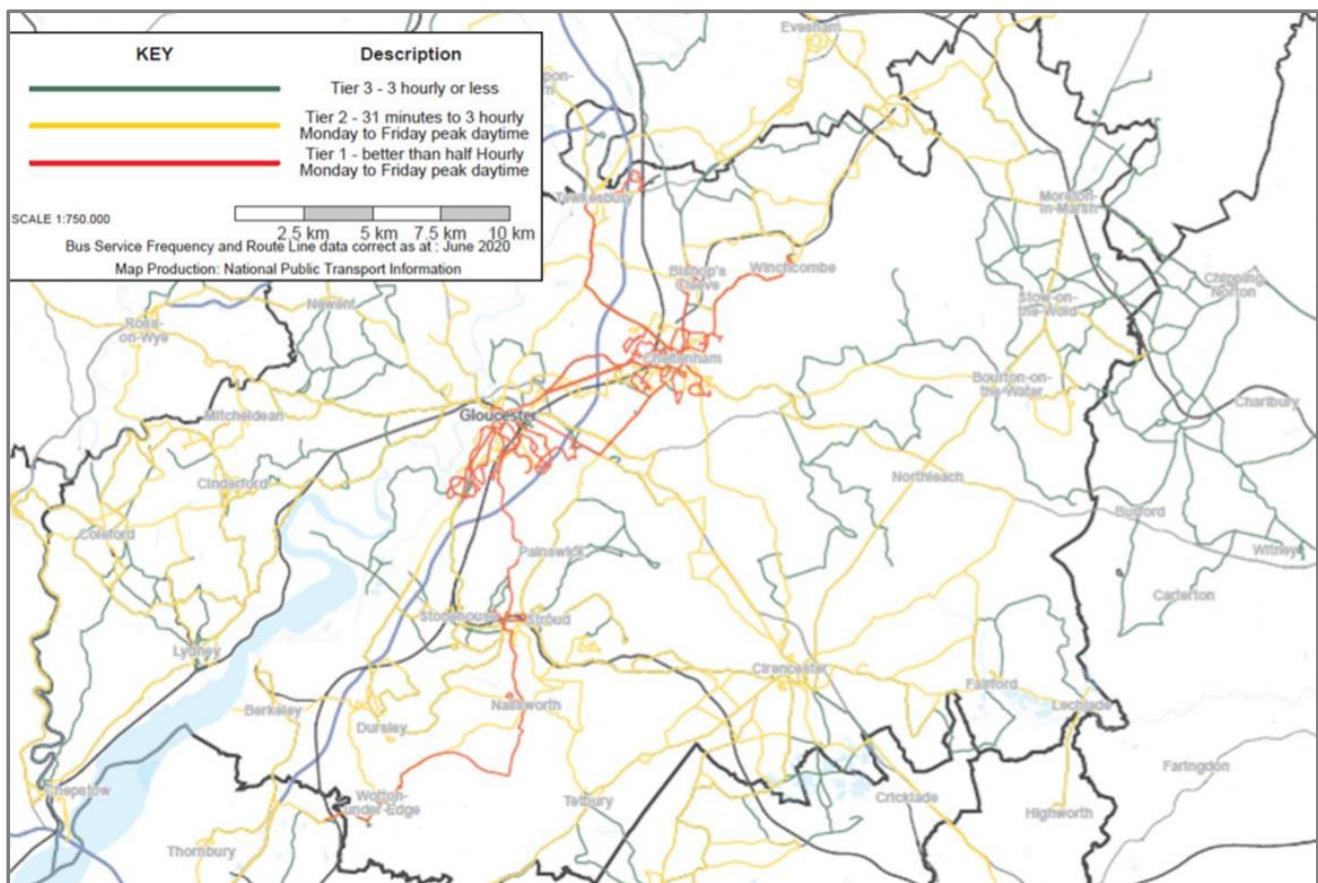
Figure 8-2 shows the bus network identified as tier 1 in the LTP which will be the starting point for identifying an express bus network. It is anticipated that, with sufficient funding, a minimum of **five new bus priority measures can be delivered by 2023.** To determine which corridors should be prioritised first for investment, the partners of the Enhanced Partnership may consider criteria such as:

- Passenger numbers
- Journey time delay caused by a specific congestion hotspot or area
- Potential to increase bus passenger numbers (i.e. likelihood of residents in catchment area switching to bus use as a result of improvements)
- Supporting Gloucestershire's growth agenda.

A number of strategic corridors which should be considered for Express Bus status include:

1. **Gloucester to Cheltenham** – Gloucestershire's central conurbations of Gloucester and Cheltenham are linked via a northern bus corridor serving the A40/B4063/Churchdown and with bus routes 93, 94, 94U, 94X, 97, 98, 99, and a south corridor services on the A46 via Brockworth and Shurdington are predominately Stagecoach Service 10. It is noted that Service 10, the single most used service and carries approximately 10% of all County bus trips.

   From modelling work undertaken for the MRT study, overall demand is estimated to be **~11.4m trips per annum** for the Gloucester and Cheltenham urban areas (derived from the 2019 census). The key services are from Stagecoach, but also including Pulham's service 99, which handles similar demand to the largely parallel Stagecoach 97/98. Demand on the north and south corridors is estimated be around **4.9 million passengers per annum**. Whilst demand on the north corridor is higher than the south corridor, the demand of **3.4m** on the north corridor is spread over a number of distinct routes with no single easy alignment offering access to all demand sources. The

southern corridor has an annual demand of **1.45m** passengers, which could be significantly increased with enhanced services and driven by the high number of housing development.

Due to the high usage and congestion, it is clear that the Gloucester to Cheltenham corridor needs to be a focus for bus priority in the short to medium term. However, it is noted that this corridor is also the focus for longer term Mass Rapid Transit development.

Note that the extent of the Gloucester corridor to the south would include Quedgeley, Kingsway, and new developments including Hunts Grove and includes reviewing intersections such as Cross Keys Roundabout where there is a link to the A38 south and the junctions from Quedgeley along Bristol Road to Gloucester.

2. **Bishops Cleeve to Cheltenham corridor**
The corridor from Bishops Cleeve to Cheltenham is a key route, including identified congestion points within Cheltenham town centre. All Stagecoach services for Bishops Cleeve and Cheltenham (A,B, C, D, E, F) carry approximately 22**%** of all bus trips in the County, and within the town centre particularly encounter congestion.

3. **Tewkesbury, including connections to Gloucester and Cheltenham**
Service 41 Tewkesbury to Cheltenham and Service 71 to Gloucester provide critical links to the two larger conurbations in the County. Links to the neighbouring County of Worcestershire are also important to consider for Tewkesbury – Services 41 and 71 carry approximately 3% of all trips in the County, and is therefore small but still important for the network as a whole. Specific locations for further investigation, and that have been raised in the BSIP process, are Northway, Hardwick Bank Road and Norton Village.

4. **Stroud and Stonehouse**
The Stagecoach services for Stroud, Stonehouse and Dursley (52, 63, 64, 65, 66, 67, 69, 165) account for approximately 6% of all of the County bus trips. It is accepted that school trips, and the location of the schools on the bus routes does cause many of the issues within Stroud, and careful consideration of bus priority measures and changes are required before any commitment Locations that will be looked at include Merrywalks, links to Stroud and Stonehouse stations, and the A419 routes to and from Stonehouse/Gloucester. As part of Stroud District Council's ongoing Local Plan review, a sustainable transport strategy was produced which identifies a number of strategic bus corridors, strategy, with linkages to strategic development sites[15]. Links to new development will be a key point of consideration for determining Express Bus corridors.

5. **Forest of Dean/Chepstow**
There are two key pinch points from the Forest of Dean to the rest of the network; eastbound to the A40 Over roundabout and westbound out of the County to Chepstow. Regeneration and housing growth in the Forest is high, and it is critical that links to the rest of the County and further afield are improved through Bus Priority measures.

In addition to the above, GCC will engage with all bus operators to seek to re-audit all of the routes in Gloucestershire, and identify minor changes that although not financially onerous, could significantly improve the speed of the route and the ease of use for bus drivers. This will include minor adjustments to kerb lines and give-ways/road markings that could improve the turning circle and geometry for the bus. Other examples may include adjusting the stop lines, visibility of signs and signal-heads, removing footway overruns and identifying where simple changes would improve the ease of buses pulling out from the laybys.

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[15] www.stroud.gov.uk/info/Stroud_Sustainable_Transport_Strategy.pdf

8.2.3. Direct links and improved connectivity in rural Gloucestershire

In rural areas, public transport journey times will be improved through the provision of demand responsive transport services that will offer new direct links to a variety of local destinations, such as employment places, small towns and railway stations. Additionally, in line with Gloucestershire's LTP, the services will link to a number of local interchange hubs, providing interchange with conventional bus services for onward travel to main centres, such as Gloucester and Cheltenham. This approach will build on the investment made in recent years in rural transport and the investment set to come in 2022 as part of the DfT Rural Mobility Fund.

Figure 8-3 - Gloucestershire Future Bus Model

Legend:
- Interchange Hub
- Rail link
- Bus route
- DRT feeder services
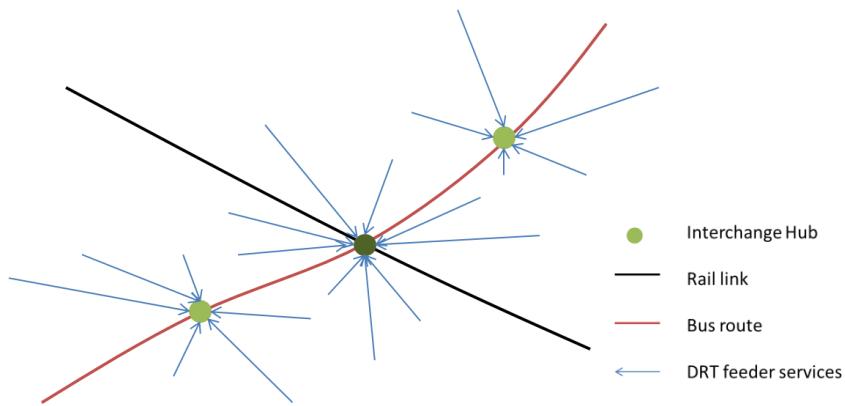
8.3. More frequent services offering greater accessibility

To deliver an increase in bus service frequencies. This should provide an hourly bus service minimum on most routes (at peak times) and significantly more frequent on the core urban network where we aim for the perception of a 'turn up and wait' bus service. Also to seek funding to expand the Rural Mobility Fund (RMF) Demand Responsive Transport (DRT) scheme to all areas of the county.

Increased bus frequency was the most popular improvement in the engagement process undertaken for the BSIP development. While 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. 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.

The Enhanced Partnership will seek funding from the Government and third parties for continued investment in transport, to increase revenue through passenger increases and service efficiencies with the aim to deliver an increase in service frequencies, as close as possible to the following ambitions:

1. "Turn up and go" frequencies on the emerging Express Bus network
2. An increase in frequency most other key bus routes
3. Expansion of the Gloucestershire DRT service

This will result in:

- improvements to bus services and planning
- more frequent and more reliable services
- increased demand responsive services
- simplified services
- a review of socially necessary services
- a Gloucestershire network of express bus services (applying super bus network principles)
- a healthy and well used transport network

8.3.1. Express Bus network: Turn up and go

The objectives set out in the BSIP will simplify services and on the express bus routes, where there ideally needs to a perception of a turn up and go service which in reality is a service with a 15 minute frequency or better. Gloucestershire does have successful frequent services, for example Service 10 which is the most popular service in the region, which operates between Lower Tuffley, Gloucester, Brockworth, and Cheltenham, travelling more than 800,000 miles and carrying more than two million local residents every year (figures from the launch of the new buses, June 2021). To achieve this the County will continue to develop the 'hub and spoke' approach to the most frequent services, for example, with the Stagecoach 94 and 10 Cheltenham to Gloucester, the aim is to provide a 'walk-up' frequency. Note there are other services from Stagecoach which could achieve this level of frequency, including Cheltenham Services A,D, E and Gloucester Services 1 and 12.

Increases in frequencies on the express bus network may be funded through more efficient use of existing bus service resources enabled by bus priority measures that reduce the cost of congestion to bus operators. The aim of the BSIP is to identify potential Express Bus services for further review and potential investment during and after the Enhanced Partnership stage of this project.

8.3.2. Minimum frequency target: One bus per hour

The aspirational target for suburban and rural services will be hourly and the frequency ambition is during the day, 7am to 7pm. However, it is clear that to provide a bus service that the public will use significantly more often, this has to be extended to both the evening and weekend services to promote the retail and evening economy.

Across the county a significant number of retail and leisure locations have shifted away from the traditional city and town centres. Taken together with the high number of residential sites that are planned, serving these areas will also be considered as the EP develops. Accessibility across the county boundaries is also a challenge. There are locations where bus demand could be increased if congestion is reduced on the road network, for example, Cheltenham-Evesham, Wootton-Kingswood-South Gloucestershire, Dursley-South Gloucestershire, Lydney-Chepstow and Bristol, Cirencester – Oxfordshire.

As stated in the LTP, GCC will target it's subsidies at tier 2 and 3 type bus services. While there may also be some efficiency savings possible through targeted bus priority measures, it is likely that this Government funding as well as developer and other 3rd party contributions are the most likely funding sources that would enable increased frequencies to be kick-started.

Local context is very important when assessing suburban and rural bus services and not all may be suitable however as part of the BSIP we are committing to identifying these services with a view to further review and potential investment in those deemed feasible.

8.3.3. Expanding Gloucestershire's DRT service

In rural areas the Demand Responsive Transport (DRT) project will deliver an innovative transport solution, starting in two pilot focus areas in Gloucestershire's most rural districts. In rural areas we will support this hub and spoke system with Gloucestershire's new Demand Responsive Transport service. As part of the BSIP it is proposed to review socially necessary services and to expand demand responsive transport services to the other areas of the county with, at first, a further five trials of the Rural Mobility Fund service.

This review will specifically include ideas to improve access for under 25s and students who predominately do not have access to a car and those in rural areas of the County where alternatives (such as taxis or mobility scooters) are not available.

8.4. Improvements to fares and ticketing

Integrate and simplify fares and seek funding to introduce fare capping and U25's reduced ticket promotion. BSIP initiatives on fares will be a 'kick-start' subject to clear operator long term commitment.

Ticketing can be a confusing area for passengers. There are multiple operators of bus services in the county each with individual fares and ticketing schemes. This is further complicated when other modes of transport, such as rail, have a separate fare structure. The DfT are aware of the complexity of multi-operator and multi-modal ticketing arrangements, and the need to provide a shared IT system for local authorities. It is important that the BSIP reflects this aim and provides a basis for further exploration. The BSIP and Enhanced Partnership agreement will aim to work towards a simplified fare structure with the potential for capped fares on expensive routes, these tend to be in rural areas that suffer from low passenger numbers and high mileage therefore impacting those who are marginalised by their ability to access transport services. Through-ticketing (i.e. a single ticket being accepted on multiple services in order to make complex trips easier) is a major aim of the BSIP work. Improving fares and ticketing will contribute to the county's employment and skills agenda, and enable higher use of buses.

Contactless payments for bus tickets are available on the Stagecoach network and it is increasingly expected that all bus services should offer this payment method. A clear aim of all other bus service operators is to investigate the roll-out of contactless payment to their services in order to address this expectation.

Lower fares and simpler fares will be a focus of the BSIP, and young people are a particular area to target. They present a significant opportunity for long term passenger growth and are a group who suffer from a lack of transport options if they are under the age for driving or if they are unable to afford a licence, or decline the opportunity to drive in order to reduce their carbon footprint, or do not drive for any other reason. They are also a group significantly impacted by the economic fallout from the COVID-19 pandemic and will require significant support to access education and training opportunities and employment. It is to be noted that this will build on the existing work that has been done in the County by operators, including Stagecoach who offer University tickets and other offers for target markets.

The details of the fare and identification required are to be finalised as the BSIP and Enhanced Partnership develops, however it is accepted that the offer needs to be significant to achieve a noticeable increase in bus use by under 25's.

This will result in:

- Improvements to bus services and planning
- More frequent and more reliable services
- Lower fares, including for the U25s
- Simpler fares
- Integrate ticketing between operators and transport

8.5. Improving passenger experience

Maintain high passenger satisfaction results and achieve a 10% increase in overall passenger satisfaction.

Through the partnership with Stagecoach and other bus operators the passenger experience has been improved through the upgrade of buses. For example, in the summer Stagecoach West introduced 21 new vehicles to its fleet as part of a £5m investment. GCC is committed to improving the situation for both accessible and inclusive bus services. The clear challenge is to transfer the passenger experience that is possible on the core network from Stagecoach West on to the rest of the network, particularly for the rural and demand responsive services. The passenger experience can also be enhanced by providing high quality information for both existing and potential passengers, and increase confidence in the public transport network. There is a universal desire to improve the quality and consistency of information at the roadside via timetable displays and real time passenger information (RTPI), and online via the numerous journey planning websites and apps, all of which use data that is maintained by the council.

One important aspect of the BSIP in Gloucestershire is to substantially improve the roadside passenger environment and to find ways to "mainstream" bus stop maintenance funding.

It should be possible to achieve substantial improvements with sufficient DfT grant funding, and a rigorous systematic and progressive roll-out of a standard infrastructure template over a longer period, from a wider variety of funding sources. It is equally apparent, that without enough maintenance resource - including personnel - to manage and steward the assets, the value of these investments can erode quite quickly over a five year period.

The provision of a standard post and flag, with integral timetable case, assists posting of roadside publicity. The visibility this gives to the public, and confidence this element gives to both existing and potential customers, is often under-estimated.

Under the Equalities Act 2010, all buses used on public services were required to be fully compliant (in accessibility terms) by 2015, this was achieved and is reflected by the upgrade to the vehicle fleet in the county. There has also been significant investment by the county in accessible bus stops across the county via high kerbing to meet with the bus entrance, however there is room for further development and investment to further expand and enhance accessibility in the county. It is important to aim for a baseline standard for infrastructure in the county and a clear plan in the BSIP to address this more broadly.

The current situation is quite variable, both within Gloucestershire and between Gloucestershire and other neighbouring Local Transport Authorities (LTAs) and a more consistent approach is needed both within and across Gloucestershire and ideally other LTAs. A draft of a template for assessing infrastructure, is included overleaf;

Template Roadside Infrastructure Specification

Stop Context	Flag	Freestanding flag and timetable case	Basic Paved Boarder min 3m x 2m	Enhanced Boarder including tactile and 6m length	Pedestrian Refuge	Controlled Ped crossing and cycle stands	Standard Shelter	Enhanced Shelter	RTPI
Urban									
Core Interchange		Y		B		Y		Y	Y
Local interchange		Y		Y	Y	C	C	C	C
Core Stops		Y		Y	C		C		C
Rural									
Main hub		Y		Y		Y		Y	Y
Local Interchange		Y		Y	Y	C		C	C
Core stops		Y	Y	C	C		C		
Other stops	Y		C				C		

Y= minimum expectation
C= preferred but context dependent
B= bespoke solutions likely to be needed.

This will result in:

- A better passenger experience
- Improved roadside infrastructure
- An improved perception of bus travel and potentially increase in patronage.

8.6.   Integrating transport

Improve bus – rail connectivity and deliver a system of Transport Interchange Hubs across Gloucestershire to integrate regular bus services with demand responsive services and other modes such as rail, bike, e-bike and cars (dependent on interchange size).

GCC has an existing transport interchange hub strategy which involves identifying key transport interchanges and ensuring they have the correct infrastructure such as bus shelters, real time timetable information, lighting, and access to other features where appropriate such as bicycle parking and e-scooter rental. The continued roll-out of real time displays at strategic, targeted locations and the potential development of audio announcements are a proposal of the BSIP, particularly on the non-Stagecoach services.

As stated in the LTP, Gloucestershire's interchange model, 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. 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.

Existing site facilities will be reviewed and opportunities for new sites will be considered subject to their location to the emerging express bus network and satisfactory business case and support from the local planning authority. Express 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.

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. They 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.

Rail stations are existing interchange hubs, though in many cases in Gloucestershire, facilities need to be dramatically improved if we want to see increases in passenger numbers. The BSIP commits to work with bus operators to review bus rail connectivity and interchange with a view to improve bus services to rail stations in particular.

The approach above will result in:

- Better integration with other modes
- Opportunities to link with other services.

8.7. Better vehicles

Work with Bus operators towards all vehicles achieving Euro 6 standard by 2025, carbon neutral bus fleet by 2035.

As outlined within the document, GCC are very ambitious for the carbon pathway and need to reverse the carbon generation within all forms of transport. The decarbonisation targets can only be achieved with both modal shift to Active Travel from private motor use and improvements to emissions with current vehicles.

Stagecoach is endeavouring to progressing towards Euro 6 standard on all of their routes (Currently of 200 vehicles 83% are Euro 5 or higher, including 31% reaching Euro 6). They have also explored in depth other options for fuel in the future, including Hydrogen and Bio-Methane and Compressed Natural Gas (CNG). At present the high cost of all kinds of zero-carbon propulsion technologies including electric vehicles means that investment is dependent upon both Government funding and the technology behind other alternatives including hydrogen being better proven. The BSIP is an opportunity to have a strategy in place for expected future DfT funding opportunities and to introduce changes to phase in lower emission vehicles in the council's public transport contracts. There is an aim to make all public transport vehicles and therefore public transport services carbon neutral by 2035.

The perception of personal safety on buses has been exacerbated by COVID-19, where passengers may feel uncomfortable with other users sitting next to them or in close proximity. The appearance and standard of vehicles will help with the perception of safety. However, the GCC will consider the provision of single seats on some vehicles, if appropriate.

This will result in:

- A decarbonised bus fleet
- Personal safety
- A nicer environment for travel, which will encourage some people to become bus passengers.

8.8. Improvements to passenger engagement

8.8.1. Passenger charter

A Passenger Charter, to be applied for the entire bus network will be developed as part of the Enhanced Partnership.

8.8.2. Strengthen network identity and better information

Work with bus operators to ensure that high-quality information is provided for passengers at bus stops, as well as via journey planning websites or apps, including the roll-out of real time AV/display announcements. Enhance the network identity of the Gloucestershire network.

Gloucestershire will work with bus operators to ensure that bus services in Gloucestershire are highly recognisable and have the highest standards of information provided. This will include minimum standards for information provision as well as investigating ways to create a unified look. This will be especially important with regards to bus routes that will form part of the network of express bus services and of course routes on the Mass Rapid Transit corridor.

Reliable, up to the minute travel information on travel conditions can influence travel behaviour. GCC therefore already commits, in its LTP, to ensuring 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).

People with disabilities can be particularly reliant on high quality information about services. GCC would therefore like to reinstate the Glos Talk app to provide access for the visually impaired.

This will result in:

- Improvements to bus services and planning
- A better passenger experience.

8.9.   Delivery Summary

Deliverable	Why	Location	Progress to date
Expansion of Demand Responsive Transport (DRT)	To improve availability of transport particularly in rural areas, and to enhance connections to all sustainable modes of transport and make the 'last mile' of any trip easier and more attractive.	Countywide with a focus on rural areas, up to 5 further trials across Gloucestershire.	Rural Mobility Fund – launch an enhanced DRT pilot in two areas, the South Forest of Dean and North Cotswolds – launch in early 2022.
Increase in Bus Service Frequency	A major piece of feedback from the public engagement exercise is that evening and weekend services require significant enhancement. Also to aid in the recovery of bus services after passenger numbers have been reduced by the pandemic.	Countywide - Increase the frequency to a 'turn up and go' on the network of express bus services, and aim of an hourly service for certain rural routes (where appropriate and at certain times).	Both GCC and bus operators continue to invest significant resources into the current public transport network even as passenger levels are down due to the pandemic.
Bus Priority Schemes	Lack of bus reliability and impact on journey times due to severe congestion on key corridors. Large disparity between off-peak and peak journey times for buses.	Express bus services are a priority area to invest in. At least 5 transformative priority schemes by 2023, 2 further schemes by 2025 (subject to funding). Through the Enhanced Partnership, develop a priority list of schemes. Focus of Gloucester to Cheltenham, Bishops Cleeve to Cheltenham, Tewkesbury, Stroud & Stonehouse and Forest of Dean/Chepstow corridors as these areas suffer from significant congestion.	Initial consultation with bus operators and work to identify key transport corridors and congestion hotspots. The development of a full study to identify the final schemes. Setup of the Traffic Light Priority (TLP) Scheme.
Mass Rapid Transit	Urgent need for a mass transit system to deliver economic, environmental and efficiency benefits in the Central Urban Corridor. Accommodate ambitious GCC targets for housing growth from the Local Plans.	The Central Urban Corridor of Gloucestershire.	Completion of a feasibility study. Subject to funding: Proposal to proceed to full business case preparation and potentially, start of construction in 2025.

Improved Roadside Infrastructure	Accessibility for all. Visible change in the quality of bus stops and improve network identity.	Countywide, subject to full roadside audits.	GCC invests in new shelters, stops, roadside displays and real time information boards every year. Maintenance and repair of these is also managed by GCC.
Transport Interchanges and links to the railway stations	Critical and urgent need for the promotion of interchanges/links to rail. For bus to be an equal choice to the private car for both single bus trips and linked trips to other modes.	Review of all transport links to railway stations.	Planning application for Arle Court Transport Hub (2021) and continued development of the 'Transport Interchange' strategy for the county.
Upgrade of vehicles - all vehicles Euro 6 standard by 2025, carbon neutral bus fleet by 2035.	Requirement to have a decarbonised bus fleet, match the ambitious carbon reduction targets for the County.	Countywide	High proportion of Stagecoach buses to Euro 6 standard. Identification of vehicle engine retro-fit programme.
Under 25's Ticketing Promotion	Identification of a need to create a new generation of bus users giving them access to jobs, training and social activities.	Countywide	Stagecoach University ticket and other promotions.
Relaunch of Glos Talk	Add to the passenger experience. Improve access for the visually impaired.	Countywide	GCC invested significantly in the previous app that was considered a success, currently scoping out a new version.

9.   Reporting

9.1.   Reporting for the BSIP

All reporting for the BSIP will be on the website; www.gloucestershire.gov.uk/BSIP

We propose to publish performance against the four key targets on our website every six months. These will include:

- Bus journey times on a sample of routes;
- Reliability on the same sample of routes;
- Patronage, using figures provided by operators; and
- Bus passenger satisfaction and perceptions, with reference to the base surveys and the Passenger Focus surveys.

The reporting will also summarise changes made to the bus infrastructure such as the implementation of bus lanes, service development and fare changes. All other information for the BSIP will also be on the website, including information on the Bus Board and developing Enhanced Partnership, and relevant public consultation exercises.

10. Overview Table

10.1. Summary Tables

Table 10-1 – Authority Tables

Name of authority or authorities:	**Gloucestershire County Council**
Franchising or Enhanced Partnership (or both):	Enhanced Partnership
Date of publication:	31/10/2021
Date of next annual update:	31/10/2022
URL of published report:	www.gloucestershire.gov.uk/BSIP

Table 10-2 – Target Overviews

Targets	2018/19	2019/20	Target for 2024/25	Description of how each will be measured (max 50 words)
Journey time	Transport Focus Survey 51% very satisfied, 37% satisfied	Transport Focus Survey 50% very satisfied, 34% satisfied	**10% reduction in journey times across all services.** Transport Focus Survey 60% very satisfied, 30% satisfied	Transport Focus Survey – reference to previous surveys and yearly review.
Reliability	87%	n/a	5% increase in reliability across the network, therefore 92% or higher	Reference to DfT annual report and progress. (BUS0902). Further reference to reliability from operators.
Passenger numbers	19.8m passengers	17.2m passengers	10% increase from 2019/2020 levels	*pre COVID-19 passenger numbers will be challenging to reach in the next year. Measurements will be based on annual users across Gloucestershire (all services).
Average passenger satisfaction	47% very satisfied and 44% satisfied	50% very satisfied and 40% satisfied	60% very satisfied and 30% satisfied	To be based on both the Transport Focus survey and the 2021 Gloucestershire Bus Survey sample (to be confirmed). Currently Stagecoach in Gloucestershire results are pre-COVID.

Table 10-3 – GCC BSIP Delivery Overview

Delivery - Does your BSIP detail policies to:	Yes/No	Explanation (max 50 words)
Make improvements to bus services and planning		
More frequent and reliable services		
Review service frequency	Yes	Develop the spoke network of buses across the county. Reliability will be improved by the addition of bus priority measures, and enhanced tracking of vehicles for the public Aim to increase the frequency to a 'turn up and go' on the flagship routes, and aim of an hourly service for the rural routes (where appropriate and at certain times).
Increase bus priority measures	Yes	Commit to developing five new bus priority measures by 2023, with two more by 2025 (7 in total), with reference to the hot spots identified by Stagecoach – subject to funding. Full study to follow to provide full costings for bus priority measures.
Increase demand responsive services	Yes	Seek additional funding to expand the Demand Responsive Transport (DRT) project to a further 5 areas.
Consideration of bus rapid transport networks	Yes	Seek funding to completion of the Mass Rapid Transit Study for Gloucestershire, to identify a preferred scheme to take forward to detailed design. Progress the feasibility study, Options Appraisal Report (OAR) and Strategic Outline Business Case (SOBC).
Improvements to planning / integration with other modes		
Integrate services with other transport modes	Yes	Multi-modal ticket, details to be developed. The Arle Court Transport Hub (ACTH) will be a flagship demonstration of integration with walking/cycling/coach and bus links. Planning for bus routes, particularly on the B4063 is linked to the LTN 1/20 cycle scheme.
Simplify services	Yes	Aim to simplify the services to and from the rail stations in particular, and to provide a turn-up and go facility on the key routes.
Review socially necessary services	Yes	The BSIP will include a full review of all the rural, DRT, and Community services that are considered socially critical.
Invest in Superbus networks	Yes	Seek funding to invest in a network of express bus services (Superbus) between Gloucester and Cheltenham, and spreading out to the extended network. GCC and their partners Stagecoach will continue to invest in this flagship area of bus provision.
Improvements to fares and ticketing		
Lower fares	Yes	Under 25's fares to be prioritised, and seek to remove cross operator ticket charges.
Simplify fares	Yes	Consideration one-County ticket. Stagecoach app's simplify tickets and GCC to consider which app to promote via the website.
Integrate ticketing between operators and transport	Yes	Multi-operator ticket. Link to rail to be developed.

Make improvements to bus passenger experience

Higher spec buses		
Invest in improved bus specifications	Yes	Stagecoach continued upgrade of buses within the partnership. Demadn Responsive Transport to improve rural bus specification.
Invest in accessible and inclusive bus services	Yes	DRT and Community Services, already prominent within the County will be prioritised as part of the BSIP and EP.
Protect personal safety of bus passengers	Yes	Improving the interchanges and bus stops, and by improving the quality of the buses.
Improve buses for tourists	Yes	Develop routes to tourist spots, such as the Forest of Dean and Cotswolds, access for cycles (including the interchanges). DRT.
Invest in decarbonisation	Yes	Carbon pathway is clear, and will drive the ambitious target for a carbon neutral County ahead of national targets.
Improvements to passenger engagement		
Passenger charter	Yes	Passenger Charter to be developed through the EP
Strengthen network identity	Yes	Hub and Spoke approach improved. Network promotion through improved stops and appearance of stops/interchanges. Marketing /fare promotions included within the financial request.
Improve bus information	Yes	Currently RTPI provider being changed and improvements being considered. Bus information on-line will be reviewed.
Other		
Other		

Appendices

Appendix A. Baseline Data Report