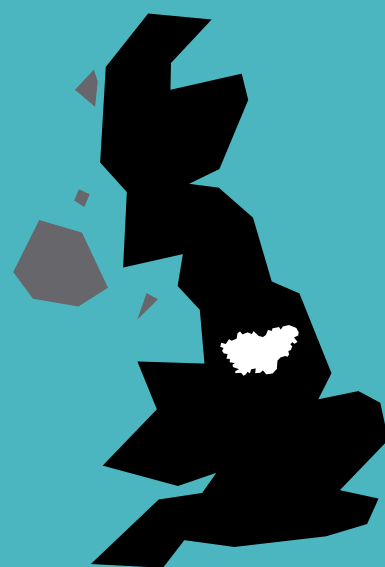




# Enhanced Partnership Plan

Final

01 April 2022



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SOUTH YORKSHIRE  
**SYMCA**



MAYORAL  
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AUTHORITY





# Contents

|   |    |
|---|----|
| Executive Summary .....                   | 4  |
| Introduction.....                         | 6  |
| Current South Yorkshire Bus Network ..... | 11 |
| Wider Context .....                       | 32 |
| What We Want from Our Bus Network .....   | 41 |
| Delivering the Plan.....                  | 46 |

## Appendices

|            |                                      |
|------------|--------------------------------------|
| Appendix A | Derivation of Prioritised Activities |
|------------|--------------------------------------|

# Executive Summary

Buses play a vital role in creating a stronger, greener and fairer South Yorkshire. Buses connect people to jobs, education, shops, health, leisure, family and friends; they are part of the fundamental fabric that shapes economic and social cohesion in our places and communities.

For many people however, the bus does not present a viable transport option, because of where the network runs, times of operation, affordability and issues of security and accessibility. This cannot continue.

The need for action is central to “Bus Back Better”<sup>1</sup>, the National Bus Strategy, published in March 2021. The strategy highlighted many failings of bus networks nationally. These same failings are also very evident in South Yorkshire and were foremost in the Independent Bus Review led by Clive Betts MP in 2020. Both conclude that if the goal of more people travelling by bus is to be realised, then there is a need to make buses more frequent, more reliable, easier to understand and use, better co-ordinated and cheaper.

In response to these challenges, the bold pledges we have set for the future of our bus network are therefore:

- **A cap on daily and weekly fares and free travel for under 18s**, plus access to cashless ticketing to create an easy to use system.

We want to create affordable fares and simplify options for passengers with products that are valid across all operators. This will help to maximise passenger numbers, enable access to transport for lower income groups and make the cost of travelling by bus more competitive compared with other modes.

- **A faster, more reliable and punctual system** helped by significant bus priority measures. We want a network which serves every community across the region, with “turn up and go” (or demand driven) frequencies and better services in evenings and at weekends with a close integration of public transport in planning for all new developments.

- **A better bus experience** from shelters to information, backed by a new customer charter.

We want to see significant investment in new on-street infrastructure, real time displays and improved information at travellers’ fingertips to enable passengers to travel confidently. We will review and coordinate timetables to provide a joined-up network across bus, train, tram, active travel, and park and ride. We will agree a new Customer Charter between authorities and operators to help improve the passenger experience.

- **A new zero emission bus fleet** and on-demand bus service

We will introduce new, electric buses which will contribute to a zero emission fleet by 2040 at the latest. We want to start a new on-demand bus pilot scheme, allowing buses to be booked ahead of travel as well as improve access to bus services for all communities of South Yorkshire.

This is the standard of bus system South Yorkshire needs and we have to be clear what we need to do to get there. The impact of COVID-19 on the bus network has been significant as annual **passenger miles fell by 23 million**, bus miles operated reduced by 11.5% and funding was **48%**

<sup>1</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/980227/DfT-Bus-Back-Better-national-bus-strategy-for-England.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/980227/DfT-Bus-Back-Better-national-bus-strategy-for-England.pdf)

**less than it was in 2010.** This document sets out an immediate roadmap to recovery (with **Chapter 1** showing the geography of the Enhanced Partnership Plan) plus the structural progress that is needed to transform our bus system.

**Chapter 2** of this document outlines the condition of the current South Yorkshire bus network highlighting the decline experienced over the decade before the COVID-19 pandemic as well as looking at areas of demand, mode share and overall network performance. Understanding what customers want is an important part of the development process for this Plan and in **Chapter 2** we also look at passenger satisfaction. Through our research passengers were generally satisfied with their overall bus journey in March 2020, yet when it comes to the condition of their bus stop, the quality of the information on offer and driver behaviour, passengers are less satisfied.

Customers have also identified fares and ticketing as requiring attention due to the range of ticketing options available. This need for simplification was also highlighted alongside a desire for more flexibility; highlighting that whilst the overall cost is important, there are other factors to consider when it comes to fares and ticketing.

**Chapter 3** sets out the social, environmental, and economic context that our bus service operates within and the contribution it makes to delivering our **Strategic Economic Plan (SEP)**. This chapter highlights the links to our **wider decision making and how local policies** can be used to support the operation of bus services across the region, including a look at how data sharing and embracing technology can support an efficient bus operation.

Understanding what is needed from our bus network is key when setting out plans for transformation. **Chapter 4** sets out the vision for our bus network. This was developed in partnership with local authorities and bus operators and drew links with our City Region Sustainable Transport Settlement (CRSTS), recognising the significant role this funding will play in delivering many elements of the Enhanced Partnership Plan. This chapter also addresses the mandatory targets we have set for journey times, reliability, passenger numbers and average passenger satisfaction, which will all be monitored and publicly reported in line with DfT guidance.

An indication of how the Plan will be delivered, including the identification of a package of short term improvements and the broad components of the Enhanced Partnership is contained in **Chapter 5**. A list of 40 key activities that are linked to the objectives of our SEP and CRSTS bid and aligned with the requirements set out in the National Bus Strategy, demonstrate how the region will deliver its vision for bus and achieve the objectives of our Plan. This chapter also recognises that the interventions will take time and funding to implement with different approaches to implementation that reflect current legislation.

The Enhanced Partnership Plan is intended to be a 'living' document and in **Chapter 6** we set out our plans to update the Plan in line with the start of the Enhanced Partnership in April 2022, and thereafter on an annual basis as our bus system evolves to ensure that it remains current and fit-for-purpose.

We recognise that the realisation of our Plan will need significant funding at a time when local government is under huge pressure and the immediate focus is recovery, including for bus services. **We will be resolute in our commitment** and belief that better transport can create stronger growth, higher productivity, and a faster recovery for our local economy and to benefit the wellbeing, inclusion, and quality of life for our residents.



# 1. Introduction

Buses are a critical element of the South Yorkshire transport network – connecting people to jobs, education, shops, health and leisure facilities, as well as family and friends. They have a vital role to play in driving economic growth and social inclusion, reducing congestion, revitalising our communities and cities, and cutting our carbon emissions. Their importance in delivering a stronger, greener, fairer future South Yorkshire must not be underestimated – and we must ensure that buses have the support they need to play their full part in the future transport network of our region.

Yet the South Yorkshire bus network is in decline. Over the decade before the COVID-19 pandemic, annual passenger miles fell by 23 million, bus miles operated reduced by 11.5% and funding was 48% less than it was in 2010. At the moment, for many people, the bus does not present a viable choice, either because of where the network runs, or its times of operation, or its affordability, or even because of issues of security and accessibility. This cannot continue.

The South Yorkshire Bus Review<sup>2</sup> (led by Clive Betts MP), published in June 2020, laid bare many of the issues with the South Yorkshire bus system, highlighting eight key findings that need to be addressed:

- **Frequency:** Service frequency is poor in some areas and has fallen dramatically in many parts of South Yorkshire
- **Reliability:** The network experiences significant reliability issues, adversely affecting customer confidence
- **Climate Change:** Buses need to play a bigger role in reducing local road transport emissions, given that local road transport contributes to 36% of all CO<sub>2</sub> emissions in South Yorkshire
- **Policy Alignment:** Many new developments have limited or no bus service
- **Connectivity:** There is poor connectivity within the bus network and poor integration between buses and other modes of transport
- **Service Changes:** The network is not stable and passengers experience amendments to services on a regular basis
- **Ticketing:** Ticketing options are varied and confusing
- **Quality and Accessibility:** Standard of bus network is variable, and the passenger offer (including fleet) can differ greatly across South Yorkshire.

Public consultation was at the heart of the Bus Review – over 5,900 responses were received from residents (both users and non-users) community groups, businesses, organisations and interest groups about their experiences of the bus network – providing a rich evidence base on which to develop plans to address these issues.

As with a number of other modes, planning and delivery of buses across South Yorkshire is fragmented – the planning of services and routes are driven by commercial considerations, the specifications and partnership working that has been seen to date often driven by legislation, and the funding provided often minimal in comparison to heavy rail. Put simply, the way in which the bus network is planned, funded and operated is not driven by the customer – the

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<sup>2</sup> [https://sheffieldcityregion.org.uk/getmedia/ba9b55bc-9e8f-4165-b45b-03d130dacb8d/Bus-Review-Report- June-2020-\(accessible\).pdf](https://sheffieldcityregion.org.uk/getmedia/ba9b55bc-9e8f-4165-b45b-03d130dacb8d/Bus-Review-Report- June-2020-(accessible).pdf)

very population who should have the greatest input in these areas for a thriving network.

The South Yorkshire Mayoral Combined Authority's (MCA's) response to the Bus Review was equally as important and forward thinking. A set of six principles were agreed in July 2020 that would be used to drive improvements on the bus network and a comprehensive programme of analysis was established to guide the MCA's understanding of what the future bus network should look like to address the issues identified in the Bus Review.

In addition to addressing these issues, the aim of the analysis was to consider a bus network that would underpin the Mayoral Transport Strategy's vision to "build a transport system that works for everyone, connecting people to the places they want to go within the city region....and will be safe, reliable, clean, green and affordable."

In practical terms, the ambition for our bus network that we are working towards includes:

- **A cap on daily and weekly fares and free travel for under 18s**, plus access to cashless ticketing to create an easy to use system

We want to create affordable fares and simplify options for passengers with products that are valid across all operators. This will help to maximise passenger numbers, enable access to transport for lower income groups and make the cost of travelling by bus more competitive compared with other modes.

- **A faster, more reliable, and punctual system** helped by significant bus priority measures

We want a network which serves every community across the region, with "turn up and go" (or demand driven) frequencies and better services in evenings and at weekends with a close integration of public transport in planning for all new developments.

- **A better bus experience** from shelters to information, backed by a new customer charter

We want to see significant investment in new on-street infrastructure, real time displays and improved information at travellers' fingertips that will enable passengers to travel confidently. We will review and coordinate timetables to provide a joined-up network across bus, train, tram, active travel, and park and ride. We will agree a new Customer Charter between authorities and operators to help improve the passenger experience

- **A new zero emission bus fleet** and on-demand bus service

Introducing new, electric buses will contribute to a zero emission fleet by 2040 at the latest, and starting with a new on-demand bus pilot scheme, allowing buses to be booked ahead of travel, we'll improve access to bus services for the communities of South Yorkshire.

We want buses to be at the heart of a coherent, integrated transport system for South Yorkshire, enabling a shift away from cars based on a convenient, affordable, effective service. We want buses to help revitalise and grow our urban centres and our rural villages, to clean our air and cut our carbon emissions, to widen access to transport and improve quality of life for everyone.

This is the bus system we need to get to for South Yorkshire, but we need to be clear how far we still have to go and what we need to do to get there. This document sets out an immediate roadmap, but structural progress will need significant funding at a time when local government is under huge pressure and the immediate focus is recovery, including for bus services.

Adequate central support is essential. Progress also depends on the right conditions – we have to get the sequencing of measures right so that we support rather than undermine the local economy. Mode shift away from cars needs to happen, but it needs an alternative to be in

place that can take up the slack and ensure that local businesses and the local economy do not suffer.

We want our buses to play that positive economic role at a strategic level. The South Yorkshire network needs to help deliver the objectives of the Local Enterprise Partnership Strategic Economic Plan<sup>3</sup> (SEP), published in January 2021. The SEP sets out how the economy, lives, and wellbeing of people in the region will be transformed over the next 20 years and is based on three overarching policy objectives: economic growth, inclusion, and sustainability – the three pillars of, stronger, fairer and greener. The SEP also set specific objectives in relation to transport under these three headings:

- Incentivise public transport usage, which will support economic productivity
- Improve the passenger journey experience, making public transport more accessible
- Increase the number of zero emission buses on our transport network.

Done well, better transport can create stronger growth, higher productivity, and a faster recovery for our local economy, in addition to other benefits for wellbeing, inclusion, and quality of life.

The need for action was given further impetus by the publication of “Bus Back Better”, the National Bus Strategy, in March 2021. The strategy highlighted many of the failings of bus networks nationally that are prevalent in South Yorkshire and concluded that if the goal of more people travelling by bus is to be realised, then there is a need to make buses more frequent, more reliable, easier to understand and use, better co-ordinated and cheaper.

“Bus Back Better” requires all Local Transport Authorities (LTAs) outside London to develop Bus Service Improvement Plans (BSIPs), the initial version of which was to have been prepared by the end of October 2021. BSIPs should:

- Be developed by LTAs in collaboration with local bus operators, community transport bodies and local businesses, services and people
- Cover the LTA’s full area, all local bus services within it, and the differing needs of any parts of that area (e.g. urban and rural elements)
- Focus on delivering the bus network that LTAs (in consultation with operators) want to see, including how to address the under provision and overprovision of bus services and buses integrating with other modes
- Set out how they will achieve the objectives in the strategy, including growing bus use, and include a detailed plan for delivery.

The initial version of the BSIP was agreed by the South Yorkshire MCA in October 2021 and has been used to develop this Enhanced Partnership Plan, which covers the geographical area of South Yorkshire and includes the four local authority areas of Barnsley, Doncaster, Rotherham and Sheffield, as shown in Figure 1. This area was chosen to represent the most coherent economic geography for the Plan in line with the area covered previously by the South Yorkshire Passenger Transport Executive (SYLTE). We have also consulted our cross boundary partners and can confirm that the intended effect of delivering our Enhanced Partnership Plan does not have an adverse impact on neighbouring authorities.

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<sup>3</sup> [https://sheffieldcityregion.org.uk/getmedia/4256c890-d568-42c8-8aa5-c8232a5d1bfd/SCR\\_SEP\\_Full\\_Draft\\_Jan\\_21-\(accessible\).pdf](https://sheffieldcityregion.org.uk/getmedia/4256c890-d568-42c8-8aa5-c8232a5d1bfd/SCR_SEP_Full_Draft_Jan_21-(accessible).pdf)





**Figure 1 – South Yorkshire**

This Enhanced Partnership Plan uses much of the evidence gathered in the Bus Review to set out the current situation with the South Yorkshire bus network, and also uses the outcomes to date of the analysis commissioned by the MCA following the Bus Review to provide an indication as to what sort of bus network is needed going forwards. This analysis is ongoing at the time of publication of this Plan and so will be used to enhance further iterations of the document.

In June 2021, the MCA committed to develop an Enhanced Partnership to support the future bus network, to become operational from April 2022, and this Plan will be a crucial part of the suite of documents that will underpin the new arrangements.

The Enhanced Partnership approach in the short term builds on existing bus partnerships in South Yorkshire. Voluntary bus partnerships between the constituent local authorities and bus operators were introduced progressively in each of the four local authority areas between 2012 and 2017 and are overseen by SYPT. The model means some operational decisions (for example, route changes) are taken in consultation between operators, local authorities, SYPT, as well as the public where appropriate. The Enhanced Partnership will be supported by new governance arrangements that include wider passenger representation and a commitment to hold all parties to account for delivery.

Qualifying agreements are used to help service co-ordination, however, there remain some decisions that cannot be taken by the voluntary partnerships for legal reasons, even where there is willingness to reach agreement between operators. This includes setting fares and running services on the network, which operators are prohibited to reach agreement on by competition law. Therefore, the MCA has also committed to undertake a review of potential future delivery models for the South Yorkshire bus network, based on the findings of the analysis that supports this Enhanced Partnership Plan.

For now, though, this Plan is a crucial document – it sets out how the MCA envisages the South Yorkshire bus network first continuing its recovery from the impacts of the COVID-19 pandemic and then building towards the network that is required to support its aims and objectives. The aim is to develop a network that is more reliable, higher quality and offers better value.

Following this introduction, the Enhanced Partnership Plan covers the following elements:

- A brief description of the current South Yorkshire bus network
- A consideration on the wider social, economic and environmental context, and the links to the policies of the MCA and the constituent local authorities that will influence the bus network
- An outline of what the MCA wants from the South Yorkshire bus network, in terms of the main outcomes and impacts, as well as some headline targets
- An indication of how the Plan will be delivered.

The Plan is intended to be a ‘live’ document and updated in line with the start of the Enhanced Partnership in April 2022, and thereafter on an annual basis as the South Yorkshire bus system evolves to ensure that it is still current and fit-for-purpose. It is intended that this Enhanced Partnership Plan will last for a period of five years.



## 2. Current South Yorkshire Bus Network

### Introduction

This section includes a brief description of the current South Yorkshire bus network. It draws on much of the evidence base developed through the Bus Review to provide an indication of the current conditions across a range of factors considered to be important as defined in the National Bus Strategy, but also outlines the impacts of the COVID-19 pandemic that need to be addressed.

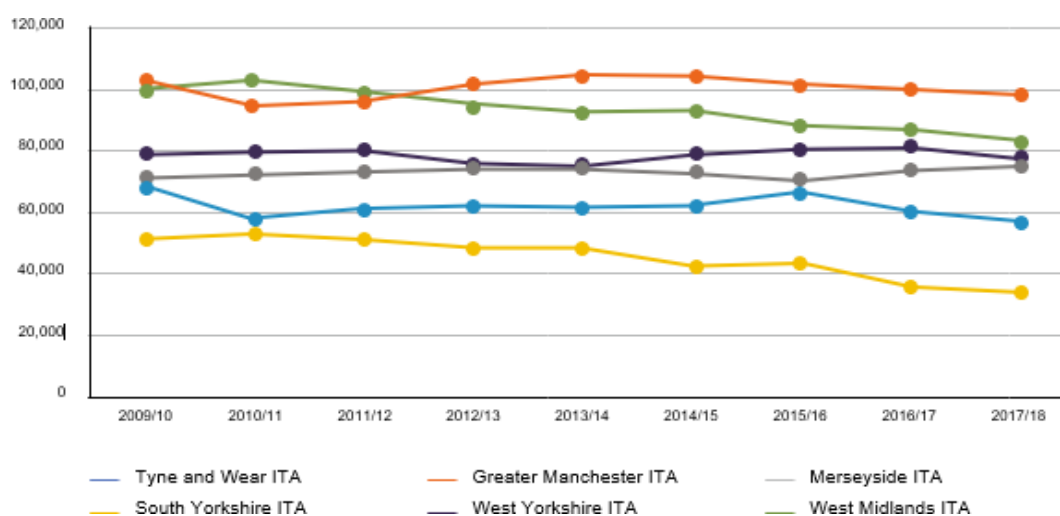
### Network Coverage and Operation

The existing bus network covers all four constituent local authority areas of South Yorkshire and includes some cross-boundary services into the East Midlands, North Lincolnshire and West Yorkshire. The network covers a total of almost 25 million miles, although this has fallen by over 11% over the last ten years, as noted previously.

The commercial bus services using this network are currently operated by 11 different bus operators, of which the two largest operators are First South Yorkshire and Stagecoach Yorkshire, which between them operate 96% of the annual bus mileage across the region.

Some services which are not commercially viable can be designated as socially necessary (for example, those that serve rural or suburban areas or that operate during evening and weekends). These are paid for by the local authorities but commissioned centrally by SYPTE following the Tendered Services Criteria Model on their behalf. As of April 2021, there are 93 routes supported by tendered services, representing nearly 140 service numbers, and covering 85,490 weekly miles, equivalent to 4.45 million miles each year. The tendered services budget for 2020/21 was £5.8 million.

Local authority budget cuts have led to a reduction of SYPTE's budget by 40% in real terms over the last decade, with a 39% cut to the funding of supported services. This budget reduction far exceeds that of other metropolitan areas outside London in percentage terms, as shown in Figure 2.

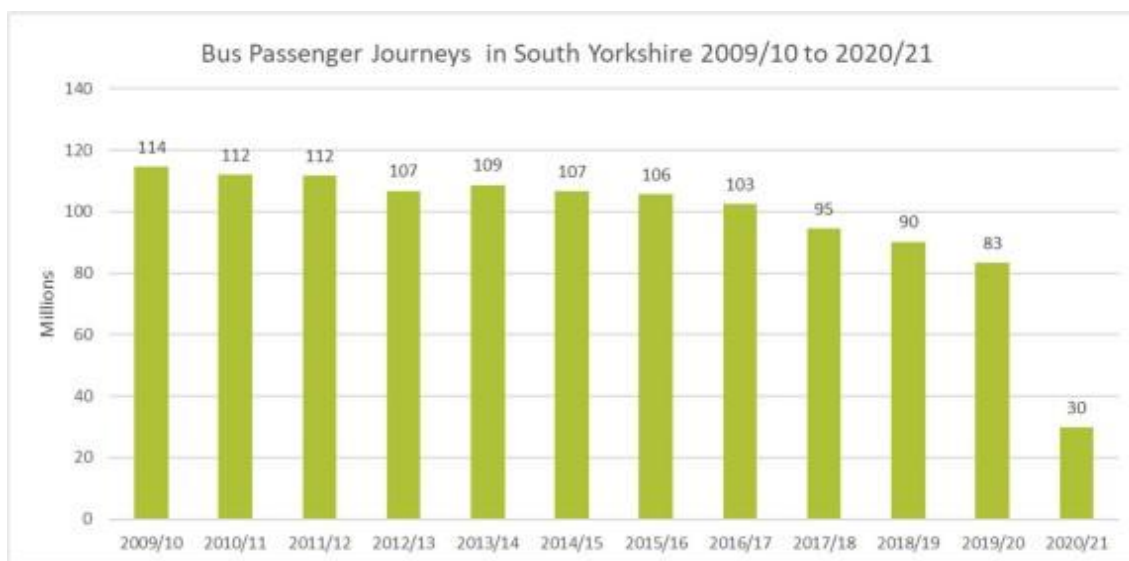


7 [https://sheffieldcityregion.org.uk/getmedia/69c38b3f-1e97-4431-91f4-913acf315632/SCR\\_Transport\\_Report-v\\_4-5-04-06-19-\(1\).pdf](https://sheffieldcityregion.org.uk/getmedia/69c38b3f-1e97-4431-91f4-913acf315632/SCR_Transport_Report-v_4-5-04-06-19-(1).pdf)

As well as standard bus routes, in each of the four local authority areas, there are community transport operators who deliver much needed transport services (including ‘dial a ride’, transport to shopping locations and group travel) to people who may find it difficult to access the main public transport network due to age, geographic isolation or disability. Services across the region are delivered under one brand, ‘Door2Door’ with Sheffield Community Transport as the lead operator, subcontracting to other community transport operators across South Yorkshire as needed. The community transport budget for 2020/21 was £1.7 million.

## Patronage

Bus patronage in South Yorkshire has been in steady decline for over a decade, many of the reasons for which were explored in the Bus Review. Passenger journeys in South Yorkshire fell from nearly 115 million in 2009/10 to just over 90 million in 2018/19 (the last full year before the COVID-19 pandemic) – a fall of over 21%. The COVID-19 pandemic has accelerated this decline over the last 18 months, as shown in Figure 3.



**Figure 3** – Passenger Journeys on Local Bus Services in South Yorkshire since 2009/10 (Source: SYPTE from Bus Operators)

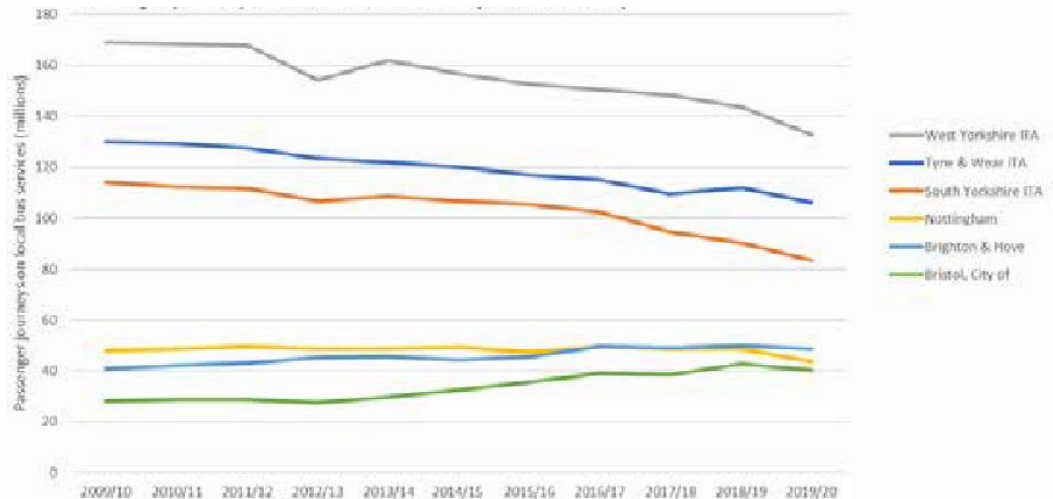
This is not an uncommon trend in metropolitan areas outside London as shown in Figure 4, such as West Yorkshire and Tyne and Wear local authority areas, although the decline in South Yorkshire has been steeper. In Tyne and Wear, where there was a small increase in bus use before the pandemic, the overall decline over the same period was around 14%, whilst in West Yorkshire, the decline was around 15%. (Note that the figures may differ slightly for South Yorkshire from those shown in Figure 3 due to different data collection regimes between the information received by SYPTE from the bus operators and that published by the DfT). It is also worth noting that bus use in London has been falling for the past six years too.

However, Figure 4 also shows that some urban areas, referenced in the National Bus Strategy, have bucked the national trend of patronage decline, although some of the more recent increases are modest. These examples are characterised by a large dominant urban centre and a large principal bus operator, and so may not be directly comparable to South Yorkshire, but there are clear lessons to be learnt from these areas.

Patronage decline has been most significant among English National Concessionary Travel Scheme (ENCTS) pass holders. Patronage for this passenger group fell by 35% between

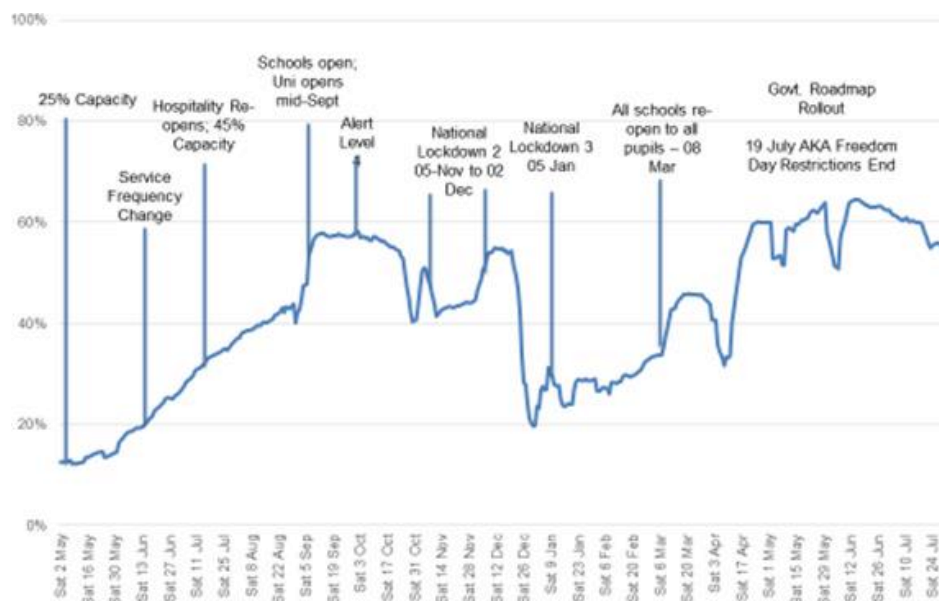


2009/10 and 2019/20. The Bus Review found evidence that the decline in ENCTS patronage has been driven by local and national changes to pass restrictions (such as the end of local enhancements to extend the duration of pass acceptance) but also the increased retention of private vehicles by older people and increased levels of physical activity. Reduced ENCTS patronage has created a significant exit from the bus network of passengers who have been using services otherwise on the cusp of commercial viability.



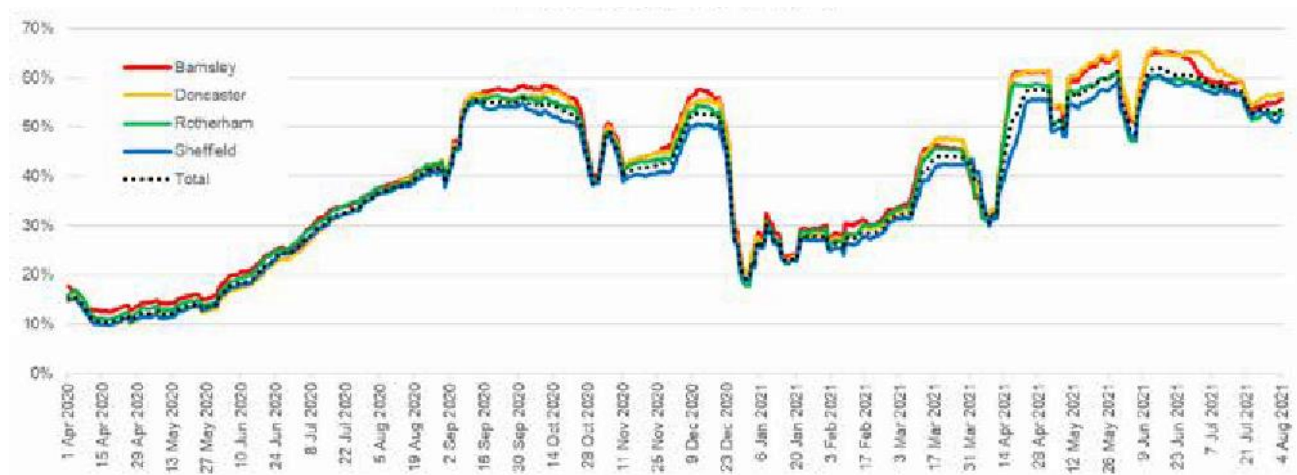
**Figure 4 – Passenger Journeys on Local Bus Services by Local Authority since 2009/10 (Source: DfT)**

Figure 5 shows the more recent fluctuations in patronage since 2019/20 over the course of the COVID-19 pandemic, in a little more detail, alongside key events over the past 18 months. As restrictions eased and were tightened through 2020 and 2021, patronage recovered to a high of 64% in early June, before reducing slightly again as the remaining national restrictions were eased, with the start of the main school holiday period at the end of July explains the most recent reduction shown.



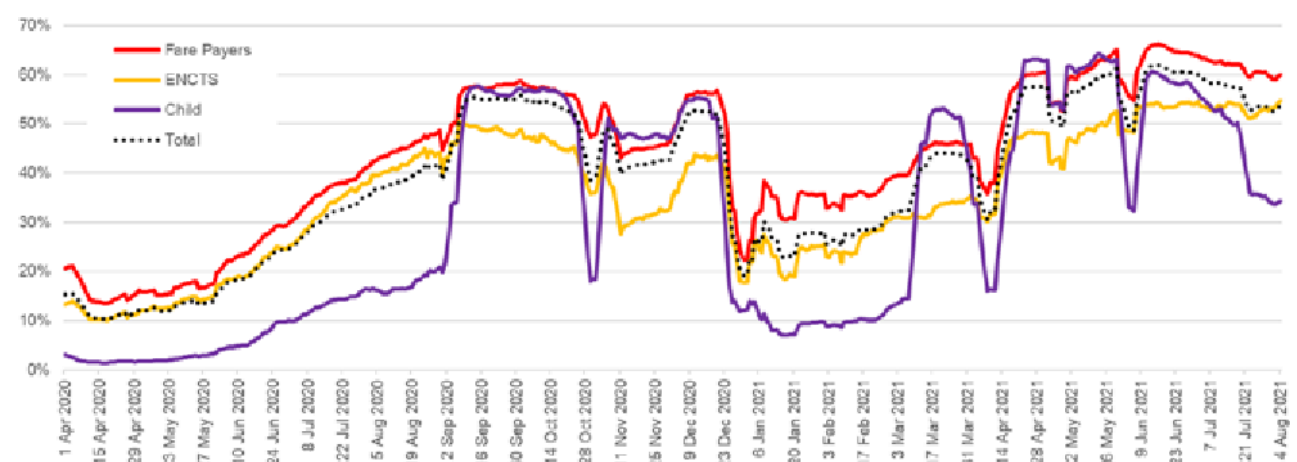
**Figure 5 – Bus Patronage across South Yorkshire as a Percentage of pre-COVID (January 2020) Levels since May 2020 (Source: Bus Operators)**

The latest figure for overall bus patronage in South Yorkshire is just under 74% of pre-COVID levels (taken as January 2020), measured at mid-September 2021. There are variations in recovery in each local authority area, with Barnsley at 76.3%, Doncaster 76.2%, Rotherham 70.3% and Sheffield 68.4%, and also by customer group (child, ENCTS and fare-payers). These differences are shown in Figures 6 and 7 respectively.



**Figure 6 – Bus Patronage by Local Authority as a Percentage of pre-COVID (January 2020) Levels since April 2020** (Source: Bus Operators)

Figure 7 in particular shows the continued decline in ENCTS passengers, which has only recovered to just under 60%, but remains significantly below the other customer groups driven by the lower return of senior travel.



**Figure 7 – Bus Patronage by Customer Group as a Percentage of pre-COVID (January 2020) Levels since April 2020** (Source: Bus Operators)

As of March 2020, Fare Payers accounted for 55% of bus passengers across South Yorkshire, ENCTS passengers for 27% and Child passengers for 17%. The proportion of Fare Payers varied across the four local authority areas as follows:

- Barnsley – 49%
- Doncaster – 51%
- Rotherham – 49%
- Sheffield – 59%

The COVID-19 pandemic has also impacted where passenger demand is even within local authority areas. Figure 8 shows the routes and areas with the highest demand but also where there have been the most marked changes in demand since 2019. These changes reflect people's different travel behaviour since the onset of the pandemic, for example in Sheffield, where reduced numbers of students studying on campus have reduced demand on bus services serving Ecclesall Road routes.

## Bus Patronage

### Local Impacts

#### Changes in demand by 2021



**Figure 8 – Most Marked Bus Patronage Changes by Route/Area between 2019 and 2021**

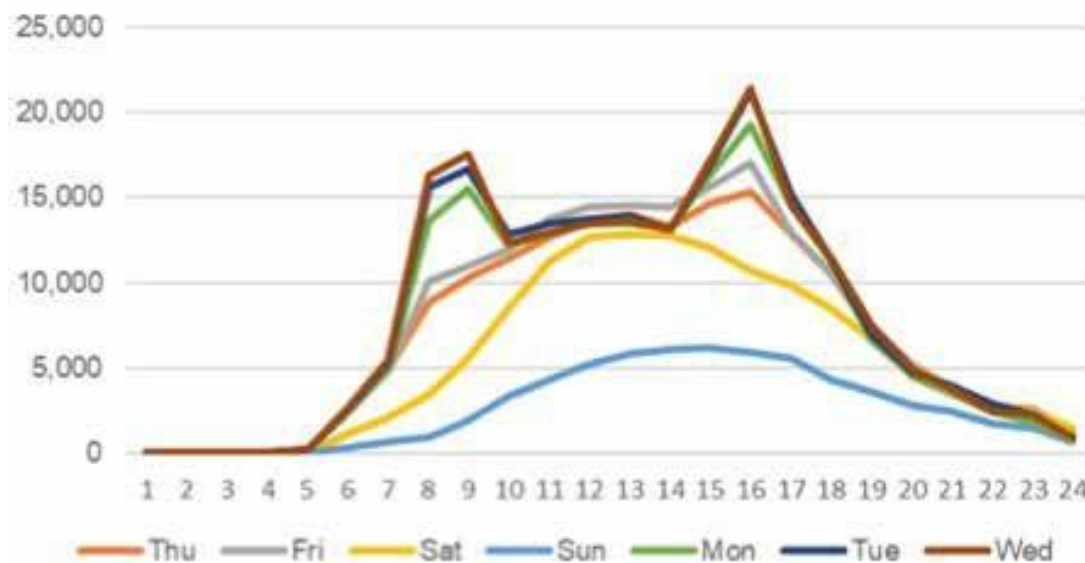
So, patronage trends were clearly downwards before the COVID-19 pandemic, with one third (33%) of bus users responding to the Bus Review said they travelled less by bus than they did 5 years ago, and over one fifth (22%) said they travelled less than they did 1 year ago. There are several factors that are limiting the return of passenger numbers even to pre-COVID levels, not least the change in working patterns likely to result from the extended period of home working and whether ENCTS trips will return to previous levels.

All of this suggests that patronage recovery will not be swift, even before thoughts of the growth envisaged in the National Bus Strategy can be entertained. Figure 9 shows the current forecasts for patronage recovery in South Yorkshire, set against recent trends (both total and customer type) and a trend that would see Child patronage returning to 100% of the trend, but Fare Payers and ENCTS passengers only returning to 80% of the trend level. As shown, despite recent recovery, patronage levels are not forecast to rise above 90% of pre-COVID trend levels in the next 12 months, even without further restrictions.



**Figure 9** – South Yorkshire Bus Patronage Forecasts (Source: SYPTE)

Patronage recovery may not be aligned to previous travel patterns, either. Figure 10 shows bus patronage by time of day and day of week before March 2020, indicating the significant morning and evening weekday peaks in demand, driven by typical commuting patterns at the time. It is evident that there will be a change in commuting patterns, at least in the short term, driven by new models of hybrid working – what this means for bus patronage is not clear at this time, but this does suggest a need for some future flexibility in the bus network to respond to the changes, whatever they may be.



**Figure 10** – Bus Patronage by Time of Day and Day of Week (Source: Bus Operators)

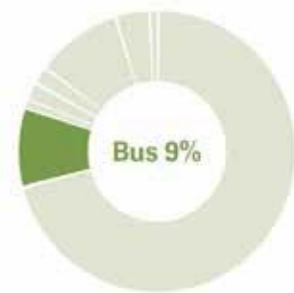


The commercial impact of reduced patronage through the pandemic has been significant. Bus services have been funded to date by the Government's COVID Bus Services Support Grant and further recovery funding announced in July 2021<sup>4</sup>, paid directly to operators, which has prevented the loss of any of the bus network in South Yorkshire up until now. However, this funding is due to expire at the end of March 2022, before patronage is forecast to recover to pre-COVID levels.

Even before the pandemic, South Yorkshire's bus system did not offer significant profitability for operators, for example, First South Yorkshire incurred an operating loss of just under £2.6 million in 2018/19. Analysis carried out by SYPTE (and verified independently by consultants) shows that over a ten year period, First South Yorkshire made an average annual operating loss of -1.3%, while over the same period Stagecoach Yorkshire made an average annual operating profit of +2.6%. Such operating margins would normally be used to fund investment in the network.

## Mode Share

Around 9% of journeys to work across South Yorkshire are currently made by bus. Compared with this, 71% of residents currently travel to work by car, and this proportion has increased since 2001. In 2019, 62% of all journeys in South Yorkshire were undertaken by car. Buses struggle to compete with private vehicle usage in South Yorkshire for many of the reasons outlined in the Bus Review, most notably in terms of reliability and the perceived cost of travel.



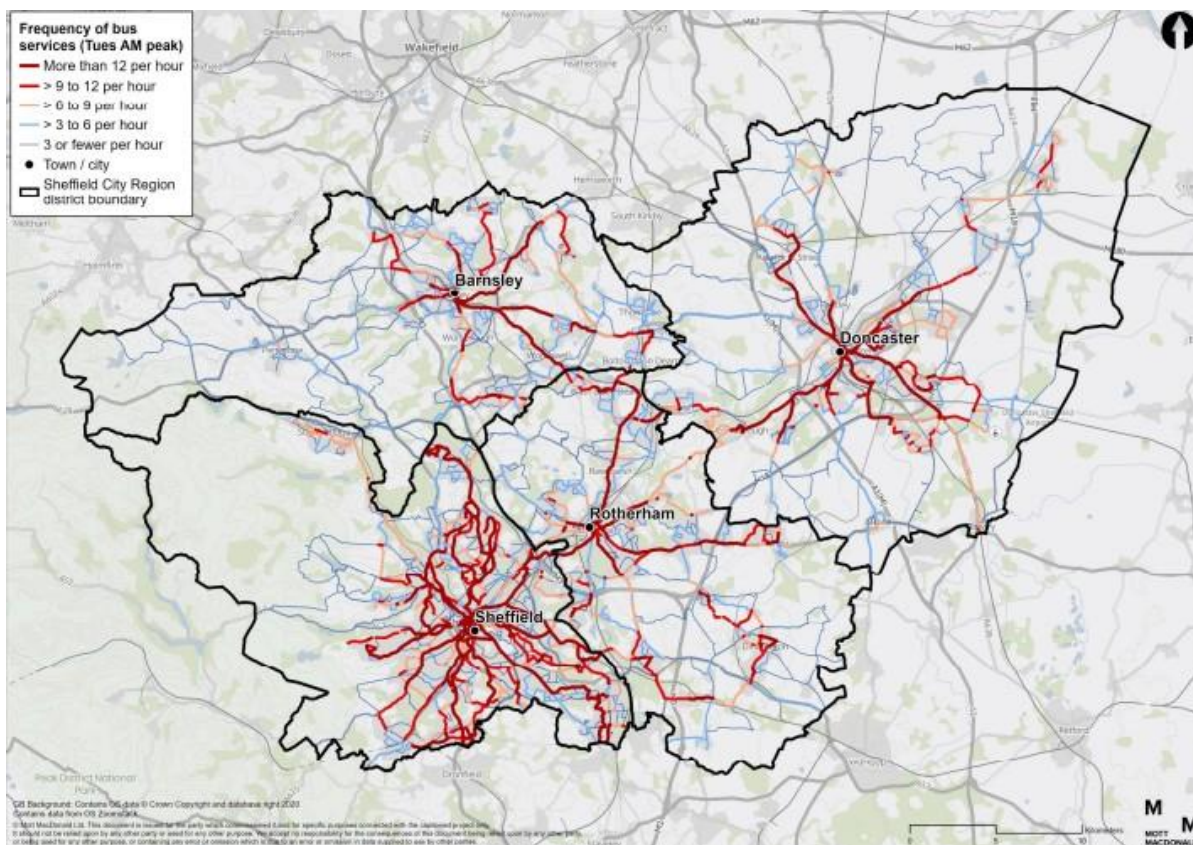
## Network Availability and Performance

The Bus Review contained a significant amount of information relating to the current South Yorkshire bus network and its performance, and so the following paragraphs contain a summary of the issues identified, many of which are unchanged from the significant public consultation exercise that was undertaken in 2019 to inform the Bus Review.

### Frequency

The Bus Review found that in many parts of South Yorkshire, service frequency is low or has fallen significantly, especially in rural and suburban areas where services are more commercially vulnerable and so are more sensitive to fluctuating demand. Figure 11 illustrates the frequencies of bus services across South Yorkshire in 2019, clearly indicating that service frequency is lowest in areas furthest away from urban centres.

<sup>4</sup> <https://www.gov.uk/government/news/226-million-package-to-support-vital-bus-services>



**Figure 11 – South Yorkshire Bus Service Frequencies (2019)**

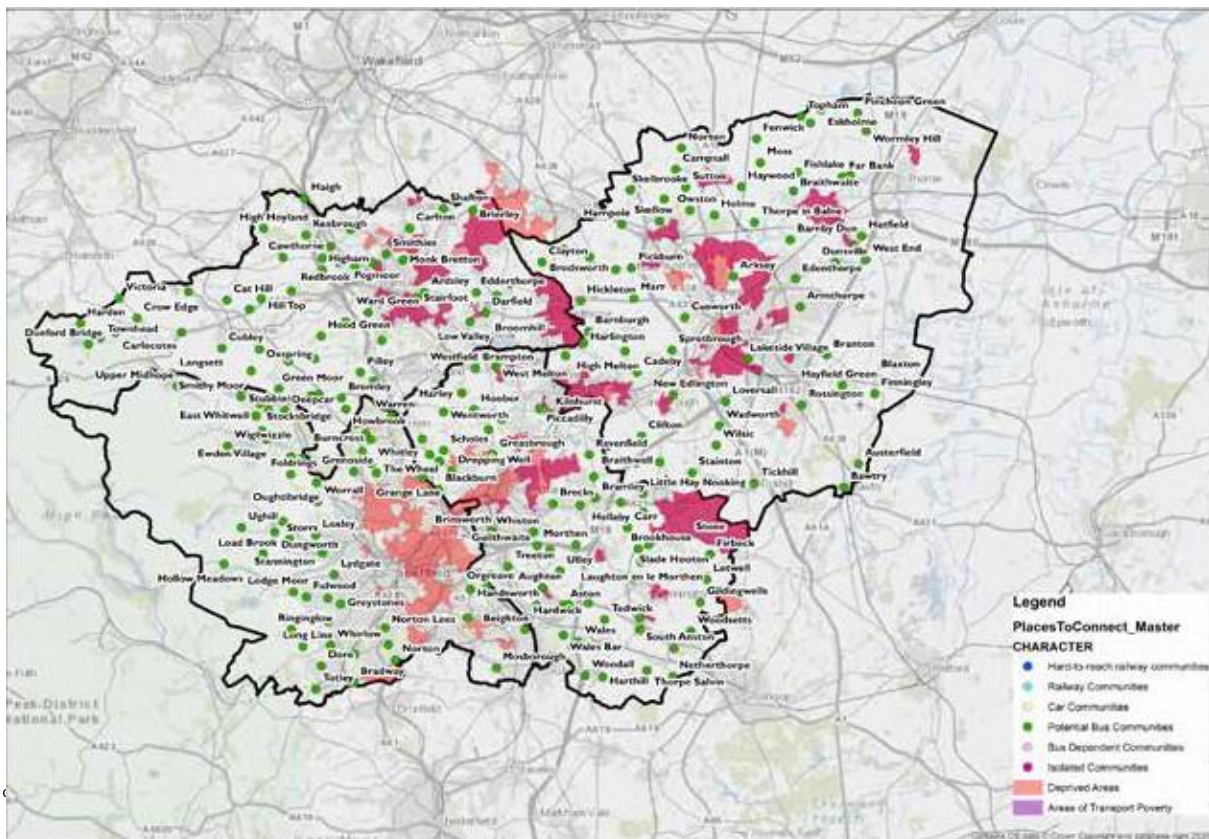
The Bus Review also found that weekend and evening bus frequency is also a problem, even on more high frequency routes. Evidence submitted to the Bus Review summarised this: “Sunday and evening services have been dramatically cut. They may be ‘uneconomic’ but if you can’t use the bus in the evenings and Sundays, public transport becomes much less attractive to use as an alternative to the car”. This is incentivising more households to own private vehicles and travel by car over public transport, even where they are economically deprived.

In developing a future bus network to meet the needs of South Yorkshire, six place typologies have been developed, based on characteristics that link to the objectives for this Enhanced Partnership Plan. This includes a recognition of public transport uptake against national averages to define car or public transport-reliant communities and the ability for rail and tram to address connectivity requirements.

Inclusive growth characteristics such as communities in the top decile of deprivation were flagged, alongside whether communities were affected by transport poverty (a combination of low car ownership, high public transport reliance and high deprivation). Finally, accessibility analysis was used to identify communities that were further than 15 minutes travel time from their nearest regional hub via public transport, a key metric in the Mayor’s Transport Vision.

Within these six place typologies, three have been identified as having the potential to grow bus patronage through the provision of an enhanced service. First, Figure 12 shows the “potential bus communities” – places could be served by a bus service of some form, but where public transport uptake is currently low and there is no alternative tram/local rail option.





**Figure 12 – South Yorkshire “Potential Bus Communities”**

Figure 13 shows “isolated communities” – places which have higher than average public transport uptake but remain outside a 15 minute travel time to the nearest regional hub. 66% of such communities are also either deprived or experience transport poverty, meaning that they would also be a target for enhancing economic opportunity by improving public transport services.

Finally, Figure 14 shows “car communities” in South Yorkshire, which are typically suburban and rural, therefore demonstrating the correlation between poor bus service frequency and availability and higher car ownership. However, these communities have relatively easy access to the tram/local rail network, but no public transport connection to the nearest stop or station.





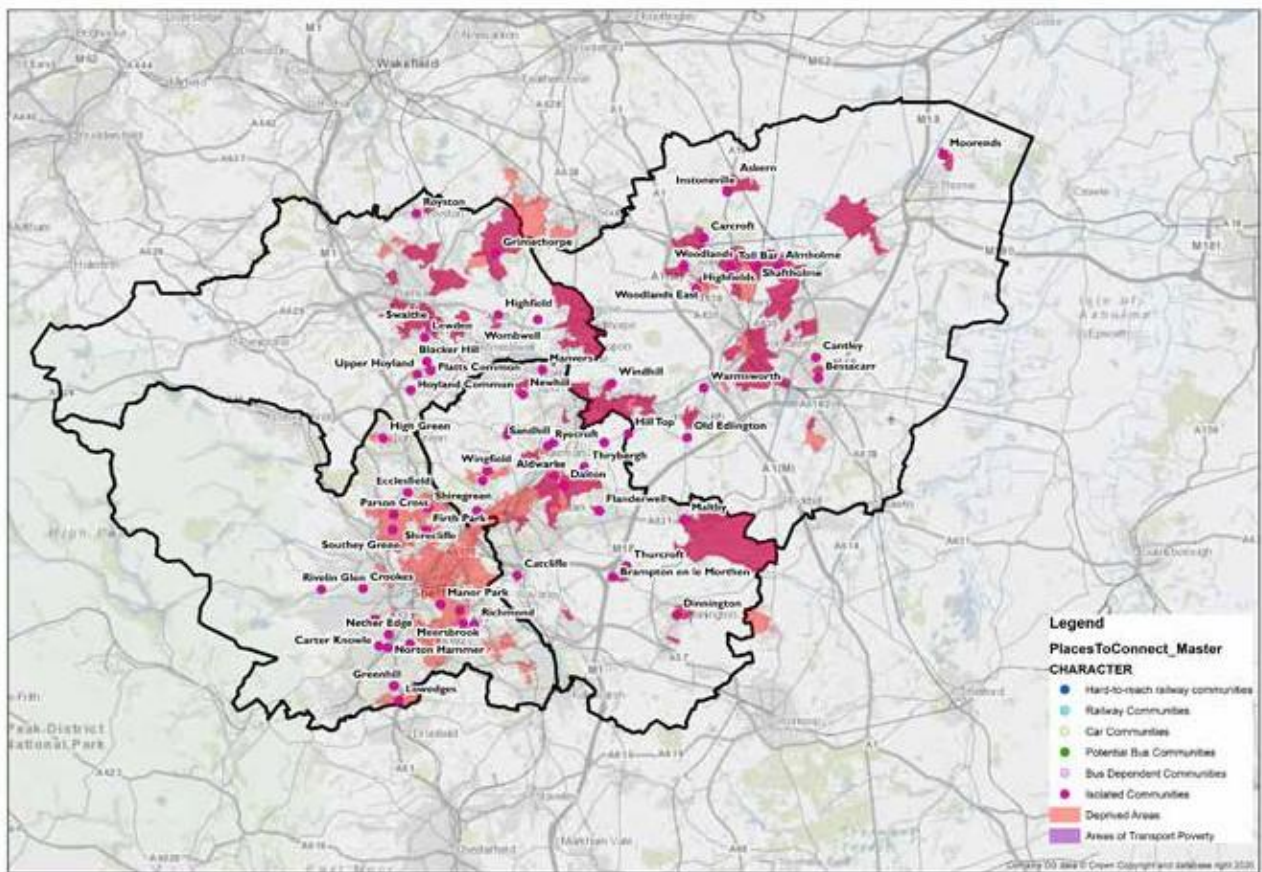


Figure 13 – South Yorkshire “Isolated Communities”

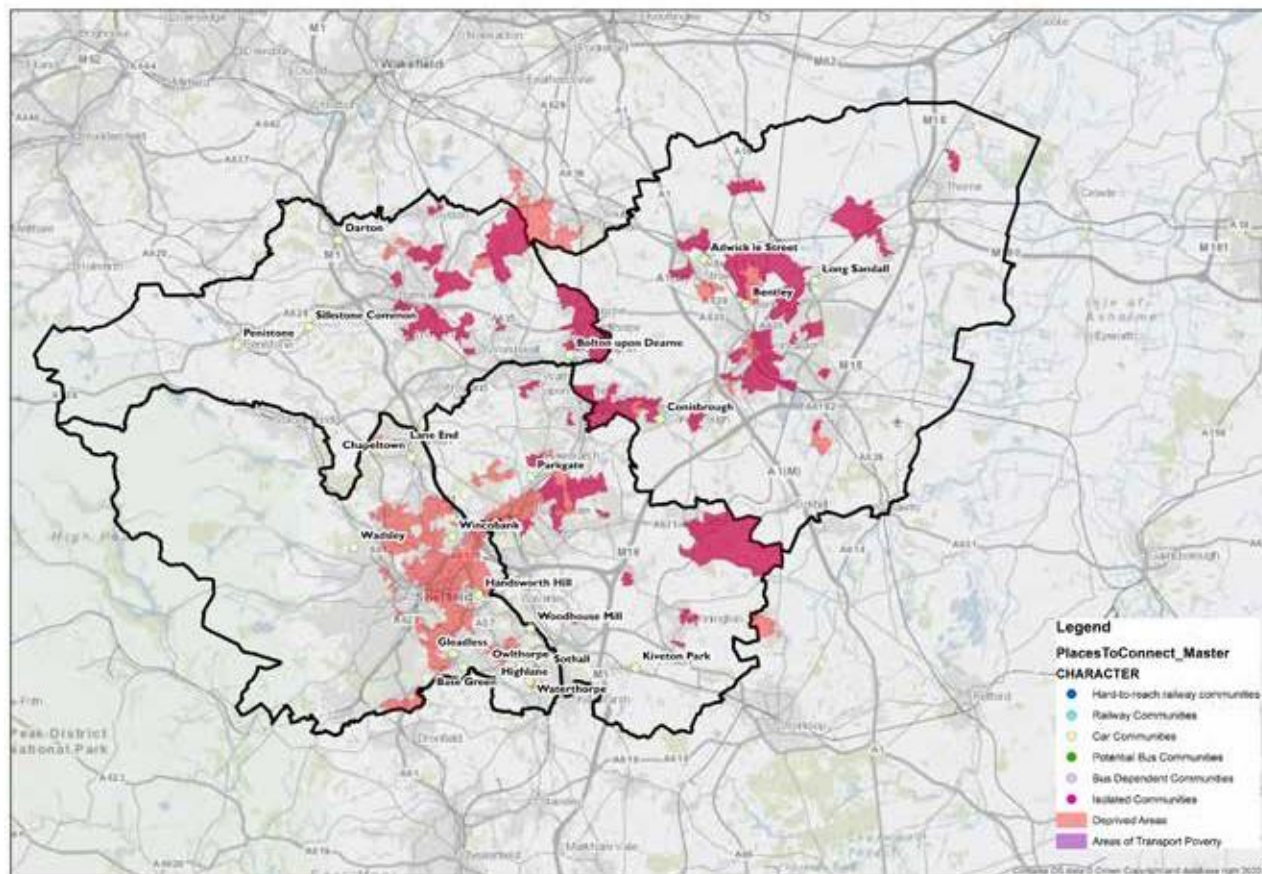


Figure 14 – South Yorkshire “Car Communities”



Work is ongoing to develop these concepts further and to understand where additional frequencies and/or additional services would most likely be financially sustainable and meet the wider MCA objectives. This will be complete in November 2021.

In the Bus Review, Commissioners did examine the relationship between patronage and frequency. Evidence submitted by SYPTE showed that alongside the decline in patronage, the number of bus miles operated across the region had also fallen by an average of 11.8% between 2009/10 and 2016/17. Operators reported that service reductions are made due to falling demand caused by factors such as increased car ownership and lifestyle changes. But the Bus Review did also find evidence that where demand has increased, operators have increased frequency to match passenger need.

## Punctuality

The Bus Review also made it clear that passengers face service punctuality issues across the network, most significantly on key corridors. Whilst these issues of punctuality have an impact on passenger confidence and satisfaction, they also have an adverse impact on the operation of the service itself, with some bus operators reporting a need to allocate additional vehicles to offset the impact of variable delays and/or having to make decisions about short-running or cancelling services due to delays across the network.

Data analysis using real time journey speed information shows that all the least punctual routes in 2019 are key corridors serving town and city centres, as shown in Figure 15. Figure 16 shows those locations where the most significant delays (based on the difference between off-peak and peak hour travel times) were experienced in 2019, overlaid onto the map of the least punctual routes.

## Bus Reliability

### Local Impacts

In 2019, the least punctual regular\* services were:

| Service No. | Route                                  | % Ontime |
|-------------|--|----------|
| 6           | Darnall - Millhouses                   | 65       |
| 30          | Sheffield - Crystal Peaks              | 67       |
| 19          | Rotherham - Worksop                    | 71       |
| X2          | Barnsley - Royal Hallamshire Hospital  | 72       |
| 97          | Hillborough - Totley                   | 76       |
| 87          | Doncaster - Moorends                   | 76       |
| X1          | Sheffield - Maltby                     | 76       |
| 252         | Sheffield Arundel Gate - Crystal Peaks | 76       |
| 52a         | Woodhouse - Wisewood                   | 77       |
| 98          | Hillborough - Totley Brook             | 77       |
| 18          | Meadowhall - City                      | 77       |

\* regular defined as services which run 12 times a day on average (approximately 1 bus per hour)

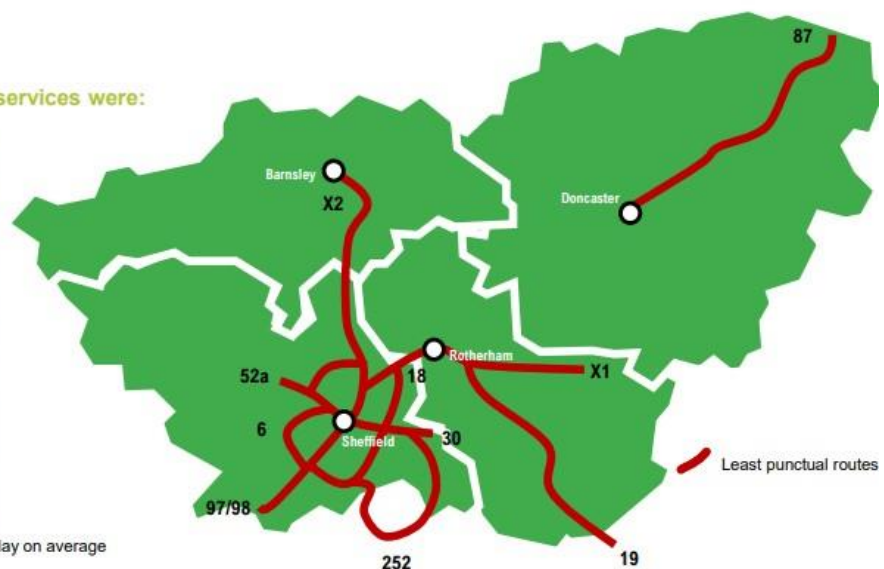


Figure 15 – Least Punctual Regular Services in 2019

## Bus Reliability

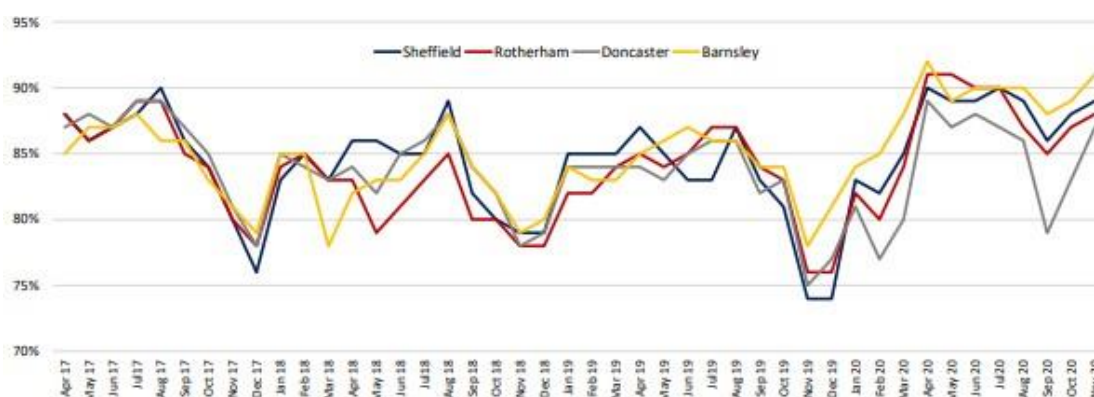
### Local Impacts

Real time bus information from 2019 highlights delays\* on the least punctual routes in the following areas:



**Figure 16 – Delay Hotspots on Least Punctual Routes in 2019**

Bus punctuality in the four main urban areas of South Yorkshire is variable, as shown by the historic information summarised in Figure 17, with noticeable declines in punctuality in the October to December period.



Source: Travel South Yorkshire

**Figure 17 – Bus Punctuality across South Yorkshire (Last Three Years) (Source: Travel South Yorkshire)**

The table overleaf shows how punctuality differs across the times of day and days of week for a number of the more frequent services across South Yorkshire since April 2021. Evening peak punctuality is a particular issue, which coincides with historic timing of greatest demand, along with an exaggeration of delays accumulated through the interpeak period.

The latest overall punctuality figures for September 2021 are:

- Barnsley – 85%
- Doncaster – 79%
- Rotherham – 83%
- Sheffield – 78%
- South Yorkshire – 80%

| District  | Service | Mon-Fri       |              |           |              |         | Weekends  | Overall |
|-----------|---------|---------------|--------------|-----------|--------------|---------|-----------|---------|
|           |         | Early Morning | Morning Peak | Interpeak | Evening Peak | Evening | All Times |         |
| Barnsley  | 95      | 92            | 85           | 77        | 42           | 88      | 91        | 73      |
|           | 93      | 94            | 75           | 81        | 42           | 93      | 89        | 80      |
|           | 27B     | 95            | 95           | 89        | 61           | 71      | 91        | 84      |
|           | 226     | 97            | 92           | 84        | 70           | 92      | 91        | 88      |
|           | 22X     | 95            | 92           | 82        | 76           | 94      | 89        | 86      |
| Doncaster | 57F     | 89            | 77           | 83        | 58           | 92      | 94        | 79      |
|           | 57A     | 90            | 80           | 80        | 64           | 75      | 89        | 78      |
|           | 82      | 94            | 83           | 83        | 73           | 89      | 90        | 79      |
|           | 56      | 82            | 54           | 84        | 74           | 81      | 92        | 81      |
|           | 15      | 94            | 88           | 82        | 88           | 91      | 92        | 85      |
| Rotherham | 29      | 94            | 82           | 67        | 74           | 96      | 87        | 76      |
|           | 9       | 95            | 91           | 86        | 85           | 92      | 91        | 89      |
|           | 8       | 99            | 94           | 85        | 78           | 96      | 95        | 90      |
|           | 114     | 98            | 93           | 89        | 73           | 96      | 85        | 91      |
| Sheffield | 135     | 93            | 74           | 51        | 51           | 87      | 85        | 72      |
|           | 18      | 93            | 76           | 71        | 68           | 91      | 89        | 82      |
|           | 76      | 93            | 77           | 86        | 68           | 91      | 88        | 84      |
|           | 97      | 94            | 82           | 87        | 75           | 94      | 93        | 88      |
|           | 75      | 93            | 70           | 86        | 75           | 91      | 91        | 85      |
|           | FY 120  | 92            | 83           | 91        | 80           | 92      | 90        | 89      |
|           | STG 120 | 93            | 89           | 90        | 89           | 91      | 91        | 90      |
|           | 52      | 95            | 92           | 93        | 90           | 92      | 93        | 92      |
|           | 52A     | 93            | 87           | 83        | 81           | 92      | 90        | 87      |
|           | 24      | 95            | 95           | 92        | 92           | 95      | 93        | 93      |
|           | STG 25  | 96            | 92           | 91        | 83           | 71      | 94        | 90      |

These are the lowest since April 2021, coinciding with a gradual return to work and hence increasing car travel, highlighting the link between congestion and delays to bus services.

60% of respondents to the Bus Review survey said they were either dissatisfied or very dissatisfied with bus punctuality and representative groups who gave formal evidence to the review identified this as the greatest cause of patronage decline. Those least satisfied include females (32%), frequent users (33%), non-car owners (43%) and, by far the lowest customer segment, those living in Barnsley (16%).

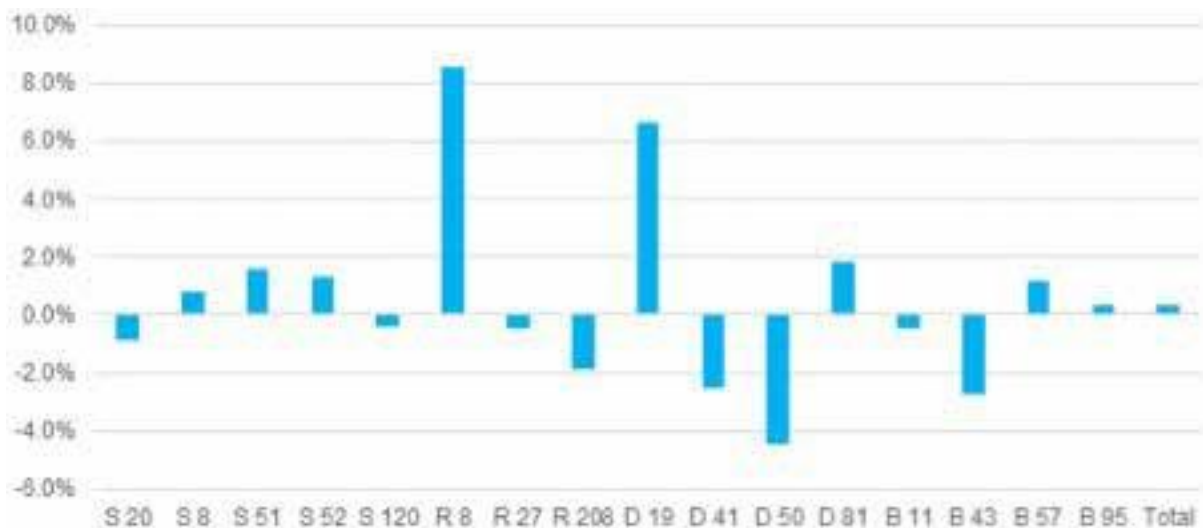
## Reliability

Whilst punctuality measures whether a bus runs on time, reliability measures whether a service actually runs at all. Historically, reliability in South Yorkshire has been relatively good, measuring 99.0% in 2018/19 and 98.8% in 2019/20, but reliability remains an issue for passengers, particularly on lower frequency services where a service not running (for whatever reason) can result in significant delay and inconvenience.

## Journey Times

Actual journey times by service and by local authority have been tracked for a number of frequent services and Figure 18 shows the comparison between the journey times of these services between 2017 and 2019.

Overall, journey times on these selected services increased by 0.3%, however, there are significant variations between services across differing local authorities and also services operating within each local authority area, suggesting that a more granular approach to understanding the causes of longer journey times and therefore developing an action plan to address issues, is required.



**Figure 18 – Bus Journey Time Changes across Frequent Services between 2017 and 2019 (Source: SYPTTE)**

## Congestion

The main cause of poor punctuality in South Yorkshire is road congestion, particularly on the major routes into and within the urban centres, for the most part caused by sustained increase in car usage. Whilst the COVID-19 pandemic has seen a 9% reduction in car traffic across roads in South Yorkshire, in parallel bus journey speeds have been faster and journey times shorter, showing the relationship between the two.

The cordon count data shown in the table below illustrates the correlation between the decrease in bus journeys identified previously and increased car usage (Note that the figures for 2020 are skewed by the impact of the COVID-19 pandemic).

| Mode | South Yorkshire-wide Cordon Count (vehicles) |         |         |         |
|------|--|---------|---------|---------|
|      | 2017   | 2018    | 2019    | 2020    |
| Bus  | 173,030                                      | 163,316 | 159,827 | 84,287  |
| Car  | 742,245                                      | 749,991 | 739,83  | 685,763 |

Congestion has a particularly significant adverse impact on the bus network across South Yorkshire. Increases in journey times reduce the attractiveness of the bus as a viable option and also affect individuals' perceptions of accessibility to opportunities, as well as adding to the operating costs for bus operators. Information developed on behalf of First South Yorkshire indicates morning peak hour passenger weighted delays prior to the COVID-19 pandemic in 2019 across Doncaster, Rotherham and Sheffield due to congestion as shown in Figure 19.





**Figure 19** – Morning Peak Hour Passenger Weighted Delay in Doncaster, Rotherham and Sheffield (Source: Prospective)

## Passenger Facilities

There are significant differences across South Yorkshire in the infrastructure provided for passengers to make bus journeys, such as the availability of bus shelters and seating at bus stops, which can often have a greater impact on elderly and disabled passengers if not provided. There are 7,635 bus stops across the region, with only 44% (3,359) having shelters.

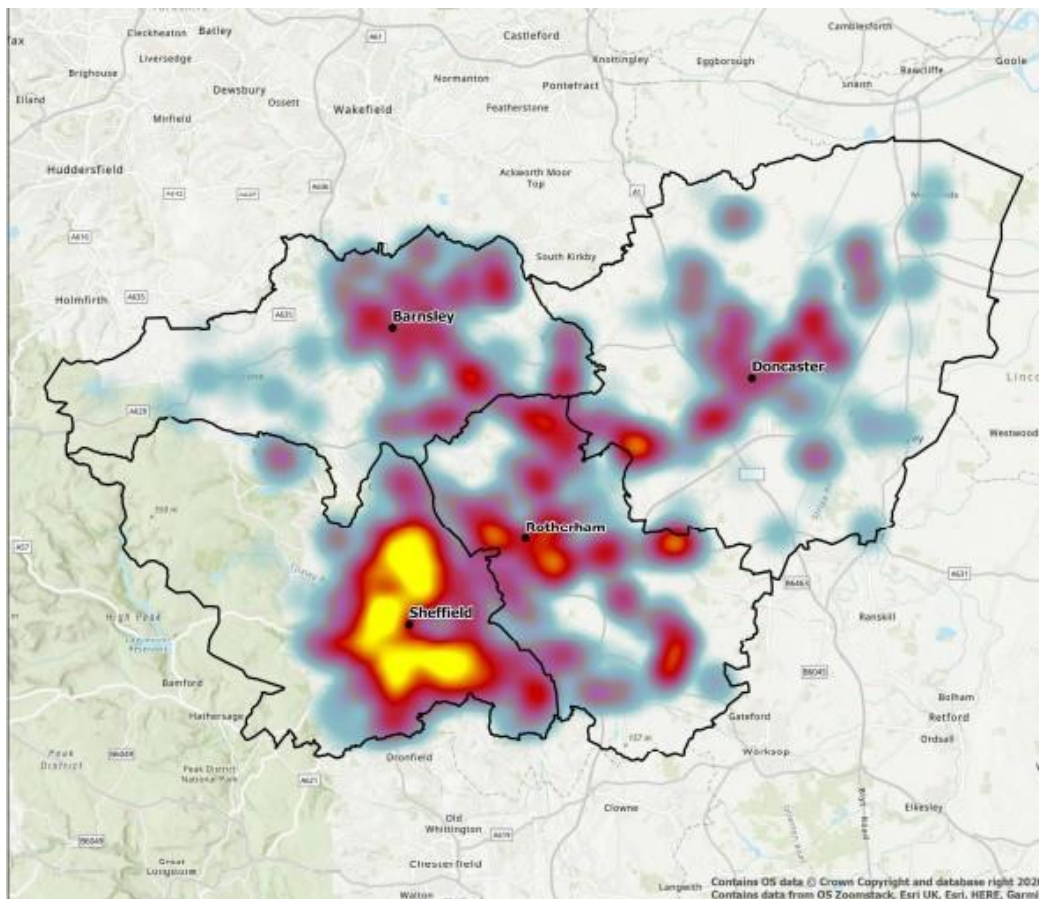
Inconsistent provision of seating at bus stops was a consistent theme throughout the Bus Review and was raised by passengers as well as representative groups including the South Yorkshire Freedom Riders who argued that “all bus stop should have shelters, usable seats and real-time information”. Of the 7,635 bus stops, only 39% have seating at present.

Further to this, Transport Focus surveys show that litter, condition/standard of maintenance, and the information provided at stops have the low levels of satisfaction out of the elements considered.

Limited parts of South Yorkshire have high bus stop density, as shown in Figure 20. This is even the case on key corridors where bus services are deemed to be high frequency.

Transport Focus surveys show that having stops or stations which are close to an individuals' home or destination is particularly important for disabled passengers, people on lower incomes, older passengers (aged 65+), younger passengers (aged 16-24) and tourists/visitors to an area.

Each of the four local authority areas has a transport interchange within the urban centre, but the Bus Review found that they differ in terms of accessibility, facilities and overall usability – with passengers viewing Sheffield Interchange more negatively in particular because of perceived poor connectivity with nearby tram stops and the mainline rail station.



**Figure 20 – Bus Stop Density across South Yorkshire**

Journey planning by public transport is increasingly carried out using digital applications with less reliance on paper timetables, although paper timetables are still provided at many locations. Real time information from buses, trams and trains enables people to make alternative arrangements in a timely fashion if required, yet only 3% (253) of existing stops have real time information displays. This is despite a ‘digital display’ for information at stops being ranked highest for the type of information passengers in South Yorkshire would most like to check

(43% of users), according to a survey by Transport Focus. There is the opportunity to improve information provision for bus services to improve the quality of the journey (for example, providing high confidence on journey reliability) and therefore attractiveness of the service.

## Fares and Ticketing

### Customer Feedback

Customers raised fares and ticketing as one of the key issues in the Bus Review, noting that that “there are an overwhelming number of ticket options available from operators in South Yorkshire, alongside TravelMaster products. This makes it complicated for customers to ensure they receive best value for money”.

A report by the Urban Transport Group<sup>5</sup> concluded that “simplicity, as well as actual fare level, is a key component to making travel attractive to passengers”. It is also one means of improving boarding speeds thereby reducing journey times – important on busy corridors.

<sup>5</sup> <http://www.urbantransportgroup.org/resources/types/reports/what-scope-boosting-bus-use-analysis-intrinsic-bus-potential-local-authority>

As well as the need for simplicity, customers also mentioned the desire for flexibility, including the ability to use buses from more than one operator without being charged a premium. This is particularly true post-COVID, with more flexible working patterns and an increase in home working, but also for those with varied shift patterns – often those on lowest income with least ability to pay extra.

The Bus Review also commented on positive measures in the region, with particular praise for TravelMaster, the operator-managed, multi-operator and multi-modal ticketing scheme. TravelMaster multi-operator products accounted for around 17 million bus journeys per year before the COVID-19 pandemic, which is around 20% of the bus market in the region, and contributes around a quarter of the total revenue within the system.

The remainder of journeys are undertaken either on single fares or utilising single operator products, which inevitably introduce restrictions to customers' travel options. Clearly passengers choose these because they are cheaper than the multi-operator option, but this can then have a perverse outcome if customers find that they have to pay more later in the day when a change in their plans or service failures mean they have to use another operator's buses. This can lead to a perception that products are poor value for money or leads to "fare fear" that they haven't selected the correct ticket product initially (a problem that is not a feature with post-pay schemes such as that in London).

Single operator products do still create confusion – in the Bus Review consultation, one passenger said "It is ridiculous that on routes like the 120 [a high frequency route] where the contract is split between First and Stagecoach, some tickets are only valid on one company's buses. This means that the strap line 'One City, One Service' is grossly misleading".

### Products and Fares

Individual operators have taken their own steps to utilise fares and products to encourage bus use. Both Stagecoach and First South Yorkshire have fully implemented payment by contactless bank card, with First South Yorkshire trialling simplification of ticketing with investment in digital technology and the roll out of an 'oyster style' fare capping trial in Doncaster. Other offers include Stagecoach's Silver Dayrider that allows cross-border travel and a 50% discount for jobseekers.

Customers told the Bus Review that there were some anomalies in the current range of tickets, such as minor differences in the price of day tickets between, for example, Sheffield and Doncaster, and limited opportunities for cheaper bus travel between the four local authority areas in South Yorkshire. The following table shows a comparison of day ticket prices in London and other metropolitan areas with South Yorkshire, noting that the current TravelMaster bus day ticket offer in South Yorkshire is limited to within local authority boundaries.

| Region                 | Price of all day ticket for any bus (£) |
|------------------------|---|
| London                 | 4.65                                    |
| West Yorkshire (MCard) | 5.50                                    |
| Greater Manchester     | 6.00                                    |
| Liverpool City Region  | 4.20 - 5.55                             |
| Tyne and Wear          | 4.85                                    |
| South Yorkshire        | 4.70 - 5.00                             |

There is a need to address both high premiums for multi-operator products and the ability to integrate bus ticketing with other modes. For example, a day ticket in Sheffield is £4.20 for travel on First South Yorkshire buses and £4.70 for the multi-operator TravelMaster equivalent – an uplift of 12% on the single operator product. Adding an option to travel on Supertram in Sheffield adds another 40p to the cost of the TravelMaster product, whilst a South Yorkshire-wide bus and tram day TravelMaster ticket costs £7.00, or £8.80 to include local rail travel. More recently, 'Flexi5' products have been introduced, effectively a discounted carnet of five days that can work for part-time workers or those who work remotely some of the time.

There is a comprehensive offer on discounted fares for young people aged 5 to 18, and an agreed discount across all operators' services for all 18 to 22-year-olds. The MCA also agreed to introduce discounted travel for those aged under 21 for a 12 month period from June 2021, and there was an eight week 25% discount offered on all adult TravelMaster tickets in August and September 2021. However, the challenge of keeping fares down and targeting further discounts is made much harder without a committed funding stream over time.

Measures to impact price or flexibility by bringing a range of specific offers can sometimes bring more complexity, with customers more confused and less likely to see the bus as the first choice for travel. It is obviously key that those on low incomes can afford the bus and feel confident that they have paid the best value fare, but simplicity and transparency are also important, so that customers have assurance that they have obtained the best ticket for their journeys.

The bus operators' view is that the longer term goal is to develop a range of simple and commercially sustainable fares, which in turn provide the economic and environmental sustainability that is needed for the whole network. The fact that the main operators are recording low operating profits or even operating losses at present re-inforces this view.

## **Retail Channels**

The other variable element of South Yorkshire's product range is a variety of means of acquiring them. As noted above, whilst choice is important, this does risk increasing complexity.

Practically all TravelMaster products are available on ITSO smart cards and products can be uploaded via an app, on-bus or at a network of travel shops and Payzone outlets, although there is some variation in where a card can be acquired initially, and which products are available.

Single operator products on a barcode can also be purchased via the operator apps and cash payment is still available. As noted above, direct payment by contactless bank cards is available on the vast majority of buses although not quite all, and it is also very important to retain cash given significant research during the COVID-19 pandemic that many customers have been excluded from basic services where cash has not been an option.

Recent research from Transport Focus, however, suggests that people increasingly want contactless payment as part of a drive for increased hygiene after the pandemic, and there is a desire for 'tap and cap' as a default offer across the whole bus network.

The National Bus Strategy notes that "we want to see multi-operator ticketing everywhere, covering all bus services at a price little if at all higher than single-operator tickets, then to extend this to tickets that cover all travel modes (bus, light rail/metro, rail)". This ambition is shared by South Yorkshire's passengers. From an integration perspective, the TravelMaster range serves as a solid starting position, covering products for bus, tram and local rail. Stagecoach as the operator of the Supertram network, also offers their own single operator bus and tram products.

There is a good basis for development with the TravelMaster product range and the mix of



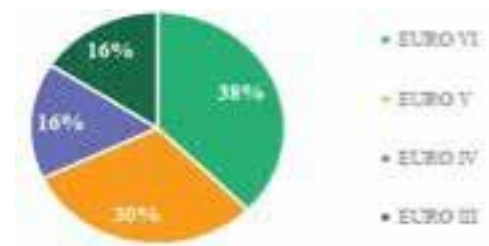
channels available, together with positive initiatives from some individual operators. The challenge going forward is to make this simpler, more transparent and where possible, reduce fares to stimulate recovery and introduce flexibility, particularly for those groups for whom access to employment, education and training opportunities is crucial.

## Vehicles and the Environment

The rise in private vehicle ownership is problematic given South Yorkshire faces an urgent air quality crisis with 18 Air Quality Management Areas (AQMAs) declared for NO<sub>2</sub> across the region, including one covering the entire urban area of Sheffield. A climate emergency has also been declared across South Yorkshire, and there is the immediate need to tackle climate change in line with the Government's adopted target for net zero carbon emissions by 2050. Tackling transport emissions is essential to addressing both issues – locally, road transport contributes to 36% of all CO<sub>2</sub> emissions in South Yorkshire.

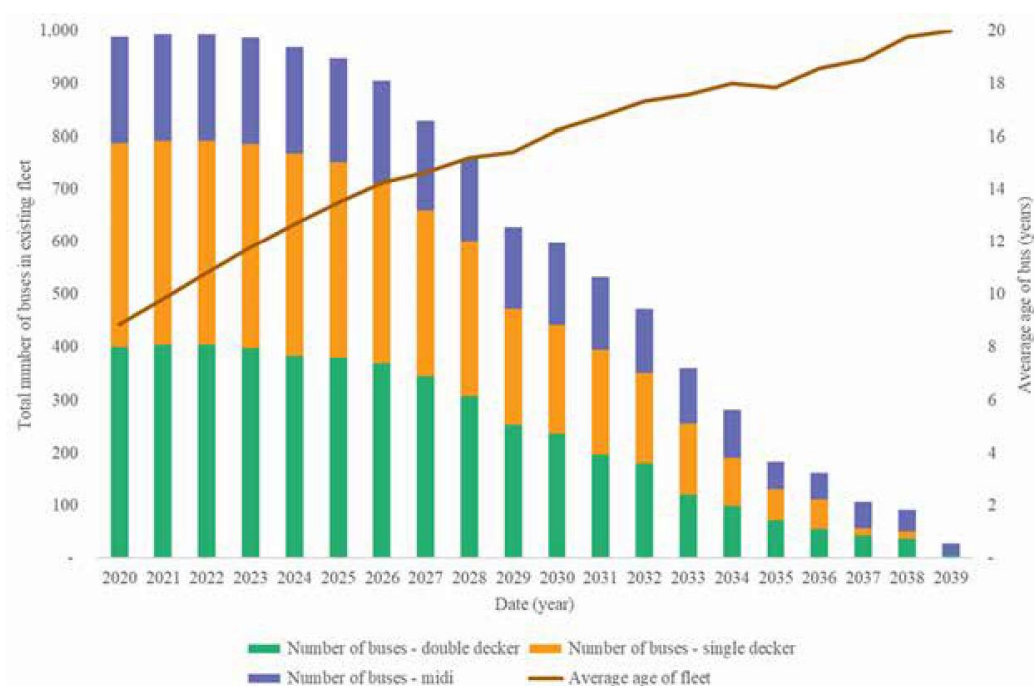
Key to this will be ensuring that the bus fleet itself plays a role in reducing emissions. Figure 21 shows the breakdown of buses that currently make up the South Yorkshire bus fleet – double decker (41%), single decker (39%) and midi (20%) buses – and the natural 'run off' for the current fleet based on an assumed age of 20 years (although 15 years is the typical expected life of a bus). The average age of the fleet in South Yorkshire is currently 10 years, compared to the national average of 8 years.

There remains a high proportion of the more polluting buses operating in South Yorkshire, particularly in Doncaster and Rotherham, with a significant proportion of buses in the region still Euro III, IV and V standard, representing around 62% of the operating fleet. This is higher than typically seen in other regions around the UK.



Only 30.3% of the bus fleet in South Yorkshire is Euro VI compliant, including buses which have had engine management and exhaust retrofit treatment. Doncaster has the lowest proportion of less polluting vehicles, with only 9.4% of buses being the required Euro VI standard. Only 4% of all vehicles in operation are hybrid – conversely, in London, approximately 40% of the fleet is made up of hybrid vehicles.





**Figure 21 – South Yorkshire Bus Fleet Composition and Replacement Trajectory**

Working with bus operators and SYPTE, Sheffield City Council (SCC) was awarded £1.947 million from the Government’s Clean Bus Technology Fund in Spring 2018. 117 non-Euro VI diesel buses operating in Sheffield (93 First South Yorkshire buses and 24 Stagecoach buses) were retrofitted with technology which will improve their engine performance and reduce emissions to a compliant Euro VI standard.

## Passenger Satisfaction

Despite the strength of feeling that was evident through the Bus Review, it is important to have a balanced view of passenger satisfaction with the current bus network in South Yorkshire.

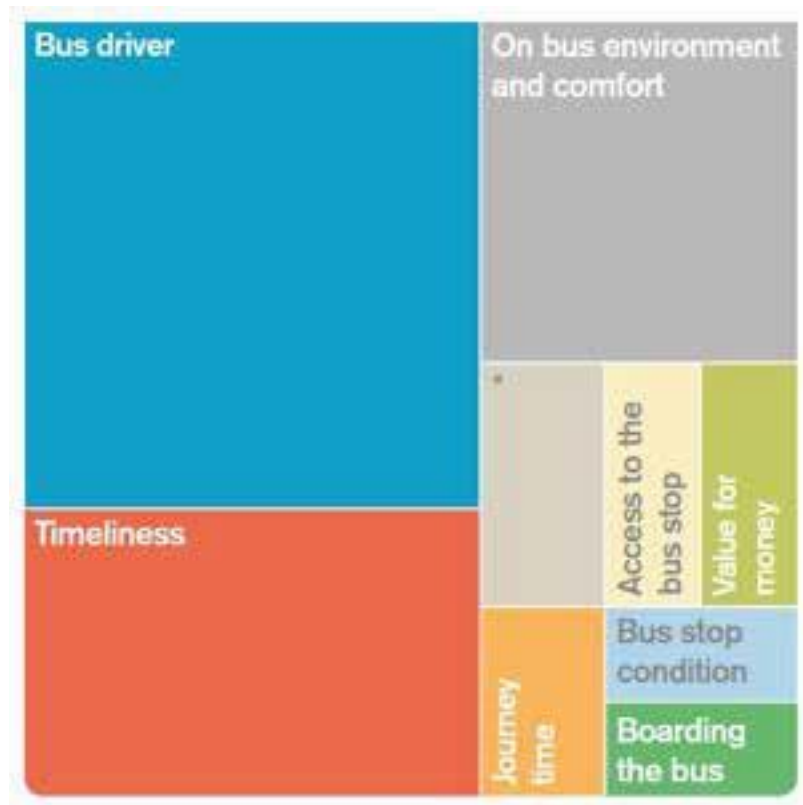
The most recent Bus Passenger Survey<sup>6</sup>, conducted by Transport Focus and published in March 2020 prior to the COVID-19 pandemic, found that 89% of bus users surveyed across South Yorkshire were either “Very Satisfied” or “Satisfied” with their overall bus journey. However, this figure falls to 71% when respondents were asked to consider the overall value for money of their bus journey. 72% of those surveyed were either “Very Satisfied” or “Satisfied” with the punctuality of the bus service and 87% with the actual on-bus journey time.

A further breakdown between the two main operators showed a trend of Stagecoach having generally higher satisfaction ratings across the first three of these four metrics than First South Yorkshire.

The highest levels of satisfaction were recorded for the ease of getting on the bus, the convenience/accessibility of the bus stop itself and the length of time it took to board. Overall satisfaction was at its lowest level for the condition of the bus stop and the quality of the information provided, followed by the greeting and helpfulness/attitude of the bus driver.

6 <https://d3cez36w5wymxj.cloudfront.net/wp-content/uploads/2020/03/08184047/Bus-passenger-survey- autumn-2019-main-report.pdf>

Figure 22 shows the themes that were identified in South Yorkshire as those most affecting overall passenger satisfaction. The larger the proportion of the square reflects those themes mentioned most frequently, indicating that the bus driver is highlighted as having the most impact on satisfaction. To add to the second most important issue – timeliness – congestion was highlighted most frequently as a factor affecting journey time.



**Figure 22** – Themes Affecting Overall Passenger Satisfaction in South Yorkshire (Fare Payers only) (Source: Passenger Focus)

Not all passengers have the same experience of bus use, with some groups being less satisfied overall and in particular areas of service, for example, disabled users are generally far less satisfied (~10% variance from the average in many cases) with their on-bus experience, availability of information, boarding experience, and with driver interactions.

Understanding what the customer wants is an important part of the work commissioned to inform this Plan, but an interesting starting point is some research done by Transport Focus to test the priorities of 5,000 existing bus users in 2020. The top three priorities encompass frequency, network coverage and reliability, all of which came up in the Bus Review, and all of which suggest a strong link to the infrastructure that is provided for buses, both now and in the future, within South Yorkshire. Interviews carried out with operators in 2021 also highlight the importance of these priority areas, in particular reliability, on overall passenger satisfaction and on customer retention.

## 3. Wider Context

### Introduction

It is important not to look at buses, or indeed any public transport mode, in isolation. The Bus Review highlighted the need to consider buses in a much wider context to understand the important role that buses can play for the economy, the environment, and people's everyday lives. This section considers this context in a little more detail, as well as some of the other policies which will influence South Yorkshire's bus network.

### Social, Economic and Environmental Context

A well-connected, sustainable bus network plays a critical role in the prosperity of most places around the world and South Yorkshire is no exception. Buses provide a flexible and cost-effective way of connecting people to opportunities and in a fully integrated system, they are an important component of the overall transport network.

As highlighted previously, the SEP sets out how the economy, lives, and wellbeing of people in the region will be transformed over the next 20 years and is based on three overarching policy objectives: economic growth, inclusion, and sustainability – the three pillars of, stronger, fairer and greener. The SEP also set specific objectives in relation to transport under these three headings:

- Incentivise public transport usage, which will support economic productivity
- Improve the passenger journey experience, making public transport more accessible
- Increase the number of zero emission buses on our transport network.

The Mayor's Transport Strategy<sup>7</sup> identified three key goals for the South Yorkshire transport network:

1. Residents and businesses connected to economic opportunity
2. A cleaner and greener city region
3. Safe, reliable and accessible transport network

An effective bus system is a critical part of how these goals will be met, with buses being particularly important to society in three ways:

- **They provide opportunities for people:** In rural areas they can provide an essential lifeline; everywhere, they connect communities and promote social interaction.
- **They keep the wheels of the regional economy moving:** Well-designed bus networks can enhance people's access to employment and other opportunities, ensuring that the benefits of economic growth can be more evenly distributed.
- **They can help the transition towards a zero-carbon future:** By reducing the need for individual car use, overall CO2 emissions are lower in places where public transport patronage is higher.

<sup>7</sup> [https://sheffieldcityregion.org.uk/getmedia/69c38b3f-1e97-4431-91f4-913acf315632/SCR\\_Transport\\_Report-v\\_4-5-04-06-19-\(1\).pdf](https://sheffieldcityregion.org.uk/getmedia/69c38b3f-1e97-4431-91f4-913acf315632/SCR_Transport_Report-v_4-5-04-06-19-(1).pdf)



## Supporting People

The Transport Strategy highlighted the impact of weak integration between different modes of transport across South Yorkshire, leading to a divide between those people or households who have access to a car and those who rely on public transport. 29.5% of households in South Yorkshire do not have access to a car and 146,000 people are experiencing “transport poverty” across the region. Before the COVID-19 pandemic, around 9% of journeys to work across South Yorkshire were made by bus – compared with this, 71% of residents travelled to work by car. Car use is now at or just below the levels seen before March 2020, whereas bus use is only 74% of pre-pandemic (January 2020) levels at best.

As we recover from the pandemic, it is vital that South Yorkshire’s transport network plays a pivotal role in levelling up regional prosperity by providing low cost, reliable and frequent services that connect people to employment, education and social opportunities – regardless of their background.

A study carried out by the Government Office for Science<sup>8</sup> found a correlation between social disadvantage and physical mobility inequalities because transport, particularly public transport, can be a barrier to employment, can reduce access to education and training opportunities or be prohibitive due to cost. This means certain social groups are more at risk from mobility and accessibility inequalities, particularly low income households, children and the elderly.

Further to this, research into transport and inequality<sup>9</sup> shows that people who depend more on the bus for travel to employment tend to be lower paid, live in more deprived areas, and are more likely to turn down jobs because of transport issues than those on higher incomes, who tend to use cars and trains more often.

Econometric analysis undertaken by the University of Leeds on behalf of Greener Journeys<sup>10</sup> shows that a 10% improvement in local bus service connectivity is associated with a 3.6% reduction in deprivation as measured by the Government’s Index of Multiple Deprivation (IMD). This reduction applies to all neighbourhoods, from the least deprived to the most deprived, meaning that buses matter to all in improving quality of life.

There is no doubt that buses will play a key role in connecting people to education and employment opportunities where car ownership is lowest. Such a 10% improvement in local bus service connectivity in the 10% most deprived neighbourhoods across England would result in:

- 2.8% fall in income deprivation, which would equate to 22,647 people with increased income
- 2.7% fall in employment deprivation, which would equate to 9,909 more people in work
- 1.4% increase in those with adult skills, which would equate to 7,313 people with adult skills
- 0.7% increase in post-16 education
- 2,596 fewer years of life lost.

<sup>8</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/784685/future\\_of\\_mobility\\_access.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/784685/future_of_mobility_access.pdf)

<sup>9</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/953951/Transport\\_and\\_inequality\\_report\\_document.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/953951/Transport_and_inequality_report_document.pdf)

<sup>10</sup> <https://www.cpt-uk.org/media/yqsda4iu/greener-journeys-value-of-bus-to-society-final-1.pdf>

The Bus Review found evidence of the negative impact that poor bus services alone can have on people's lives in South Yorkshire. For example, Commissioners heard from people who reported that they had lost jobs, missed education opportunities, or were simply not able to travel to employment opportunities – all because services had been cut and they were left with no alternative methods of transport. The Government estimates that for 1 in 5 bus journeys, a practical alternative does not exist – providing South Yorkshire's communities with a real choice will be imperative in the future.

## **Supporting Economic Growth**

The benefits of recent economic growth have not been felt evenly by the population and significant inequality remains with economic and social deprivation widening – exacerbated by the impact of the COVID-19 pandemic. This disparity is particularly the case in terms of transport where an increasing number of households are living in poverty, including transport poverty.

South Yorkshire is the 10th largest LEP by population and 16th largest LEP area by economic output, but it is the 7th most deprived LEP area with some of the country's highest economic inactivity and unemployment rates, especially for young people. In 2020, 39% of South Yorkshire's LSOAs were in the top fifth of most deprived in the whole country.

Whilst recent years have seen rapid jobs growth, they have largely been in lower paid employment and/or jobs with insecure contracts. South Yorkshire has low levels of people with qualifications of NVQ4+ (5.6% below the national average), higher than UK average levels of unemployment (5.4% vs 4.6%), a high economically inactive rate (23.6%), and a higher number of people who want a job (26.9%) compared to the national average (22.6%).

The Transport Strategy highlighted the negative impact that poor transport connectivity and congestion is having on the economy by restricting growth and potentially curbing future productivity without immediate intervention. Poor transport connectivity limits agglomeration benefits for the region's economy, impacting on its productivity. With 75% of residents commuting within the South Yorkshire boundary, only 12% of working residents use public transport to access work.

Providing fast, reliable, convenient, and affordable transport is essential in connecting residents to job opportunities, however bus operators were reporting up to 30% increase in journey times on some routes due to congestion before the COVID-19 pandemic.

The polycentric geography of South Yorkshire makes good transport connectivity key to achieving inclusive and sustainable economic growth. The region's public transport system needs to be accessible, affordable, integrated and provide seamless travel throughout the whole region and to neighbouring economic centres for the benefit of residents and business.

In addition, the Transport Strategy also highlighted that gaps in connectivity could further limit access to employment, labour, and higher value jobs. Key economic growth assets such as the Advanced Manufacturing Innovation District, Doncaster Sheffield Airport and Junction 36 are all in out of centre locations and so how to serve these areas, plus new growth zones identified in the SEP, by effective public transport networks, is a challenge that needs to be met.

Bus users themselves are generators of economic growth – the research for Greener Journeys indicated that bus users create more than £64 billion worth of goods and services to the national economy and that buses are the primary mode of access to city centres, responsible for facilitating 29% of all city centre expenditure. The shift of economic activity across the region caused by greater working from home will have an impact on these figures, but there is no

doubt that bus users will play a significant role in the recovery of South Yorkshire's large urban centres, so recognising the role of the bus within these centres, which are often where there are competing demands for space, will be important.

Transport Focus carried out in depth research<sup>11</sup> in December 2020 and January 2021 into current and lapsed bus passenger experiences, looking at perceptions and expectations of travelling during and after the pandemic. One recommendation was that local authorities and bus operators should commit to the introduction of new facilities and measures to improve the punctuality of services and speed up bus journeys to assist with passenger confidence.

At the same time, when a person works from home rather than at the office, their work-related consumption of goods and services provided by the locally consumed service industries will take place where they live, not where they work.

One of the other recommendations of the Transport Focus research was that operators should introduce, and promote the availability of, more flexible tickets which reflect new patterns of demand. Therefore, South Yorkshire's transport system must be agile to adapt to this new pattern of economic and social activity, and the role of buses providing enhanced access to local centres, with flexible timetabling and ticketing offers, will be crucial.

### **Supporting the Environment**

South Yorkshire faces significant air quality issues. In Sheffield, there are 51 separate locations where the European Union's annual average limit value for NO<sub>2</sub> (40µg/m<sup>3</sup>) has been exceeded in one or more of the three-year periods (2010-2012). Analysis indicates that road transport is the single most significant contributor to Sheffield's NO<sub>2</sub> emissions at these locations. NO<sub>2</sub> and particulates have significant impacts on people's health and those living alongside main roads are more likely to suffer from a range of health problems. As a result, SCC is proposing to introduce a 'Category C' Clean Air Zone.

Alongside air quality there is a wider issue of responding to the climate emergency. Most of the energy that is consumed in the region is produced from fossil fuels with petrol and diesel dominating the transport sector. The Sheffield City Region Energy Strategy<sup>12</sup> made clear the role of transport in supporting the region's transition to a low carbon economy. This includes moving to a zero carbon public transport network by 2035, something that will take much greater investment in zero emission vehicles, which recent Government announcements recognise.

A double decker bus can take up to 75 cars off the road and a high quality bus network can also play a role in incentivising modal shift away from private vehicles and therefore reduce car use, decrease congestion, reduce emissions and improve air quality. Research from the University of Westminster<sup>14</sup> found that effective bus priority measures can deliver up to 75% fewer emissions per bus passenger per kilometre than for car passengers.

Public transport, especially buses, will play an essential role in unifying South Yorkshire's transport system to encourage cleaner, greener, productive and inclusive ways of living and working. Regionally, half of all trips under 2km are made by car – more worryingly, a quarter of trips under 500m are also made by car and so for many people short and medium length journeys could feasibly be made by walking, cycling or bus. However, research by Passenger

<sup>11</sup> <https://d3cez36w5wymxj.cloudfront.net/wp-content/uploads/2021/04/23145258/The-route-ahead-getting-passengers-back-on-buses-qualitative-research-findings.pdf>

<sup>12</sup> <https://sheffieldcityregion.org.uk/getmedia/423b1606-ad2b-4261-93b0-f712b7fef6e8/SCR-Energy-Strategy.pdf>

<sup>14</sup> <https://www.cpt-uk.org/media/dwrftlta/binder2.pdf>

Focus suggests that, for many people, environmental concerns are a low priority when they are deciding how to travel – the top three factors are safety, direct travel and convenience, so environmental factors are important to achieve the region’s objectives, but less so in affecting modal shift.

## Links to Wider Policies and Strategies

Understanding the wider context in which the bus network operates, and the wider goals and objectives that it supports, shows how this document and the interventions that flow from it, cannot exist in a vacuum. Although this Plan represents a step-change in how buses are perceived within the transport system, there are a number of existing policies that both recognise the importance of the bus network and also include some proposals for improvement on which to build.

### Mayor’s Transport Strategy

The Mayor’s Transport Strategy included the three goals mentioned previously and nine key supporting policies. Improvements to the bus network will have wide-reaching benefits across South Yorkshire with clear links to all of these policies.

The Transport Strategy envisaged a series of implementation plans, some of which the region will lead, some of which the region will contribute to and some of which the region will seek to influence. The Rail and Active Travel Implementation Plans have already been published – this document will help shape the Public Transport and Roads Implementation Plans, given the fact that buses predominantly use the road network on which to operate and that the existence of both a light rail and a tram-train network within South Yorkshire means that it would not be logical to view buses in isolation when developing a future public transport network.

The complete public transport network (including tram and tram-train) needs to be considered as a whole, as well as the links to and from public transport at either end of a journey – this has been a consideration of the development of the South Yorkshire’s aspirational active travel network. How a customer views the journey should be how a future network is developed for it to be effective and for it to address a number of the issues identified in the Bus Review.

### Key Route Network

The concept of a Key Route Network (KRN) for South Yorkshire was initially identified in the Mayor’s Transport Strategy (arising from the Devolution Deal) as a network across the region where a more integrated approach to the management of the network could address the challenge of fragmented thinking and responsibility that exists at the moment.

A defined KRN could be used to plan and identify investment priorities in the future, all linked to a new set of objectives for the region’s road network, recognising that how roads are planned and used needs to change drastically if South Yorkshire is to address issues such as congestion and air quality, contribute to the net zero targets and create a better public and active travel network as part of the region’s whole transport network.

An initial KRN was defined for South Yorkshire that aimed to reflect the new approach to the road network, meaning that routes that met the following public transport-related criteria would be included:

- Principal public transport corridors – roads with an inbound frequency of 6 or more buses per hour (except in any identified growth area identified in the SEP, where either direction is considered)



- Access to regional hubs – roads that connect the key economic centres defined in the Mayor's Vision for Transport<sup>13</sup>
- Access to key public transport hubs – roads that provide direct access to public transport hubs, interchanges or park and ride/park and cycle sites.

This approach is a significant departure than simply using traffic flow volumes to define the important parts of the road network and reflects the increasing importance that will be placed on public transport within the South Yorkshire's future plans.

The Government is currently consulting on increasing the responsibility for MCAs over the operation and maintenance of KRN in their areas, and so there is some uncertainty at this time as to what this may mean in the future. What is clear, however, is the commitment from South Yorkshire to recognise how such roads support bus services and to ensure full consideration is given to making the services on these roads more frequent and more reliable.

### **Individual Local Authority Policies**

In addition to the Mayor's Transport Strategy and the published or emerging implementation plans that support it, the importance of buses and the need for improvement, is also recognised in the strategies of all of the MCA's constituent local authorities.

The **Barnsley Transport Strategy (2014-2033)** notes that internal connectivity within the borough is an issue. In particular, there is recognition that there is still a 'hub and spoke' pattern to bus services. Travel to the principal towns from the town centre and vice versa is relatively simple, as opposed to journeys between principal towns or to areas outside the established road network, with slow journey times and infrequent services. External links also tend to originate from Barnsley Interchange and not from the principal towns themselves, necessitating travel to the town centre, with additional longer travel time and inconvenience. Providing a network that meets a changed set of travel needs will be important.

Poverty and social exclusion are also significant issues, and there are several communities, especially in the Dearne which are relatively isolated and combine urban levels of deprivation with rural levels of isolation. Those living in areas of low employment often find it difficult to access jobs in the growth areas of Barnsley and beyond, by public transport. Also, young people have difficulty accessing learning opportunities, again suggesting that the network should change to support the changing needs of local people.

The **Doncaster Infrastructure Strategy (2019 Update)** outlines the investment requirements and funding mechanisms to support the delivery of growth set out in the Doncaster Local Plan. The document notes that Doncaster has a comprehensive bus network serving urban and rural communities, and which helps to support areas hard to reach by other modes of public transport, providing a vital lifeline to rural communities. However, bus patronage has been falling for a number of years, and a range of bus improvement and efficiency measures are likely to improve bus punctuality and services across Doncaster and other parts of South Yorkshire, particularly at peak times.

Such schemes, alongside other measures (including park and ride schemes and junction improvements) will help relieve congestion and encourage public transport use along key strategic routes serving housing, employment and leisure developments at the Lakeside, Doncaster town centre and Doncaster Sheffield Airport. In addition, advanced emission improvement technology will be installed along the existing bus corridor between Doncaster and Rotherham to reduce nitrogen oxide emission levels.

<sup>13</sup>[https://sheffieldcityregion.org.uk/getmedia/1c1ad981-67d6-43f9-87ce-eba7da30fd06/Mayoral-Transport-Vision-V-2-18-12-18-\(1\).pdf](https://sheffieldcityregion.org.uk/getmedia/1c1ad981-67d6-43f9-87ce-eba7da30fd06/Mayoral-Transport-Vision-V-2-18-12-18-(1).pdf)

The **Rotherham Transport Strategy (2016-2026)** notes that Rotherham is well served by a network of largely radial bus services, linking all the principal settlements with the town centre as well as linking neighbouring major settlements. However, declining public transport patronage is seen as indicative of a system that is not meeting the needs of travellers. Although there are some existing bus priority measures in Rotherham, there are many places where buses are affected by congestion, for example on the A633. Not only does this give the bus a distinct journey time disadvantage compared to most other modes, it also affects reliability and timetabling – this suggests a need to identify targeted bus priority improvements.

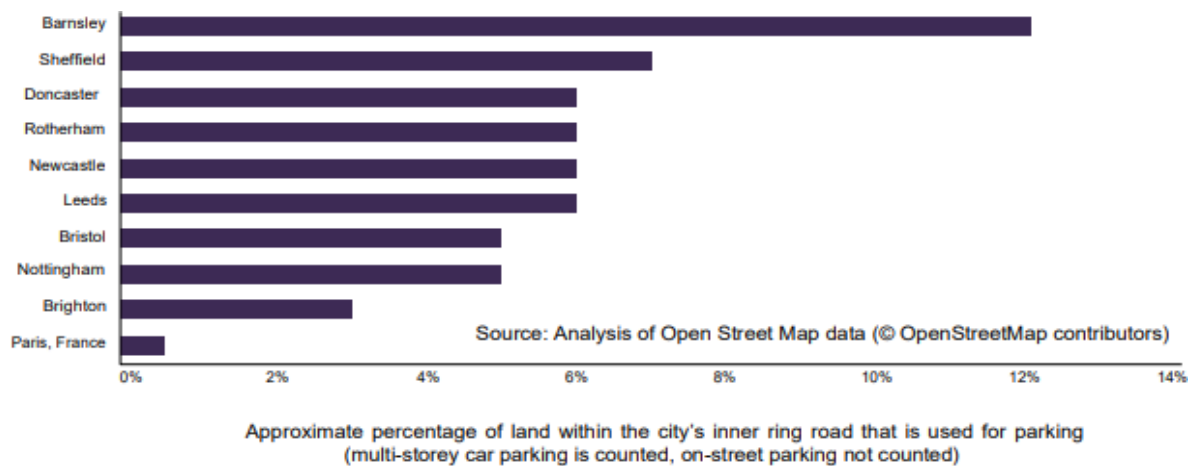
Recognising some of the issues with previous development and integration described previously, the document outlines an intention for new developments to be expected to provide connectivity to existing bus and active travel networks, for instance by providing convenient pedestrian access to bus stops. Location of developments along major public transport corridors will be preferred to those which are more remote. In addition, many bus, tram and train trips start and finish on foot or bicycle and many more could be transferred if facilities beyond the active transport network were improved and better connected. So, more attention will be paid to helping people change from one mode to another.

**Sheffield's Transport Strategy 2019 to 2035** is a long term plan to help deal with the city's pressing economic, environmental and equality challenges. On buses, the document states that it will not be enough to simply make the bus faster – there is a need to make it simple to understand and use, and therefore, more attractive. A step-change is required to reverse the decline in patronage and to make buses (and trams) as easy to use as cars, both to attract people away from cars and on to bus services, but also to encourage existing bus passengers not to abandon the bus for the car (which is particularly important in the immediate aftermath of the COVID-19 pandemic).

Actions identified include introducing additional bus priority, including new bus lanes on existing key bus routes, to not only protect buses from congestion but also to proactively improve bus journey times. Other priority measures will include traffic signal control improvements, realigned to proactively speed up buses, rather than merely bringing late running buses back to timetable. The hours of operation of existing bus lanes throughout the city will be extended to include weekends and daytime periods, to ensure bus journey times and reliability are maintained throughout the day and to reduce the costs of operating public transport services.

All of these policies suggest support for the principle of this Plan, but one area where there can sometimes be conflict between local policies and the needs of the bus system is the issue of parking provision and charging, particularly in larger urban centres.

The increase in car usage described previously has driven an increased demand for car parking spaces, particularly in urban centres. This has been met by both local authority and private sector run provision. Across the four urban centres in South Yorkshire, there are just over 17,000 parking spaces, the level of which are above other towns and cities, as shown in Figure 23.



**Figure 23** – Approximate Percentage of Land used for Parking within an Urban Area's 'Inner Ring Road'

Around 40% of the total number of spaces in the urban areas are owned and operated by the local authorities, but the split between public and private parking provision does vary across the four urban centres:

- Barnsley – 2,322 total, 72.8% public/27.2% private
- Doncaster – 4,516 total, 58.3% public, 41.7% private
- Rotherham – 1,856 total, 96.2% public, 3.8% private
- Sheffield – 8,446 total, 8.7% public/91.3% private.

The split between public and private parking provision in any one location is important in terms of the ability to balance parking provision and charging with a policy to encourage bus use. However, in Sheffield, much of the current private parking provision is on identified development sites, highlighting the need and opportunity to embed measures to encourage public transport use within planning policies.

The perceived cost of using the car as opposed to the bus is often skewed by the parking charge at the destination, and similarly the ease and availability of parking can often weigh a decision on which mode to use in favour of the car. Car parking charges in each of the local authority areas are often priced very competitively compared to the average price of bus fares. For example, in Barnsley, parking is free for a three hour period at weekends and in Rotherham, parking is free all day on Sundays, whilst for the rest of the week, prices are generally as low as 20p for 30 minutes, 5% of the £4 cost of a First South Yorkshire day ticket. Similarly, in Doncaster, parking for 5 hours at the main shopping centre (where there are 846 parking bays) is only £5, 30p more than the price of a First South Yorkshire day ticket, and £1 more than a capped return journey.

## Technology

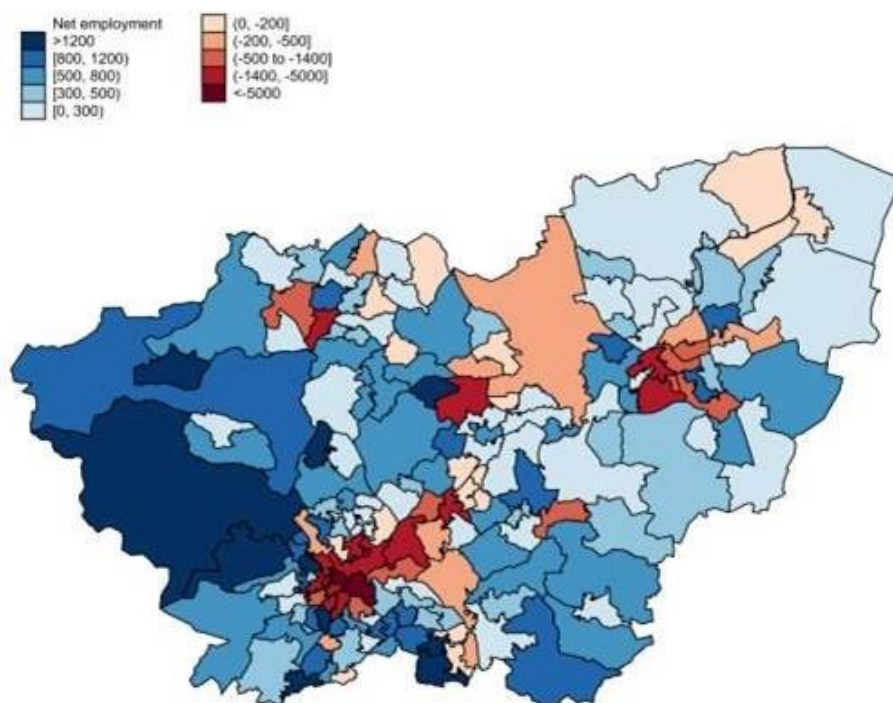
Advances in technology are drastically changing the world and the transport industry is already benefitting from advancements in technology and innovation. South Yorkshire MCA commissioned a review of future mobility services across the region to help develop the implementation plans that support the Transport Strategy.

The review identified that the opening up of data has significant potential for the development of new services and solutions and that South Yorkshire has the opportunity to explore how data can be made more open. The unlocking of data can also support better region-wide planning,

not just from a mobility perspective, but also to look at the whole system of planning to support better and more predictable outcomes.

The evolving way of accessing many mobility options without having to own a car means that car ownership rates may fall as travel patterns and behaviours change in response to a rapidly evolving market. There is an important role for South Yorkshire to mitigate against any risks of new mobility models in a pro-active manner, specifying up front what the MCA and the constituent local authorities want from service providers and ensuring these parameters are operated within.

As well as offering opportunities, technology can also offer threats to the bus network, no more so than how travel patterns and demands have changed as a result of the COVID-19 pandemic and increased working from home – a trend now known as ‘zoomshock’. Recent research by the Universities of Birmingham, Nottingham and Sheffield<sup>14</sup>, illustrated in Figure 24, show just how labour markets across South Yorkshire have changed in the past 18 months, with a significant reduction in employment within urban centres, not all of which will necessarily return as restrictions ease.



**Figure 24 – Net Employment Changes across South Yorkshire since March 2020**

Whether these changes are permanent or temporary remains to be seen, but the implication again is for a bus network that is more flexible than it has been in the past, being able to respond to such changes more readily.

<sup>14</sup> <https://khub.net/documents/312279551/O/FULL+ARTICLE+--+Zoomshocks.pdf/3ceedd0d-ee04-dede-cfa4-33a292277d1c?t=1631190931594>



## 4. What We Want From Our Bus Network

### Introduction

The preceding sections of this Enhanced Partnership Plan have set out the position with the current South Yorkshire bus network and also wider factors that will influence the shape of the network and the needs of passengers going forwards. Drawing on this, and the analysis commissioned following the publication of the Bus Review, the MCA, the constituent local authorities and the bus operators, have started to develop an idea of what is needed from the bus network across a range of elements.

### Vision for the Bus Network

At the outset, the MCA, local authorities and bus operators have agreed a vision for the South Yorkshire bus network as illustrated below.



This vision is linked to the objectives of the SEP and the Transport Strategy described previously, and also to the emerging objectives developed in response to the City Region Sustainable Transport Settlement (CRSTS), recognising the significant role that this devolved funding source will play in delivering many of the elements of this Plan, particularly the capital expenditure required.

## Headline Outputs

As well as achieving locally derived objectives, the interventions set out within this Plan also need to link closely to the National Bus Strategy, which had at its centre an aim to make buses more frequent, more reliable, easier to understand, better co-ordinated and cheaper.

In particular, the Government envisaged that BSIPs would include a range of policies and interventions that deliver a number of headline outputs, including:

- More frequent and reliable services
- Improvements to planning/integration with other modes
- Improvements to fares and ticketing
- Higher specification buses
- Improvements to passenger engagement.

Given the history of bus services in South Yorkshire, the strength of local feeling that was evident during the development of the Bus Review and the emphasis placed on achieving ambitious carbon reduction targets, two other headline outputs are considered to be important to shape this document:

- Strong network identity
- Invest in decarbonisation.

Finally, it became clear in discussions with operators that there needed to be shift in the policy positions adopted by the MCA and the constituent local authorities in some areas, predominantly around planning for new developments and the use of the KRN to provide real and lasting bus priority, both of which would signal a real commitment to the bus. Therefore, there is a final headline output – Complementary policy positions.

The key elements of the Enhanced Partnership Plan that are described in the remainder of this document have been developed with a mind to the agreed vision and also how they sit within these headline outputs.

## Outcomes and Impacts

The National Bus Strategy explicitly states that BSIPs should set targets (specifically around journey time and reliability, patronage and customer satisfaction), based on an assessment of the current situation and the expected impacts of the interventions and policies set out within the document.

Understanding what the outcomes and impacts of the measures contained within this Plan is the first part of setting relevant and realistic targets. This is best illustrated using a 'logic map', which shows the clear linkages from the context (in this case, the key findings of the Bus Review) through to the impacts anticipated (which should have a direct read-across to these findings).

The South Yorkshire logic map is illustrated in Figure 24.

The 'Outcomes' in the logic map represent our objectives for improving bus services and are those which will be monitored and evaluated through the ongoing development of the Enhanced Partnership Plan. These reflect both local and national objectives and also have a strong link to the success criteria that were included in the Transport Strategy, as shown in the table overleaf.

Drawing on both the logic map and the previously agreed success criteria gives a platform for setting out a number of key targets for this Plan.

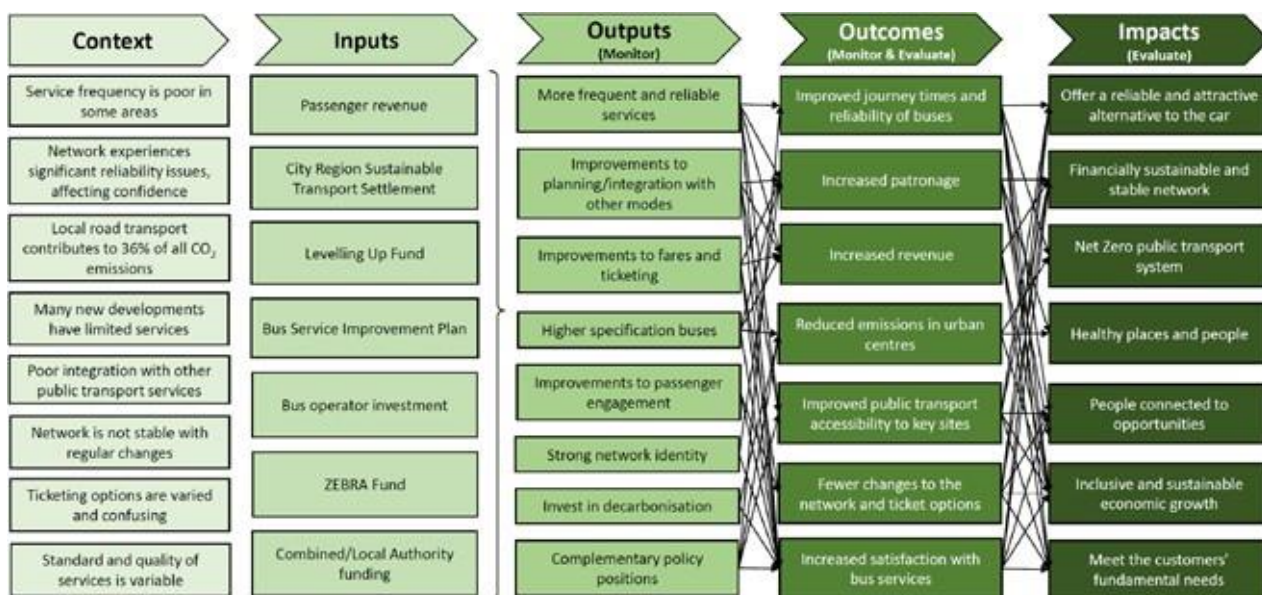


Figure 24 – South Yorkshire Bus Improvement Logic Map

| Goal  | Success Criteria (by 2040)  |
|---|---|
| <b>Residents and businesses connected to economic opportunity</b> | a) Contribute towards increasing GVA in South Yorkshire through increasing the number of economically active people living within 30 minutes of key employment locations and universities by public transport                       |
| <b>A cleaner and greener city region</b>                          | b) Better frequency of rail service between Sheffield and Manchester/Leeds - at least four fast trains per hour, with a target 30 minute journey time to/from both and a local rail network that meets the agreed minimum standards |
|   | c) Increase productivity through reducing delays on our transport network   |
|   | d) Increase trips by 18% bus, 100% rail, 47% tram, 21% walking and 350% cycling and manage the increase in private car/van/goods trips to 8%  |
| <b>Safe, reliable and accessible transport network</b>            | e) 95% public opinion that our local transport choices feel safe  |
|   | f) Reduction in reported casualties of 4% per year  |
|   | g) Eliminate AQMAs in the city region and comply with legal thresholds to achieve compliance in the shortest possible time  |
|   | h) Reduce tailpipe carbon emissions in line with targets for the UK and have a zero-carbon public transport network by 2040   |

## Targets

The preceding discussion shows a logical progression from the outcomes of the Bus Review to the targets that have been chosen for this Enhanced Partnership Plan, through an agreed vision and a series of headline outputs that marry local and national objectives. The targets have also been selected with a mind to the availability of baseline data as set out previously and further data that the various parties to this Plan can compile.

### Mandatory Targets

The Initial BSIP included targets that were required to be set for 2024/25 for journey times, reliability, passenger growth and customer satisfaction, along with an indication of how these are to be measured. The suggested targets, drawing on the baseline information provided previously and with a mind to the prioritised activities set out in the following section, are shown in the following table. These targets have been adopted for the Enhanced Partnership Plan.

| Metric                                | Existing/Target Values |              |            | Method of Measurement   |
|---------------------------------------|------------------------|--------------|------------|---|
|                                       | 2018/19                | 2019/20      | 2024/25    |   |
| <b>Journey Time</b>                   | +0.3%                  |              | -4.0%      | Increase in cumulative journey times for an agreed set of frequent services compared to 2017 baseline |
| <b>Reliability</b>                    | 99.0%                  | 98.8%        | 99.5%      | Bus operator data   |
| <b>Passenger Numbers</b>              | 92.0 million           | 82.9 million | 77 million | DfT statistics  |
| <b>Average Passenger Satisfaction</b> | 86%                    | 89%          | 92%        | Transport Focus annual survey   |

The Journey Time metric is based on achieving a reduction in journey times for the set of frequent services shown in Figure 18 as high as that achieved between 2017 and 2019 as a result of the interventions made – this would apply across all services shown and all urban areas. Achieving these journey time reductions will be delivered by a combination of bus priority measures and improvements to bus boarding/stopping times on targeted services.

The Reliability metric (defined as whether a service actually operates) picks up the need to demonstrate that the bus offers a reliable mode of travel and so seeks to consolidate the aspiration included within the existing voluntary partnership agreements into a single target for South Yorkshire. Better data on network incidents and an improvement in vehicle age and specification will contribute to the achievement of this target.

The Passenger Numbers metric reflects the recent patronage trends and the forecast for patronage recovery following the COVID-19 pandemic shown in Figure 9. The target for 2024/25 represents a 22% increase on the passenger numbers that are currently forecast for 2021/22 (which are themselves reliant on whether further restrictions are imposed in the coming months).

Given the intended removal of Government support for bus services at the end of March 2022, there is an imperative to try to return to pre-COVID trend levels of patronage as soon as possible, and so the target is to achieve this within two years, which is six months earlier than



shown in Figure 9, indicating a commitment to introduce early measures through this Plan aimed at an accelerated recovery in patronage.

Thereafter, the selected target represents a 4% increase in patronage over the following two years, which is comparable to the increases seen in other metropolitan areas such as Tyne and Wear and Merseyside, prior to the COVID-19 pandemic. This is also some 20% above the level of patronage that is forecast by even the most optimistic of the trend lines shown in Figure 9.

Beyond 2024/25, the targeted increase in bus patronage by 2040 set out in the Transport Strategy (and referenced in the preceding table) remains valid, showing a continued level of ambition for future bus patronage that has not been affected by the COVID-19 pandemic, merely a more immediate resetting of how the decade-long decline in passenger numbers can be addressed and the foundations for growth established.

The Average Passenger Satisfaction metric seeks to track a continuous improvement in bus services on a similar trajectory, and to a similar level, to those comparative metropolitan areas mentioned above and some of the exemplar areas highlighted in the National Bus Strategy. Targeting those areas that are having the greatest effect on passenger satisfaction that were shown in Figure 22 will underpin the approach to this target.

### **Supplementary Targets**

To reflect the logic map in Figure 23 and the Transport Strategy success criteria, it is also proposed to monitor the following metrics through the Enhanced Partnership Plan:

- Overall revenue within the system (as a measure of financial sustainability)
- Average daily bus fare as a proportion of the average daily wage (as a measure of affordability)
- Punctuality (as a measure of network performance)
- Proportion of the population within 15 minutes travel time from their nearest regional hub via public transport (as a measure of integration)
- Accessibility to key employment locations (as a measure of economic opportunity)
- Overall fleet emissions.

Further work will be undertaken to develop the baseline and targets for the metrics in advance of March 2022, as the necessary supporting analysis is completed.

It should also be noted that any further national restrictions between now and March 2022, along with announcements on a number of funding bids and settlements and whether there will be a continuation of Government support for bus services beyond March 2022, will have a significant influence across both the mandatory and supplementary targets, and so the range of targets will be reviewed again before the implementation of the Enhanced Partnership.

# 5. Delivering The Plan

## Introduction

This section explains how the requirements set out in the National Bus Strategy are to be tailored and delivered within South Yorkshire to deliver a more reliable, higher quality and better value bus network.

The findings and recommendations of the Bus Review provided the starting point for identifying what is needed in order to improve the bus system in South Yorkshire. Further work has been done to identify 40 prioritised activities, interventions and policies for inclusion in this Enhanced Partnership Plan and the following paragraphs provide a little more detail on each, explaining how they will contribute to improving the South Yorkshire bus network and achieving the agreed vision, all within the context of a stronger, fairer, greener region.

These prioritised interventions have been developed from a thorough evidence base including:

- Intermediate outputs from the extensive work commissioned by the MCA in response to the Bus Review, covering Route, Quality and Environment Analyses – this work is ongoing at the time of preparing this document
- Liaison with senior officers of the MCA, SYPTE and the local authorities
- Outputs from a specific commission to develop a realistic action plan to address issues around fares and ticketing, given the matters raised in the Bus Review and the prominence given to this topic in the National Bus Strategy
- Discussion with all bus operators in South Yorkshire and the Confederation of Passenger Transport throughout the preparation of this document
- Individual meetings with passenger groups, disabled passenger representatives and local businesses at specific points as the document was developed
- Development of the CRSTS bid recently presented to Government, the means by which much of the capital investment required within the five year lifetime of this Plan, will be delivered.

It should be recognised that the interventions will take time to implement and therefore impact may not be felt immediately. Some interventions can be implemented in the short term (indeed, some are already underway), whereas others will take more time, either because further work will be required to understand the detail of what is needed in practice, mobilisation lead times or due to the best timing for their deployment given the focus on immediate patronage recovery – this is explained further for some of the activities. This approach also reflects the fragile state of the South Yorkshire bus network following the COVID-19 pandemic.

As well as when these activities, interventions and policies are implemented, there may well be different approaches as to how they are implemented, reflecting the current legislation governing bus networks in England and the ability of the various delivery models to support (or not) what is trying to be achieved. Whilst the Enhanced Partnership is the first delivery model that will be employed, other models may be more appropriate, or necessary, in the future to achieve all that is required.

Many activities, policies and interventions by the MCA, the constituent local authorities and bus operators will influence and contribute to delivering the desired outcomes and impacts, locally,

regionally, and nationally. Granularity of information about the short term interventions will be developed through the Enhanced Partnership.

Reference should also be made to the summary table at Appendix A showing how the prioritised activities strategically align to the objectives of the SEP and CRSTS, and with the headline outputs of the National Bus Strategy and the Transport Strategy success criteria.

## Stronger South Yorkshire

### Vision for the Bus Network

- Providing a reliable and attractive alternative to the car
- Supporting inclusive and sustainable economic growth
- Using technology and data to improve connectivity, quality and resilience

### Providing a Reliable and Attractive Alternative to the Car

Accelerated by the COVID-19 pandemic, people's lifestyles have changed, altering how they live, work and travel. Alongside this, car ownership has continued to rise steadily, increasing the number of vehicles using the region's roads. As data analysis carried out to support development of this Plan identified, the consequence of this is increased traffic and congestion across the network and throughout the day, no longer limited to urban centres and traditional peak times of day, with an adverse impact on bus punctuality. This in turn leads to falling passenger confidence in buses as a reliable method of travel.

To combat this, we will put in place measures across South Yorkshire's road network to improve bus service punctuality against congestion so that passengers can experience faster, more reliable journeys. This will rebuild passenger confidence but also encourage modal shift from cars by offering a more attractive alternative than at present.

1. **Standardise and extend hours of operation of existing bus lanes.** Previous evidence highlighted the importance of introducing effective bus priority measures to improve bus journey speeds and reliability. National research has also shown the positive impact bus lanes can have in reducing congestion and journey delays experienced by individuals.

In the most recent Transport Focus survey, only 69% and 75% of passengers were satisfied with bus punctuality on First South Yorkshire and Stagecoach services respectively. The Bus Review also found that at present, bus priority measures, particularly bus lanes, are not consistent across the region in terms of their hours of operation. Even before the COVID-19 pandemic, there were changes in working times, in the hours of schooldays and in how retail and leisure facilities have extended their opening hours, all of which mean that travel demand patterns may be different from the traditional peak hours on which many bus lanes currently operate.

Each of the main bus operators has previously called for greater consistency of operation and enforcement across the region, indeed First South Yorkshire called for "effective and coordinated action on congestion hot-spots, bus lane operation and enforcement to deliver significant improvements in predictability and bus journey times to attract people out of their car".

To reflect the new travel demand patterns, we will review the operating times of bus lanes and standardise the hours of operation, where possible, across the region to give buses consistent priority on the region's busiest roads and at times when the benefits for punctuality will be greatest. We will also lengthen and/or widen bus lanes where this would give an immediate benefit and improve signing and lining to aid driver awareness and enforcement.

- 2. Improve pinch-point junctions at identified locations of greatest delay.** Bus service punctuality can be impacted by localised congestion at particularly busy junctions, even outside of peak travel times. This is evidenced by the data analysis carried out for this Plan whereby there is strong correlation between the least punctual services and the least punctual routes where delay hotspots are congested road junctions, such as Chesterfield Road in Sheffield.

Slower bus speeds can reduce patronage, with a 10% decrease in operating speed being shown to lead to a 10% decline in patronage. We will therefore prioritise improvements to those pinch-point junctions that are most adversely impacting bus punctuality. This will include giving buses greater priority over cars at busy times so that bus journey times are more punctual and therefore give passengers more confidence in network reliability. Work on this has already begun, with some pinch-point improvement schemes already identified and included in agreed gainshare improvements for 2021/22 and in South Yorkshire's bid to the Government's Levelling Up Fund.

- 3. Major junction improvements on the KRN to include bus priority measures as a core design requirement.** In the past, the needs of buses, including bus priority measures, have not necessarily been considered early enough in planning and infrastructure projects, which puts buses at an immediate disadvantage to private vehicles and often leads to a lack of real benefits once a scheme has been implemented.

As part of the option assessment stage of any scheme, major junction improvements on the KRN will require bus priority measures to be included and the input of bus operators and, where relevant, bus passengers, sought at the earliest possible stage. This process is already underway for the Shalesmoor Gateway scheme in Sheffield, which now includes a scheme objective to deliver a greater journey time saving for buses than other vehicles through the scheme as well as involving both First South Yorkshire and Stagecoach in a recent design workshop.

- 4. Develop a pipeline of bus priority improvements across the KRN.** The proposed South Yorkshire KRN encompasses our more strategically and economically important local roads and carries a significant proportion of the region's traffic. At present buses, are not generally given equitable strategic priority (largely with cars) across the proposed KRN and are not always prioritised for investment in improving journey times. There is a need for a systematic network of significant bus priority interventions across the region to drive improvements in reliability and journey times and make buses more attractive.

There is clear evidence elsewhere of the benefits of giving buses more space on strategically important roads, such efforts in as in Bristol and Brighton and Hove, where bus priority on key corridors has significantly improved bus reliability and increased patronage on the routes that benefitted from the priority measures.

The response to the COVID-19 pandemic has shown that re-allocating road space enables people to use more sustainable modes of transport and there is a need to find ways to 'lock in' these benefits over a sustained period of time. The flexible use of the South



Yorkshire road network during recent months indicates that an appropriate balance needs to be struck between the creation of new road infrastructure and making better use of the existing network.

The Devolution Deal agreed with Government already allows for greater collaboration on the management of the KRN across the city region by the respective highways authorities in partnership with the Mayor. The KRN should carry the core, high frequency, bus services with a high level of punctuality to encourage their use, meaning that effective priority is needed across this network.

Understanding what is needed across the KRN will take time, but we will develop an agreed pipeline of significant bus priority improvements with bus operators, using a set of principles that have been developed and shown in Figure 26, using a corridor in Barnsley as an example.

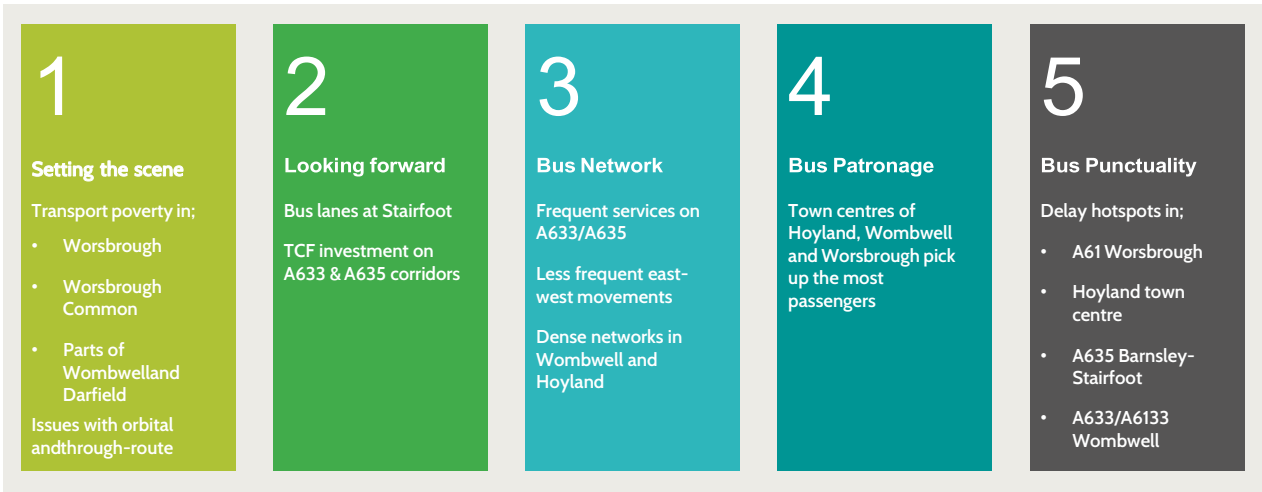


Figure 26 – Approach to Developing Bus Priority Measures

Given a need to recover patronage levels as soon as possible, the development of the pipeline of bus priority improvements is already underway, with the aim to complete the work in November 2021. However, we have already started identifying areas of high demand and high unreliability shown in Figure 27 as areas where bus priority measures can be targeted.

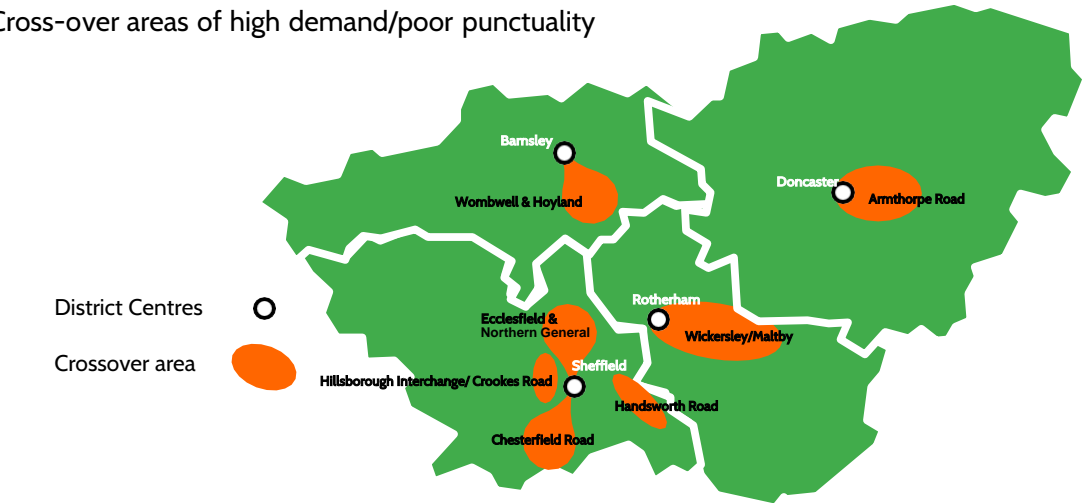


Figure 27 – Areas for Initial Investment in Bus Priority Measures

To ensure that we can make a start in delivering the required bus priority on these corridors, capital funding is already being aligned to this activity, both through the Levelling Up Fund bid and the CRSTS, with early bus priority measures identified on the A635 in Barnsley, the A18 corridor in Doncaster, Warren Vale in Rotherham, and the A61 Chesterfield Road in Sheffield.

## Supporting Inclusive and Sustainable Economic Growth

Public transport, especially bus, is vital for everyone in our region but especially those people from deprived communities. Without this underlying public transport network, people face challenges in accessing social, education and employment opportunities. Passengers have reported that poor or no access by bus meant they either had to use private vehicles (which some could not afford) or simply not take up a job offer because they could not reliably get to work. This example of poor public transport as a barrier to employment and therefore productivity, is where we see increased investment and the activity set out in this Enhanced Partnership Plan playing a major role in arresting this decline and levelling up our public transport network in South Yorkshire.

- 5. Review and strengthen access to the bus system and explore new types of Demand Responsive Technology (DRT) bus services away from the core routes.** The route analysis work currently underway will help us understand the shape of the network we should be working towards by November 2021 – one that not responds to current demand but helps create new demand and that serves every community across South Yorkshire. This could be achieved over time both by a reconfiguration and expansion of scheduled routes, but also other methods like DRT.

Bus service frequency has fallen significantly away from core routes in recent years as a result of funding pressures and routes becoming no longer commercially viable, hence there exists a spiral of decline created by commercial vulnerability and reducing patronage which has left many rural areas cut off from bus services. South Yorkshire ranked among the lowest authorities in England for ‘at stop’ waiting time satisfaction. The same analysis also identified that “doesn’t run” and “doesn’t run when I need it to”, are amongst the most common reasons car users give when explaining why they do not choose to travel by bus.

DRT services have been launched in other parts of the UK to bridge the gap between core bus routes and those areas where a timetable bus service is not effective at meeting customer needs. The TeesFlex service and the recently launched FlexiBus East Leeds both provide an alternative to timetabled services enabling customers to ‘hail’ a bus via an app and board at a ‘virtual’ bus stop (usually a location within 200-300m of their location). The former is targeted at areas where there have been cuts to tendered services in recent years, whilst the latter is more targeted at areas of employment and housing growth where there may not yet be a critical mass for a commercial service. The flexibility provided by such vehicles enables a service to be provided that responds to customer demand, targets resources where they are needed as well as helping to improve passenger satisfaction regarding wait times at stop.

To improve service frequency away from key corridors, we will explore new DRT bus services that can better serve areas that are not accessed by core routes and/or health and education facilities. We will build on good practice, such as the Transport for London DRT trial that took place in 2019 and West Midlands On Demand, as well as the two examples above.

The work commissioned by the MCA will provide an indication of where such services may be beneficial as part of the future bus network by November 2021, but it is clear that areas where there are employment sites but relatively poor bus services at present, especially where there are historic shift patterns, such as in the Dearne Valley, would be suitable candidates as well as major hospitals.

Given a desire in the National Bus Strategy to improve bus facilities for tourists and the proximity of many parts of South Yorkshire to open space, this may also be an opportunity to trial a new DRT service. Initial discussions have been held with the Peak District National Park on considering a new DRT service based on the Hope Valley Explorer and the Moorlands Connect services, providing enhanced bus access to both the National Park itself and also the Hope Valley rail line within it.

- 6. **“Turn up and go” frequencies across the KRN with additional services at evenings and weekends.** While it is important to make sure that everyone has access to bus services no matter where they live, it is crucial to maximise service offer where there is demand. This is critical in our recovery following the impact of the COVID-19 pandemic.

We know from our research that poor frequency is causing car and taxi reliance in the region and that, from our customer research and benchmarking exercise conducted through the Quality Analysis work “doesn’t run enough” and “doesn’t run when I need it to” are common reasons given for not using the bus. A comparison with other areas from the most recent Transport Focus passenger survey, as shown in Figure 28, shows that South Yorkshire does not perform comparatively well for satisfaction in terms of waiting time for the bus.



Figure 28 – Comparison of Bus Waiting Time Satisfaction from Transport Focus Surveys

Research also tells us that of the groups most likely to be influenced to use the bus through an increase in frequency, the top three are younger passengers (aged 16-34), commuters and those who own two or more private vehicles currently. All three are clearly target markets for passenger growth, with the latter two in particular also being important to achieve mode shift.

Therefore, we will increase service frequency on the core routes across the KRN so that passengers do not have to wait more than 10 minutes between timetabled services across the daytime, supported by feeder routes as appropriate. This will make it easier for passengers to use bus services along key corridors and help modal shift away from cars. Through the route analysis work that is being undertaken, we will identify corridors where there are opportunities to change current timetables to make services more regular within the “turn up and go” aspiration – this work will be complete in November 2021.

We will also aim to make the bus a genuine alternative to the car by ensuring useable frequencies for evening and weekend/holiday services. This will help support new leisure opportunities in the urban centres and also to reflect a change in retail opening hours and customer habits over recent years.

- 7. Secure additional vehicles to operate additional mileage/uplifted frequencies/extended hours of service.** On average a bus in South Yorkshire will contribute to the delivery of over 30 separate services – this means that there is little or no capacity to deliver the extensions to the bus network that will arise from increased frequencies and/or extended hours of service within the existing fleet.

We will secure additional vehicles to operate additional mileage, increased frequency and extended hours of service once we have a preferred future network identified in November 2021. As part of the continuing analysis that is supporting this Plan, we will also consider the range of vehicles that we may need to address this additional demand for capacity, for example, smaller vehicles on DRT routes.

- 8. Make best use of existing assets.** In accepting that additional vehicles will almost certainly be needed in the future, it is logical to first make use of existing vehicle assets across the network, especially if smaller vehicles can be deployed on some routes. The concept of ‘total transport’ has been applied elsewhere, with operators and local transport authorities alike supporting more efficient use of resources within a system, such as health and education vehicles, not just those dedicated to public bus services.

There is a need to look at what vehicles can be ‘freed up’ in the system as a result of other initiatives as well understanding what elements of the ‘total transport’ concept might be used to provide any new/expanded network in a cost effective manner in South Yorkshire.

For example, if we save, say, 6 buses across the network due to the first two years of bus priority measures as a result of improved reliability, these vehicles should be deployed first in other parts of the network to enhance the offer. In addition, if there are education or healthcare vehicles ‘spare’ at some points during the day, could these be used to provide additional vehicles across the network at those time to enhance the offer? In this way, existing assets are used more effectively, and the additional costs of enhanced frequencies and hours of operation are minimised.

- 9. Ensure that ticket prices are more competitive with other modes and parking charges in urban centres.** The price of bus travel relative to other modes is a major factor keeping passenger numbers down, and high prices can easily exclude people with lower incomes from using the network, as well as encouraging those with cars to view them as preferable to the bus. At present, the price of single bus tickets is often higher than the equivalent parking charge in urban centres, especially if more than one person is making the same journey as part of a group. Where local authorities have control over a significant volume of parking provision (and hence charging), policies have been put in place to minimise charges where possible in order to support the survival and success of town and city centres which



have been decimated by recent economic turmoil. Especially in the absence of a better public transport service, this is an understandable approach and one which does need to continue in the immediate period of recovery from the COVID-19 pandemic.

However, in the medium to long term, mode shift is needed in our urban centres to improve air quality but also to enhance the quality of the centres themselves. As more local centres benefit from an increase in home working, the aim should be to encourage the regeneration of local high streets, but to avoid them becoming congested to the point that buses cannot access them, the urban environment becomes unpleasant, and business actually suffers. So long as adequate public transport alternatives are in place, reducing congestion and shifting travel away from cars can be associated with real economic benefits, in addition to any positive environmental, health and quality of life impacts.

Over time, therefore, a more appropriate balance does need to be struck, with the aim of making the price of a day ticket more competitive than the equivalent cost of car use, especially taking account of all-day parking charges in our urban centres. This is something that we are committed to achieving as our region moves forward.

- 10. Ensure planning policies encourage bus use, particularly for new developments.** The National Planning Policy Framework stipulates that new commercial and residential developments must be accessible by public transport. We will continue to support the implementation of this policy framework in South Yorkshire.

However, there are a number of examples of where this has not been borne out in practice and therefore, buses are not effectively integrated into major new developments. For example, the Waverley housing development in Rotherham (a new 4,000 home community) was originally designed to include a bus interchange but this has not yet been provided. The estate is in a key strategic location, situated in very close proximity to the M1, 15 minutes from Sheffield city centre and next to the nationally leading Advanced Manufacturing Park. Not implementing the original plans has meant residents are reliant on cars leading to significantly increased congestion on the nearby Sheffield Parkway – a key corridor on the proposed KRN.

It is crucial that public transport (alongside active travel) is given full consideration for all major developments across the region as our economy continues to grow. We will ensure that all planning policies include ways of encouraging bus use and that commitments to provide public transport links for new developments are maintained. Similarly, we will ensure that developments within urban centres will promote and support active travel and public transport, with any parking provision in line with this commitment.

### **Using Technology and Data to Improve Connectivity, Quality and Resilience**

There are many parties involved in the delivery and operation of South Yorkshire's bus network, a situation that often creates issues for the customer, but better use of technology and data can help 'join up' the system much more effectively and also enhance the efficiency of operation for those involved.

- 11. More effective data use and improved data sharing between authorities and operators.** The lack of resilience of South Yorkshire's road network often has an adverse impact on bus service punctuality and reliability. Extreme weather (be it snow or heavy rain) has a major impact on services as roads become unpassable resulting in services being cancelled or rerouted, often at short notice. The impacts of congestion (whether resulting from incidents, planned events or sheer volume of traffic), also results in severe issues for the reliable operation of public transport.

Better use of, and sharing of, data across the South Yorkshire's transport network would improve resilience, utilising the Urban Traffic Management and Control (UTMC) system. Going forwards, the UTMC system should be cloud-based, allowing all authorities and operators to work more efficiently, reducing cost and complexity, whilst bringing freedom, agility and integration to the real time management of the network. Access to real time information collected from across the whole of the KRN will allow regular monitoring and reporting on the performance of the network, shared with bus operators.

One part of this pro-active network management could include enhanced strategic management of key bus corridors to develop more reliable public transport links between key growth areas and employment zones and real-time alerts of unplanned events. The sharing of GPS locational data by bus operators can help locate buses on the network and initiate strategies to speed up buses or affect necessary diversions. Bus operators can also share information on bus occupancy to allow customers to understand how full services are, an important factor in attracting people back on to the bus.



Access to real time information from across the network presents opportunities to deliver centralised transport and travel information to everyone across South Yorkshire – daily bulletins, roadworks information, incident alerts, variable message signs and information about alternative options, on web-based and social media platforms.

This puts the user at the heart of the new system, providing open data for future app development and can help with enforcement and influencing and improving driver behaviour. Through better network intelligence, it will be able to provide a mobility network which is more reflective of the current movement patterns across the region, encouraging multi-modal shifting by giving residents more data to make intelligent decisions about their mobility plans.

12. **Network-wide traffic management and bus detection.** At a number of locations of delay, relatively small-scale interventions could have a significant positive impact on reliability, for example amending traffic signal timings to give slightly more green time for key bus routes, introducing bus detection at some points so as to extend the green time when a bus is approaching and addressing locations where queuing traffic can sometimes block the entry to, or exit from, bus lanes and bus stops.

A series of small-scale improvements across the network will be investigated and developed to ensure that existing facilities offer the benefits that they should and that delay 'hotspots' are tackled. Funding was identified in the CRSTS bid for this purpose. As traffic signal maintenance programmes are rolled out, the ability for this equipment to enable bus detection as well as to be linked to the new UTMC system, will be a routine part of the upgrades.

# Fairer South Yorkshire

## Vision for the Bus Network

- Meeting the customers' fundamental transport needs
- Offering value for money
- Being accessible, integrated, simple and efficient

## Meeting the Customers' Fundamental Transport Needs

Passenger confidence in South Yorkshire's bus system is our number one priority, yet there are a number of reasons why too many people do not see travelling by bus as a suitable choice of transport. In essence the view from current and potential users is that the current system is failing to meet their fundamental transport needs. Therefore, to recover patronage as we are targeting, we must make sure buses support people to make journeys across the region, regardless of where people live or where they are travelling to.

### 13. Implement a consistent standard across whole journey experience and all operators.

Passenger feedback revealed inconsistent journey experience is a significant concern for passengers in South Yorkshire and can be a genuine barrier to travel for those passengers who need additional support. For example, accessibility is not consistent across the network and therefore disabled passengers do not always see buses as a reliable mode of transport. Wheelchair ramps are not available on every vehicle and where they are available, they are not always mechanically operated.

We want people, especially non-bus users, to see buses as an appealing alternative to car. We will work with operators and passengers to determine consistent bus journey standards for all operators that will apply in all parts of our region. This consistent standard will apply across a range of elements, summarised in Figure 29.

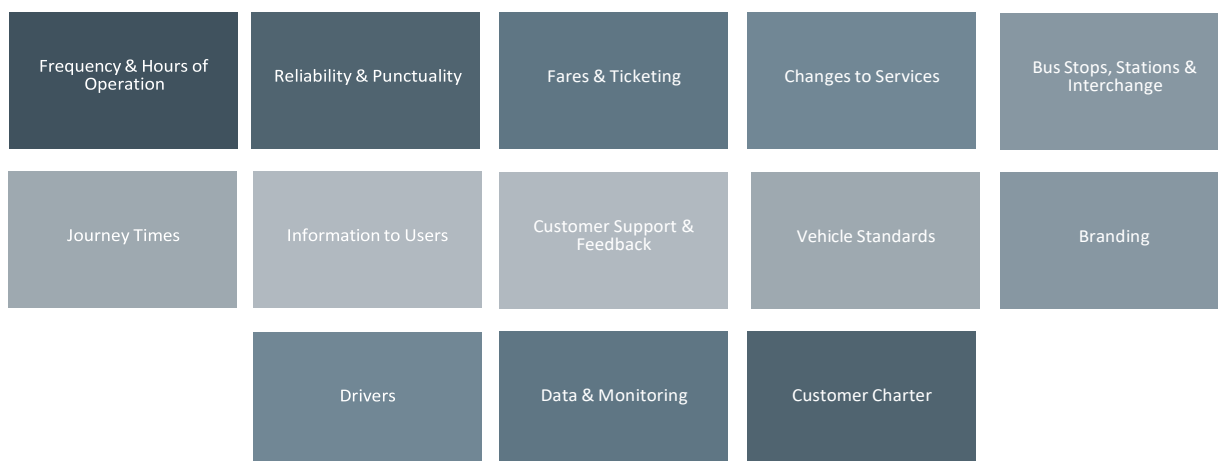


Figure 29 – Elements of the Quality Standard for the South Yorkshire Bus Network

This will include a consistent set of ticketing products and where to buy them, underpinned by publication of open fares data on the national platform.

These elements will be developed further to form the basis of a refreshed Customer Charter, but research has indicated that there are priorities within this list that will address current issues as patronage recovers from the COVID-19 pandemic. These are highlighted in Figure 30.

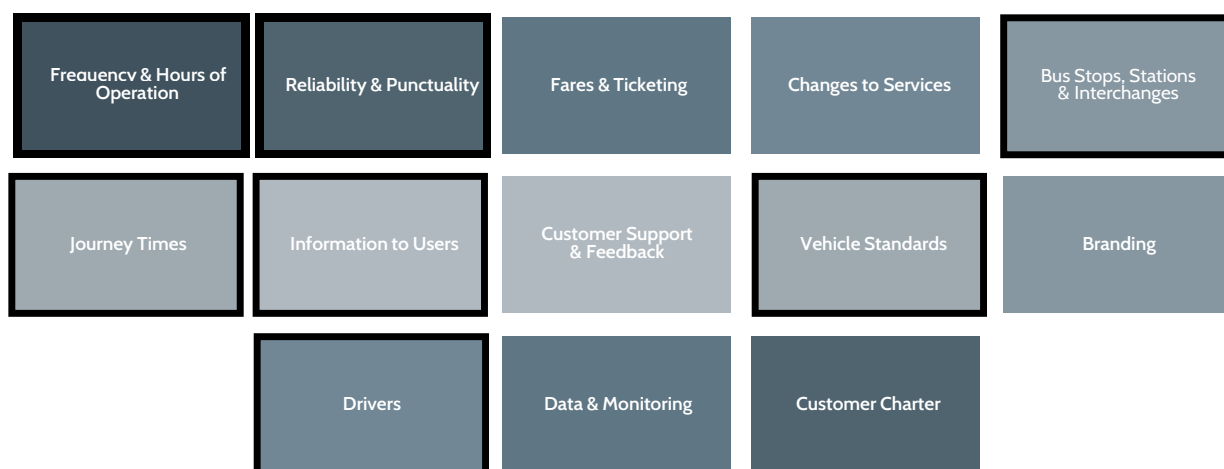


Figure 30 – Priority Elements of the Quality Standard

The prioritised activities described within this Plan have been identified and developed with this in mind, trying to ensure that whatever we do in the short term has a clear focus on the needs of existing and potential customers.

14. **New Customer Charter to reflect new quality standards and a consistently high level of service.** All of the improvements we will make to customer service and passenger experience will be cemented in a single refreshed Customer Charter that will set out the new quality standards that passengers can expect to receive across the network. At present there are individual charters that operate for each of the four existing bus partnerships, but not one that covers journeys across the whole region. We are working towards developing a draft Customer Charter in November 2021, which will then be discussed and agreed with operators and passenger groups to ensure that they are instrumental in its development and implementation from March 2022.
15. **Establish on-street standards to include at bus stops.** As with journey experience, it is critical to give passengers consistency at bus stops, with evidence of significant differences in the infrastructure supporting passengers to make journeys, such as provision of seating. Disabled passengers in Barnsley have indicated that large print communication is not readily available at bus stops which makes it very difficult to receive information. As part of the outcomes of the Bus Review, Commissioners recommended the creation of a blueprint for the design of the network to establish minimum consistent standards, particularly at bus stops.

The analysis commissioned by the MCA shows that the provision of high quality information provision would have the greatest impact on infrequent and non-users, visitors and tourists, members of BAME groups and older passengers. By improving and simplifying fares information, installing real time displays at stops, providing audio-visual announcements on board and creating a strong network identity for the South Yorkshire bus network, a positive impact on patronage could be achieved as well as delivering wider benefits for all users.



In establishing consistent standards across the network, an early area of focus will be on-street standards, which will include timetable displays, real time displays, bus stop flags, and ensuring printed information, accessible to all passengers, is available in key locations, with shelters to be clean and well-maintained.

A programme of bus shelter modernisation is planned through both the gainshare commitment (that will see about 500 existing shelters replaced) and a bid for investment has been made as part of the Levelling Up Fund for an additional 1,000 new shelters in the following two years.

We will also review where real time information at stops would be most effective, with plans to provide an additional 250 new displays through the gainshare commitments and a further 1,000 displays through the Levelling Up Fund bid.

- 16. Agreed operator standards on fleet quality, presentation and cleanliness.** Vehicle age sometimes affects the quality of the bus offer, particularly as older vehicles may not have, or be easily adapted to have, more recent innovations like wifi and charging points. As the average age of vehicles differs between operators and different parts of the region, so does the quality of vehicles. 32% of respondents to the Bus Review survey reported some form of dissatisfaction with quality and condition of buses, with passengers calling for greater consistency in standards on board, for example “On new vehicles and when refurbs are carried out it would be also helpful to include USB points, especially on buses used for longer distance routes. In my experience these are currently available on a tiny proportion of buses”.

Presentation and cleanliness are cited as key factors in providing confidence to return to the bus following the COVID-19 pandemic, and so the quality of the fleet provided, and its appearance, will be key areas to focus on in the short term. We will work with operators, as well as passenger groups, to establish common standards for fleet quality – everything from onboard technology to how fleet can be better designed to support disabled passengers, identifying short term measures that can be undertaken to underpin passenger confidence.

There will also be a fleet renewal plan developed, given the older than average age of buses in South Yorkshire. Sources of investment will need to be identified and the existing fleet will need to be replaced with lower emission vehicles, but ultimately the deployment of new vehicles will allow for better standards across South Yorkshire for the benefit of passengers.

- 17. Ensure staff are well trained and motivated to offer top customer service.** The most recent Transport Focus survey indicated that the biggest factor affecting passenger satisfaction was the bus driver, and more detailed analysis of this factor shows that South Yorkshire benchmarks low compared to other authorities for driver style. It also identified that those passenger groups who we need target to increase patronage (infrequent users, non-users and young people) tend to be most concerned about driver interactions. Therefore, there is a real need to ensure we provide consistent high quality driver training across the system regardless of operator or geography.

All bus drivers will receive high quality customer service training in addition to driver training, including specific disability awareness training so that they have a greater understanding of the additional needs that some passengers have. Passengers who had a disability reported being the least satisfied with bus services in South Yorkshire in the Transport Focus survey.

- 18. Renew safety and security efforts across the network to promote a feeling of personal safety.** Recognising the need to invoke a feeling of safety and security amongst passengers, we will build on our existing arrangements. For example, a “Safe Places” scheme is already in place in South Yorkshire to safeguard passengers across the network but at present, the scheme’s operation is only limited to the four main interchanges plus Meadowhall. We will look to extend the “Safe Places” scheme to cover the whole network from the start of the Enhanced Partnership – including bus stops, all interchanges, and on-board buses – so that everyone has safety and security wherever they make their journey.
- 19. Major service changes to be limited to twice per year.** Regularity of service changes is a key issue with passengers, and despite the existing bus partnerships agreeing that service changes should only be made at three agreed time each year (one major change relating to the start of the new term and two minor ones), the reality is that passenger experience changes on a much more regular basis due to operator necessity. The rail network operates with two change dates each, and so we will move to a similar system in South Yorkshire, to give passengers more certainty and stability. Bearing in mind the importance of the September change date to reflect the academic year, it is suggested that the two change dates be at Easter and September. We will need to confirm that the suggested dates could work in practice, particularly in relation to cross-boundary services. This would also mean that, further to any network changes made under the existing partnership arrangements over the next six months, there would be no further changes to the network within the first six months of the Enhanced Partnership.
- 20. Wider passenger representation.** One of the issues often raised by passengers is the lack of consultation on elements such as proposed service changes ahead of when they were announced, or even introduced. For example, changes to Rotherham services by First South Yorkshire and Stagecoach were put out for consultation in late 2019 and introduced in 2020. Subsequent revisions were made to the service changes, yet the plans were not re-issued for consultation. Passenger groups reported the confusion that this causes (especially for disabled groups) and the frustration at not being able to give evidence about the impact on passengers that proposed service changes would have. We will address this by making sure that a wide range of passenger engagement has been sought in a timely manner when service changes are proposed, and the reduced number of service change dates proposed should help with this new approach. Through the development of the Enhanced Partnership, we will also investigate ways to widen passenger representation in the development of future bus policy and activities arising from this document, such as the refreshed Customer Charter.
- 21. Develop a common complaints procedure.** Inevitably, even with every measure taken to provide passengers with the best possible service, issues will arise. At present, customers are required to follow the complaints procedures of different operators which can be confusing and time consuming, especially if they have encountered multiple operators on their journey. In the case of lost property, the lack of centralised points for lost property makes it very hard for passengers to be reunited with any lost possessions. Where passengers may experience some dissatisfaction with the service they receive in the future, we will work with all operators across the South Yorkshire public transport network to develop a common complaints procedure and in tandem, create a centralised approach to how lost property will be dealt with on co-ordinated routes.

This should also maximise operator resources by developing a more effective approach across the network.

- 22. Booked assistance system and availability/resource at bus interchanges and interchange hubs.** Booked assistance schemes are not a new concept – the rail industry has offered this service for a number of years, however this is not common across the bus network. Offering this service at our main interchanges would help to bring them in line with the offer available on the rail network.

Whilst booking assistance to support travel is positive, there is a drawback in that this removes some of the freedom to travel due to the advanced notice required. As cited in the National Disability Strategy 2021, ScotRail's passenger assist service reduced its assistance booking notice period to one hour, and the introduction of a British Sign Language (BSL) app has significantly improved frontline staff communications with BSL users. Spontaneity to travel is something that should be available to everyone therefore, alongside offering the ability to pre-book support, keeping the advanced notice period to a minimum would help bring parity in journey experience between those requiring additional support and those who do not.

- 23. Develop interchange cleanliness standards.** Along with vehicle cleanliness, it is crucial passengers enjoy spending time in interchanges as part of their journeys. The COVID-19 pandemic has given rise to heightened focus on public hygiene which has led us (and operators) to re-examine how cleanliness standards at the main public transport interchanges and their facilities are being monitored.

We will develop common interchange cleanliness standards for bus interchanges, including the toilets, so that no matter where a passenger is on their bus journey, they know the facilities around them will be hygienic and safe to use.

- 24. Introduce a last bus promise and consider refund dissatisfaction guarantee.** Bus operators often work together to offer forms of compensation in the event that bus services do not meet the passengers' satisfaction, or if their last bus service is more than 20 minutes late/cancelled. In South Yorkshire we want to build on nationally recognised good practice that has been well-received by passengers and confirm the arrangements included in some of the existing voluntary partnership agreements, which are often poorly understood. We will re-inforce and promote a last bus promise which means passengers will not be stranded or forced to take expensive taxi journeys if the last bus is late or does not turn up.

In parallel, we will work with operators to explore a refund guarantee scheme in the event passengers are not satisfied with their bus service. This will need to align with the Customer Charter that we have committed to refresh to reflect consistent, higher standards across operators, and also need to be mindful of any targeted price incentives that are offered.

### **Offering Value for Money**

Passengers want a good quality, reliable bus system, but they also want bus travel to represent good value for money. In return, the more people that travel by bus, the more cost efficient the system will be, and so the more revenue will be available to re-invest in the network and services, making the overall system financially sustainable.

At present there is an array of tickets available for passengers across the network which do not always provide the best value for money, especially if prices rise more regularly than passengers feel is acceptable or by a factor that is significantly above the cost of living and average wages.

Ticket technology in South Yorkshire lags behind comparable metropolitan areas and therefore

does not offer the flexibility needed to adapt to passengers' changing travel patterns.

Customers' views on value for money are, in part, a reflection of the complexity of the ticket offer, which can lead to purchasing the wrong product and having to pay more later, or to concern that they have selected the wrong option, thereby undermining confidence.

Whilst benchmarking suggests that in general South Yorkshire fares are lower than other metropolitan areas, fares have risen substantially above inflation in the past decade and there remains a significant difference in absolute and capped fares between London and other metropolitan areas. For too many people, bus travel is prohibitively expensive both in comparison to other modes like cars and, for lower income groups, in absolute terms as well.

It is therefore important not only to address the complexity that leads to customer concerns, but also to make buses better value for money, especially compared to other modes. Given the need for investment and the financial pressures on all parties, a careful balance needs to be struck about the timing, but at a minimum we need increase the perceived value for money of our buses and develop targeted offers for those groups who need additional support to access the network.

**25. Price rises limited to once a year.** At present, operators can increase fares ad-hoc in response to serious commercial pressures, yet this causes uncertainty for passengers and increases the costs of travel for passengers who rely on public transport. By comparison, the rail industry has a single regulated fare rise point each year (1 January), with those fares linked to an appropriate index, although unregulated fares can also change on two other occasions.

We will aim to align the approach to regulated fare rises with the rail industry and to make sure that the cost of bus travel will only increase once a year, if necessary, to provide clarity and certainty to passengers but also to secure a sense of better value for money. Again, we will need to confirm how this could work in relation to cross-boundary services.

**26. Review the removal of some single operator products.** The eventual goal must be for South Yorkshire to have an integrated transport system for the whole region, with a simplified fare structure and inter-operation among modes and operators. Passengers should not have to make complex decisions about which operator to use for the cheapest ticket or whether their tickets will be valid on the route they want to travel.

In view of the complexity of the current ticketing offer and the aim to make the system simpler for people to use, to start this process, bus operators will review their single operator products and consider withdrawing them in order to simplify the offer to customers and enable the majority of products to be used on any operator's services. This will remove any interchange penalties for customers who find that they need to swap to another operator's services. To be in line with current legal restrictions on competition, each operator will need to undertake their own review and come to their own decision on the appropriate course of action, but operators have committed to implement the findings of their own reviews and this will be included within the Enhanced Partnership.

**27. Develop a consistent offer for under 21s and additional concessions/discounts for target segments.** In recent years patronage decline has been most significant among ENCTS passholders, as previously highlighted, and with young people. Only 72% of people aged 16 to 34 reported having some form of satisfaction with value for money in the most recent Transport Focus survey, yet the analysis carried out for this Plan reveals that young people are the most incentivised to travel by bus. It is crucial we translate this appetite into patronage.

Steps have already been taken to improve concessionary travel in South Yorkshire. As part

of the South Yorkshire COVID Recovery and Renewal Plan, in June 2021 it was announced that fares would be reduced for everyone aged 21 and under for a period of one year, bringing the cost of a single bus ticket to just 80p. This precedent will be used to agree a longer term offer for young people, apprentices and jobseekers. We will also consider targeted discounts to TravelMaster products to stimulate recovery, similar to the discount offered in Summer 2021, plus an offer of free travel to under 18s subject to the required funding being made available.

- 28. Develop day and week price capping to guarantee best value.** Recent research from Transport Focus suggests that people increasingly want contactless payment as part of a raft of 'cleaner' measures post-COVID, and there is a desire for 'tap and cap' as a slightly longer term ambition, where customers tap in and out of bus and other public transport services and are charged a capped fare at the end of the day or week as appropriate. Eventually, there is a strong case for tickets that are usable for a journey across any number of operators (and possibly modes) for a fixed time period.

'Tap and cap' technology is gradually being introduced across the UK, with some places successfully transitioning away from cash payment. For example, on Brighton and Hove Buses, 'tap and cap' is used for around 85% of bus fare payments and has just become enabled for multi-operators.

In South Yorkshire, 'tap and cap' technology is not yet in place across the whole of the public transport network, although there have been successful trials carried out by First South Yorkshire in Doncaster and the COVID-19 pandemic significantly increased the use of contactless payments due to hygiene measures in place.

We will build on passenger demand to transition away from cash payment and the small number of operators without this technology will be supported to implement this through the purchase of ticket machines that accept contactless payment, subject to the recent Levelling Up Fund bid.

As a first step to achieving this aim we will work with operators to make the existing multi-operator product range the most attractive option for travel around the Region. Together with the simplification of the product range, this will provide all the building blocks required to put in place 'tap and cap' ticketing across the bus network for day and week tickets that will guarantee passengers best value for money, as well as simplification of ticketing whilst speeding up passenger boarding and reducing delays.

This will be developed in partnership with operators and passenger groups but assumes that a technical solution to process transactions is available as Government has stated that LTAs should not seek to develop this independently. Should there be a significant delay to the delivery of a national technical solution to support 'tap and cap' across all operators, we will seek to deliver a South Yorkshire bus solution that can interface with other regions and other modes in due course.

It is the intention that this offer will be extended to tram services and to the local rail at the earliest opportunity, and we will work with those operators and third parties to bring this about.



- 29. Employer engagement and ticket discounts offered to incentivise bus use.** We recognise that in the short term, we will need intensify efforts to encourage people to choose to travel by bus in South Yorkshire – in part because of the uncertainty and hesitancy caused by the COVID-19 pandemic.

At this time, people are being encouraged to return to work in person as part of hybrid working patterns, so this will require a more flexible ticket offer for passengers whose lifestyles are adapting to suit new ways of working. But it also needs engagement with employers across the region so that we can reach out directly to the region's workforce and incentivise people to choose buses over cars for part or all of their commute to work, advocating personal tax relief for bus season tickets as happens with the rail industry. This will also provide a model for work with JobCentre Plus and other groups to enable corporatesupport for take up of public transport.

### **Being Accessible, Integrated, Simple and Efficient**

It is crucial that everyone in our region is able to access and make public transport journeys across our region and that from a passenger perspective, it operates as one joined up system that connects with other forms of transport including light rail and train.

- 30. Implement consistent use of 'South Yorkshire' brand across the network.** Whilst there is some common branding within each of the four local authorities, and many on-street facilities and interchanges use the 'Travel South Yorkshire' brand, this does not extend across the South Yorkshire bus network or across the wider public transport network. Branding of the bus fleet is inconsistent, with each of the bus operators adopting their own branding. In the case of First South Yorkshire and Stagecoach, which is in keeping with national livery. Common branding is a relatively simple, yet effective means of demonstrating a more joined-up system, as has been shown with recent improvements in the West Midlands. We will work towards a common branding across the South Yorkshire public transport network, starting with on-street facilities and working with operators to understand how this can be rolled out across bus fleet as part of the deployment of new vehicles, mindful of how this can apply to cross-boundary services.

- 31. Increase the availability of off-bus retail outlets.** We will use Levelling Up funding to provide up to 20 new off-bus retail machines across the network. This will both increase access to the network but also enable some products to be withdrawn from on-bus sale over time, and which will help to speed up boarding times and therefore improve journey times.



- 32. Enable one single source of information to plan journeys.**

At present passenger journey information is spread across a wide range of different data sources, largely provided online or through mobile phone apps. Passengers may also need to use online information provided by different bus operators where their journey includes multiple bus services. This problem is exacerbated when passengers make multi-modal journeys. By comparison, travelling by car often involves just putting a postcode into a single in-car system that can provide dynamic journey information.

Figure 31 shows the typical information needs of a customer and the channels that they may use to obtain that information across the whole of a journey.

We want to make travelling by bus simple for passengers, especially infrequent or (current) non-bus users. We will enable a single source of information that provides passengers with

journey information for buses as well as other forms of transport, across their whole journey. We will also ensure that we provide open data sources to allow other parties to develop applications that will help meet customer needs and present a more integrated network.

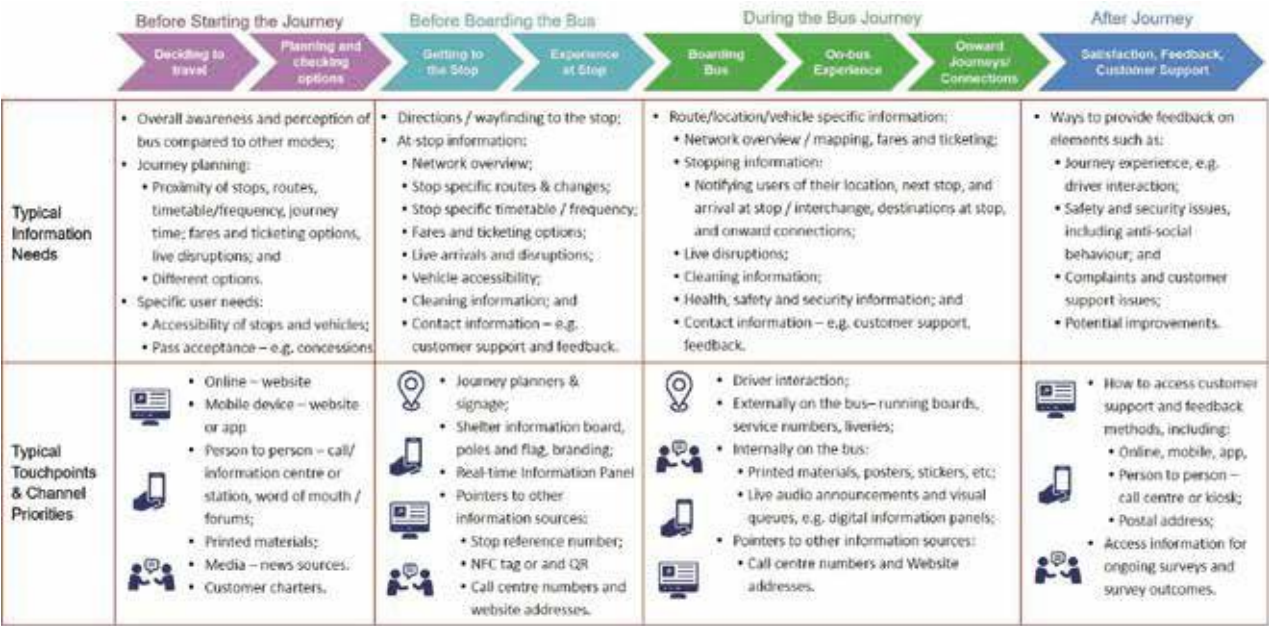


Figure 31 – Information Provided to Users as Part of a Journey

33. Develop simple high frequency networks that enable easy integration with other modes.

The current bus network does not support a fully integrated transport network and changing travel patterns means flexibility between different modes of transport is a big consideration for passengers. Better integration is required.

First, we will make sure that the right ticketing options are available both across different services, but also that ticket types reflect new travel patterns, for example, whether a weekly ticket is still relevant. Our goal is a multi-operator, multi-modal ticket across the system within a set period, in tandem with our commitment to provide passengers with a single source of information for all modes of transport.

Second, we will seek to systematically co-ordinate timetabling so that frequent bus services are rational (avoiding overprovision on some routes and times and under provision on others) and aligned not just within the network but across to the local rail and tram networks. Work is ongoing to identify priority locations where integration between bus and other modes could be improved, but Figure 32 provides an initial indication as to how such improved integration could work in practice.



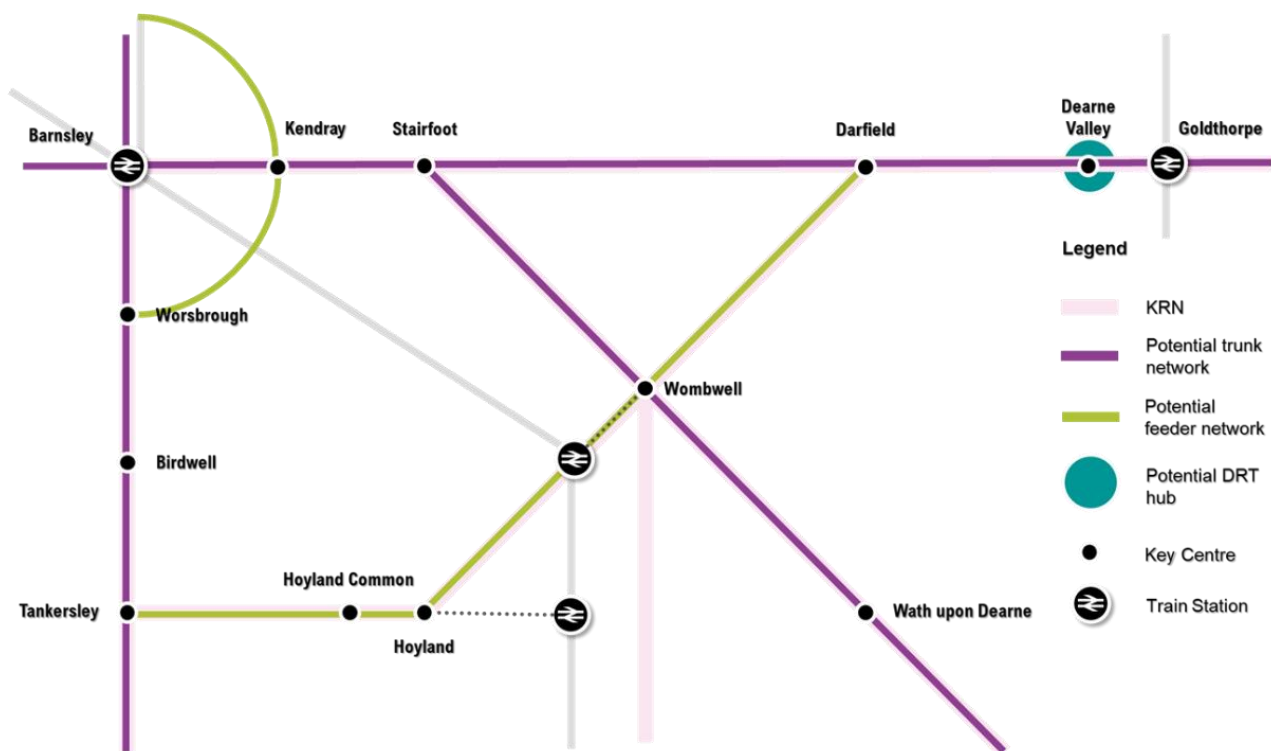


Figure 32 – Towards a More Integrated Network

#### 34. Roll out additional AV equipment on vehicles to improve consistency of information.

A very small minority of buses are fitted with audio and visual information equipment and at present is only available on two routes, both of which operate in Sheffield. AV equipment is commonplace in other UK towns and cities, including London and on Metrobus services, and is very much the norm across Europe. It is vital in helping infrequent bus users or disabled passengers to complete a journey with confidence, security and in safety and so we will increase the use of AV equipment on our buses, both as new buses are deployed, but also by amending older vehicles.



# Greener South Yorkshire

## Vision for the Bus Network

- Leading to a net zero system

### Leading to a Net Zero System

There is no credible path to achieving South Yorkshire's carbon targets without a thriving public transport system, one which helps achieve the necessary mode shift away from the private car but also leads the way in terms of how vehicle emissions are reduced over time. Making the bus a more attractive option whilst ensuring that bus services make their appropriate contribution to a reduction in emissions will be a critical part of our future plans.

**35. Ensure active travel proposals provide good links to key interchanges and public transport hubs.** The Active Travel Implementation Plan set out our long term vision for an active travel network across the region. This is already being delivered in stages as funding becomes available and therefore an element of prioritisation is required. We need to align the roll-out of our planned active travel network with the bus network to ensure there are no gaps in provision.

It is important to identify those active travel schemes that feed into the core bus network and to prioritise them for delivery. When considering the infrastructure that is provided at bus stops and key hubs, active travel facilities will be accommodated where possible, such as cycle stands and benches.

Supporting policies to enable whole journeys to be completed sustainably need to be developed and applied – this could include the carriage of cycles and e-scooters on public transport, ensuring that there is space for wheelchairs and buggies and consideration during the planning process for clear and direct walking routes to bus stops.

**36. Consider new types of service as part of the review of tendered services, using electric vehicles.** Community transport services are procured through the tender process as they are deemed to be socially necessary but are not (at present) commercially viable. Therefore, they tend to be operated by smaller operators who struggle to reinvest any surplus revenue into vehicles and therefore the meet the totality of the specification set out in the service tender agreement.

As the services are operationally using smaller midi vehicles on routes that do not form part of the core network (and are therefore operational less complex) they are more readily operated using net zero vehicles at the moment, such as overnight charging electric buses. As a reflection of this opportunity to move to an electric vehicle fleet away from the core network, South Yorkshire has submitted an application to the Government's ZEBRA fund as well as identifying committed gainshare funding, to support the immediate conversion of the region's community transport fleet. Gainshare funding has also been identified for an electric bus trial in Doncaster.

**37. Fleet replacement and retrofitting to achieve a net zero fleet.** The Transport Strategy set a target of achieving a net zero public transport network by 2040. The Sheffield City Region Energy Strategy accelerated this aim to a net zero public transport fleet by 2035. As buses

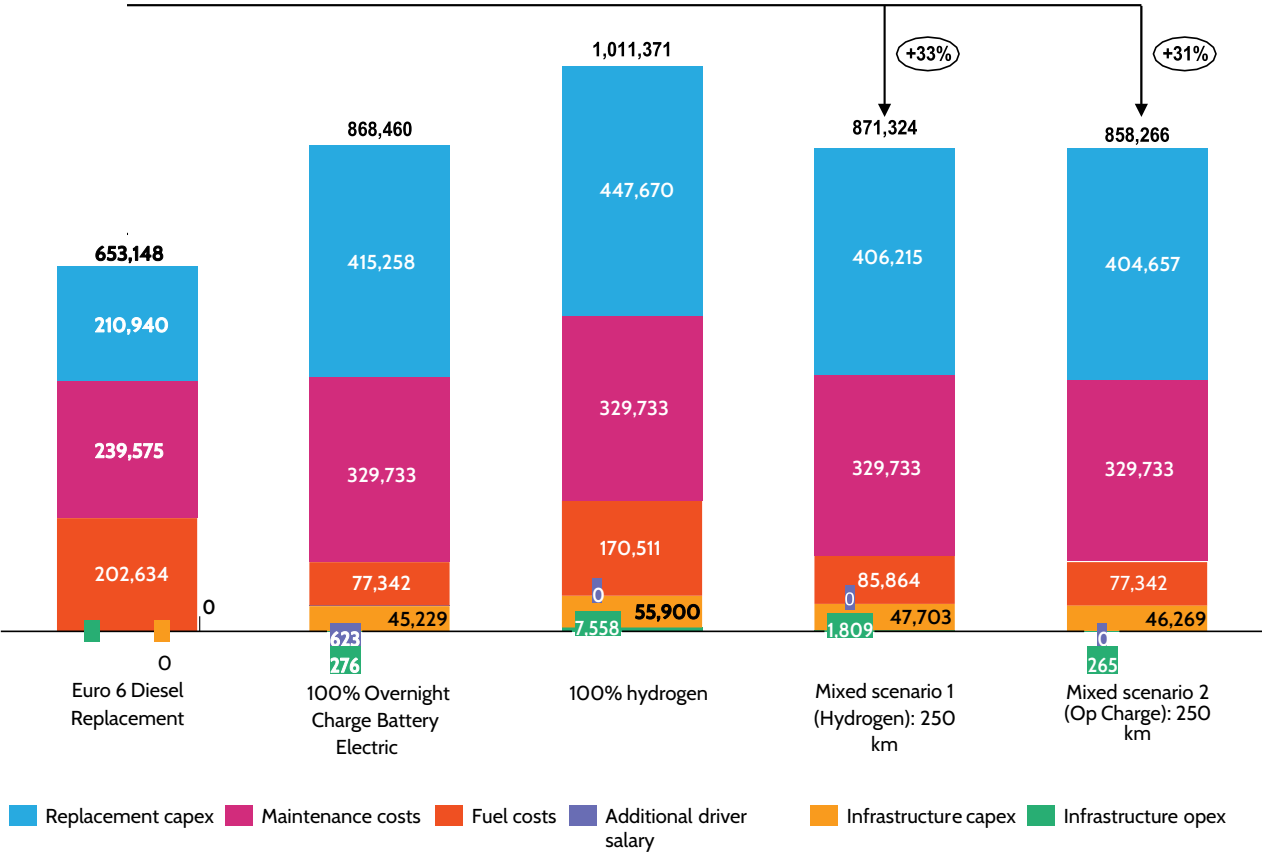


typically have a 15-20 year service life, these targets imply that all new buses should have been zero emission from 2020, assuming those buses spend their entire operational life within the region. It is therefore vital to expedite planning for this transition now, to ensure a transition to zero emission bus operation is planned in a manner that maximises South Yorkshire’s opportunity to deliver even ahead of the target dates, given the climate emergency.

There are considerable benefits of converting the existing bus fleet to zero emission buses. Work carried out to support development of this Plan has identified that by switching to zero emissions vehicles, we will negate all pollutant emissions with the exception of particulates that are generated by tyre wear. We will also remove the equivalent of 27,000 cars off the region’s roads. The conversion to zero emission vehicles may also have a positive impact on running costs for the network, with possibly significant implications.

The analysis has taken a long term view of how best to convert the South Yorkshire bus fleet to zero emission, looking first at the number of vehicles that would be required under different scenarios. For example, given the current range of batteries and the topography of South Yorkshire, an all-electric bus fleet would require a total of 1,304 vehicles, an increase of 40 over the current total. A 100% hydrogen-powered fleet would not require any more vehicles but it would be significantly more costly to provide the necessary fuel.

The suggested approach for South Yorkshire therefore sees a mix of electric and hydrogen vehicles replacing the current fleet over time, based on this being the most cost effective approach, taking into account the capital and operating expenditure required. This is shown in Figure 33. This shows that the overall additional cost of the preferred mixed fuel scenario, over and above the replacement of the current diesel fleet with the most efficient model at the time, is some £220 million – this is clearly a significant sum to be found.



**Figure 33 – Relative Total Costs of Delivering a Zero Emission Bus Fleet (£million, 2021 prices)**



It should be noted that the analysis done to date provides very high level costings for replacing the South Yorkshire bus fleet with a fully zero emission fleet, based on a number of scenarios and sensitivities. This includes capital and operational costs estimates that, whilst high level, present a reasonable estimate of the potential quantum of cost. Over time, we expect the costs of zero emission vehicles to fall, as the technology matures and becomes common place, as well as when second hand cascade market opens, meaning that the overall quantum of the cost required to achieve a net zero fleet should reduce.

Further analysis has tried to break the initial estimate down a little further to understand where resources can be best deployed at this time, and this is shown in Figure 34.

Figure 34 shows that the additional cost of transition is broken down into three components, and in order to facilitate a transition from diesel buses to zero emission vehicles, our intention is to try and reduce the difference through a support mechanism that considers funding additional infrastructure costs such as charging points, leaving operators to focus solely on bus costs, which are those that are most likely to reduce over time. Prioritising investment in such infrastructure will also have a wider benefit beyond a single bus operator. However, we will continue to examine the economic case for more direct investment as well.

The maximised efficiency model used at present to minimise the number of actual vehicles required proves to be an economic challenge when converting a fleet to zero emission buses. Typical electric bus services have dedicated vehicles (as hybrid buses currently do in Sheffield) due to the short distance range currently available which may not be a problem in the short term but in the longer term, vehicles will need to operate on multiple routes and services. Hydrogen buses are not as limited by range but they are less cost effective, at least in the short and medium term.

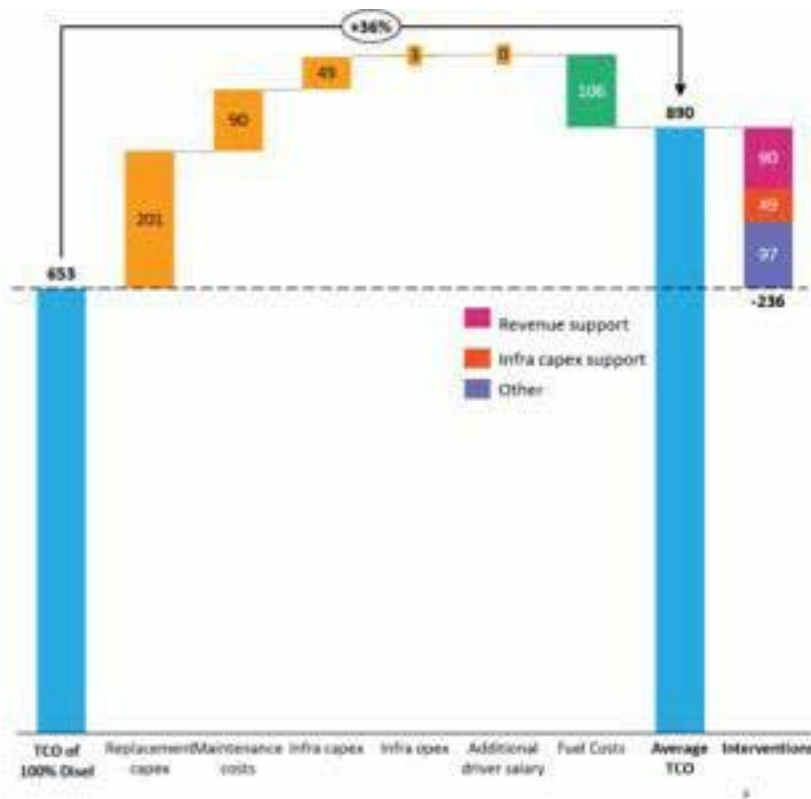


Figure 34 – Zero Emission Bus Fleet Transition Cost Breakeven Analysis (£million, 2021 prices)

We recognise that passenger growth is critical to the introduction of zero emission buses due to the high cost of these vehicles, for example, the cost of a battery electric bus is almost twice the price of a diesel equivalent (although operating costs are significantly less). Ultimately, we will need to grow passenger numbers to support investment in the more expensive zero emission vehicles and operate such a complex bus operation in South Yorkshire. In the absence of more government funding or incentives, only an increase in patronage and therefore revenue, will allow operators to reinvest in the vehicles which will allow us to meet local and national zero emission targets at the rate we need.

As a starting point, the MCA has applied for £6.8 million of DfT ZEBRA funding towards a total project cost of £13.9 million. This will allow the conversion of Stagecoach route 221 which operates between Rotherham and Doncaster and route 22X between Rotherham and Barnsley to electric bus operation, potentially including opportunity charging, if required, at Rotherham Interchange. The funding will also support the introduction of a new electric city centre shuttle service in Sheffield. ZEBRA and similar schemes can support the region's leadership in the adoption of zero emission, supporting inward investment and economic growth, and the work done to date indicates a clear determination to meet our emissions targets.

Retrofitting our diesel fleet with zero emission technology could offer a cost effective way of decarbonising our public transport fleet in the short term. It is understood that capabilities exist within the region to replace a vehicle's diesel internal combustion engine with battery electric technology, at a lower cost than purchasing a new electric bus. Further work is required to investigate the whole life costs involved however, this may offer a cost effective route to zero emission in the short term and kickstart the transition to zero emission operation in the long term.

- 38. Review bus park and ride locations and systematically improve the offer.** Park and ride facilities across the region generally receive positive feedback from passengers and operators alike and passengers reported their usefulness in promoting connectivity between modes of transport. They also help to reduce the burden of congestion on major roads by encouraging people to travel into town and city centres by public transport.

However, existing park and ride locations may not reflect the changing travel patterns, and economic growth areas of our region and we know from indicative analysis already completed that passenger numbers are falling at some locations.

Therefore, we will review the locations of our existing park and ride facilities, as well as considering where we could develop new park and ride sites so that we improve the offer to passengers as part of a systematic effort to provide practical alternatives to car use. This will be informed by the continuing route analysis being undertaken, due for completion in November 2021, but established high frequency routes seem a logical starting point.

As well as location, the level of facilities provided will be important too, noting that the recently opened park and ride site at Stourton on the outskirts of Leeds has capacity for 1,200 cars, serviced by high quality, all-electric buses. More importantly, the new site has a number of supporting amenities including electric charging points for vehicles, family and disabled parking bays, waiting facilities, cycle stands, cycle lockers, and mobility scooter lockers. It is the UK's first solar powered park and ride site with solar panels provided on canopies above some of the parking spaces to generate electricity, which will be used to power lighting, electric vehicle charging points, CCTV and heat the waiting room at the site.

We will review the provision of such facilities at existing and new park and ride sites so that not only are we encouraging a greener mode of transport, but that we are also at the forefront of making it happen in practice.

**39. Ensure new and amended infrastructure takes account of urban realm to promote a better street environment.** The MCA's bid to the Levelling Up Fund recognised the need to be more reflective of local communities in our transport infrastructure. We propose to use funding (if successful) to support our commitment to modernise and enhance bus infrastructure so that it reflects the local areas in which they are situated. Research has showed that the condition and standards of infrastructure is amongst the features of the bus system that passengers are least satisfied with, but we need to ensure that new infrastructure is sympathetic to its surroundings and can make a positive impact to the street environment.

**40. Positively change attitudes to the bus and lead by example.** Finally, there is a need to change the conversation about buses and promote them as a core part of our future transport network. Buses are not just for those who have no travel alternative and too often buses are viewed as the mode of last resort. This needs to change if we are to grow patronage and attract new users, particularly those who currently drive or who will turn to the private car as part of the recovery from the COVID-19 pandemic. To positively change attitudes to bus and create a sense that they are a mode for all, we will consider a pro-active campaign alongside the further development of this document and the action plans that arise from it.



## Towards An Enhanced Partnership

Within legislation, an Enhanced Partnership is comprised of an Enhanced Partnership Plan and one or more Enhanced Partnership Schemes. An Enhanced Partnership Scheme (or Schemes) includes more detail on what the parties to the partnership are aiming to provide over a specified period of time in order to deliver elements of the Enhanced Partnership Plan.

Given the time constraints involved in agreeing and implementing an Enhanced Partnership by April 2022, DfT has suggested that LTAs concentrate on an initial Enhanced Partnership Scheme that includes existing LTA and bus operator commitments for investment and infrastructure, and then include additional measures by means of the variation process allowed by the legislation.

This guidance has informed the preparation of an initial Enhanced Partnership Scheme that accompanies this Plan.

In addition, the governing mechanism for the Enhanced Partnership will be reviewed. In line with DfT guidance, this Plan has been developed alongside the MCA's constituent local authorities and the bus operators and has involved other groups that have been able to contribute, such as bus user groups, representatives of disabled people and local business groups. The forum for these discussions has been informal to encourage co-operative working, utilising existing engagement arrangements to aid efficiency and timeliness.

However, the work of this 'forum' now expands to one that considers the development of the Enhanced Partnership, meaning a need to consider more formal arrangements and, potentially, a widened membership. Details of what this will mean in practice are under development, in addition to the consideration of an independent chair. It is recognised that these processes are important because they can, in part, duplicate the outcomes of a public consultation process and reduce the risks of significant objections, a important consideration given the timetable for implementing the Enhanced Partnership.

The new governance arrangements for the Enhanced Partnership will also make sure that organisations representative of local bus users will be involved in the monitoring and evaluation of the Plan and the first Enhanced Partnership Scheme, as well as any variation to the latter. This will include ensuring that all parties, including bus operators, deliver on their commitments within the Enhanced Partnership.

## Competition Issues

Making or varying an Enhanced Partnership is subject to the test in Part 1 of Schedule 10 to the Transport Act 2000, predominantly whether there is likely to be a significantly adverse effect on competition as a result of the proposals.

The Enhanced Partnership Plan has been developed in conjunction with all bus operators, is intended to apply across the whole of the South Yorkshire bus network and does not propose any activity that would ordinarily impose any unnecessary restrictions on the deregulated bus market. The Competition Test set out in Part 1 of Schedule 10 to the Transport Act 2000 has been applied and it is concluded that, at this point, there will be no significantly adverse effect on competition arising from the proposed Enhanced Partnership Plan and Enhanced Partnership Scheme.

## Small and Medium Sized Operators

As set out previously, there are 11 operators of bus services in South Yorkshire at present and a number of these are considered to be a “small and medium sized” operator (SMO), defined as having less than 250 employees. Legislation requires an LTA to conduct a thorough assessment of the SMOs within their area, to discuss any issues with such operators at an early stage of developing any proposals and, where necessary, make adjustments such that they are not disadvantaged.

The Enhanced Partnership Plan has been developed in conjunction with all operators through a series of regular meetings and specific briefings have been held with SMO representatives to discuss the vision and objectives and the proposed activities. The activities themselves are designed to be delivered over a time period which allows operators of all sizes to make the necessary investments in new technology and zero emission vehicles that suit their own investment plans and should therefore not attract a considerable administrative burden or require a large financial outlay.

Where the MCA wishes to see a faster pace of delivery, specific funding bids have been, and will be, made to assist SMOs with this transition; for example, bids for transformational bus funding to provide on-street electric charging infrastructure for all vehicles (not just the large operators’ bus fleet), as well as a Levelling Up Fund bid to allow the conversion of all remaining ticket machines to accept cashless transactions.

On this basis, the assessment undertaken does not indicate that the proposals within this Plan will have a disproportionately adverse impact on SMOs.

## Future Delivery Models

The Enhanced Partnership was agreed by the MCA as the most appropriate means of delivering the initial set of activities contained within this Enhanced Partnership Plan as well as enabling access to future funding. The intention is for the Enhanced Partnership to be in operation for a five year period from April 2022, matching the multi-year funding allocation through the CRSTS, albeit noting that there is a requirement to refresh the BSIP on an annual basis, and hence this Plan as required.

However, it is not the only delivery model available to the Mayor and the MCA for all of the prioritised activities contained within this Enhanced Partnership Plan. The prioritised activities within this document will also be used to undertake an initial assessment of the legal, financial and technical aspects of a number of future delivery models, including franchising, so that a clear preference can be identified as to the most appropriate mechanism to secure the required improvements beyond the proposed Enhanced Partnership.

The aim is to complete this initial assessment alongside the preparation of the Enhanced Partnership so that the MCA has a full understanding of what can, and should, be delivered in the early years of the Enhanced Partnership, within the current legislation, and also whether a more detailed examination of other delivery models is required to ensure that the scale and pace of change that is required, can be achieved.





# Appendices

## Appendix A

### Derivation of Prioritised Activities

## DERIVATION OF PRIORITISED ACTIVITIES

| SEP Objective<br>(Headline and<br>Transport-specific)                                  | CRSTS Objective<br>and Activity  | Bus Service Improvement Plan  |   |   | Transport Strategy<br>Success Criteria  |
|--|--|---|---|---|---|
|  |  | Vision  | Prioritised Activities  | Headline Outputs  |   |
| Stronger – incentivise public transport usage which will support economic productivity | Growing the economy through better connectivity – improve public transport connections to economic growth areas and increase job opportunities for communities with higher levels of deprivation                     | <ul style="list-style-type: none"> <li>Providing a reliable and attractive alternative to the car</li> </ul>                | <ol style="list-style-type: none"> <li>Standardise and extend hours of operation of existing bus lanes</li> <li>Improve pinch-point junctions at identified locations of greatest delay</li> <li>Major junction improvements on the KRN to include bus priority measures as a core design requirement</li> <li>Develop a pipeline of bus priority improvements across the KRN</li> </ol>  | <ul style="list-style-type: none"> <li>More frequent and reliable services</li> <li>Improvements to planning/integration with other modes</li> <li>Higher specification buses</li> <li>Strong network identity</li> <li>Complementary policy positions</li> </ul>       | <ul style="list-style-type: none"> <li>Increase productivity through reducing delays on our transport network</li> <li>Increase the number of economically active people living within 30 minutes of key employment locations and universities by public transport</li> </ul> |
|  |  | <ul style="list-style-type: none"> <li>Supporting inclusive and sustainable economic growth</li> </ul>                      | <ol style="list-style-type: none"> <li>Review and strengthen access to the bus system and explore new types of DRT bus services away from the core routes</li> <li>“Turn up and go” frequencies across the KRN with additional services at evenings and weekends</li> <li>Secure additional vehicles to operate additional mileage/uplifted frequencies/extended hours of service</li> <li>Make best use of existing assets</li> <li>Ensure that ticket prices are more competitive with other modes and parking charges in urban centres</li> <li>Ensure planning policies encourage bus use, particularly for new developments</li> </ol> |   |   |
|  |  | <ul style="list-style-type: none"> <li>Using technology and data to improve connectivity, quality and resilience</li> </ul> | <ol style="list-style-type: none"> <li>More effective data use and improved data sharing between authorities and operators</li> <li>Network-wide traffic management and bus detection</li> </ol>  |   |   |
| Fairer – improve passenger journey experience, making public transport more accessible | Levelling up our public transport – invest in the standards of our public transport system to unlock opportunities, drive patronage growth and strengthen the role of public transport in supporting economic growth | <ul style="list-style-type: none"> <li>Meeting the customers' fundamental transport needs</li> </ul>                        | <ol style="list-style-type: none"> <li>Implement a consistent standard across whole journey experience and all operators</li> <li>New Customer Charter to reflect new quality standards and a consistently high level of service</li> <li>Establish on-street standards to include bus stops</li> <li>Agreed operator standards on fleet quality, presentation and cleanliness</li> <li>Ensure staff are well trained and motivated to offer top customer service</li> <li>Renew safety and security efforts across the network to promote a feeling of personal safety</li> </ol>  | <ul style="list-style-type: none"> <li>Improvements to planning/integration with other modes</li> <li>Improvements to fares and ticketing</li> <li>Higher specification buses</li> <li>Improvements to passenger engagement</li> <li>Strong network identity</li> </ul> | <ul style="list-style-type: none"> <li>Increase bus trips by 18%</li> <li>Achieve 95% public opinion that our local transport choices feel safe</li> </ul>  |

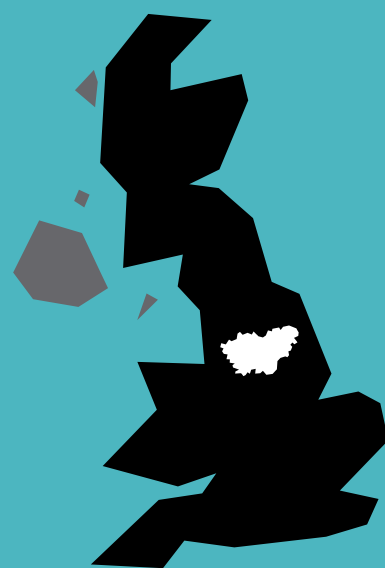
| SEP Objective<br>(Headline and<br>Transport-specific)                         | CRSTS Objective<br>and Activity   | Bus Service Improvement Plan                         |   |  | Transport Strategy<br>Success Criteria  |
|---|---|--|---|--|---|
|   |   | Vision   | Prioritised Activities  | Headline Outputs   |   |
|   |   |  | <b>19. Major service changes to be limited to twice per year</b><br><b>20. Wider passenger representation</b><br>21. Develop a common complaints procedure<br>22. Booked assistance system and availability/resource at bus interchanges and interchange hubs<br>23. Develop interchange cleanliness standards<br>24. Introduce a last bus promise and consider refund dissatisfaction guarantee  |  |   |
|   |   | • Offering value for money                           | <b>25. Price rises limited to once a year</b><br><b>26. Review the removal of some single operator products</b><br><b>27. Develop a consistent offer for under 21s, free travel for under 18's and additional concessions/discounts for target segments</b><br>28. Develop day and week price capping to guarantee best value<br>29. Employer engagement and ticket discounts offered to incentivise bus use  |  |   |
|   |   | • Being accessible, integrated, simple and efficient | <b>30. Implement consistent use of 'South Yorkshire' brand across the network</b><br><b>31. Increase the availability of off-bus retail outlets</b><br>32. Enable one single source of information to plan journeys<br>33. Develop simple high frequency networks that enable easy integration with other modes<br>34. Roll out additional AV equipment on vehicles to improve consistency of information   |  |   |
| Greener – increase the number of zero emission buses on our transport network | Accelerating the decarbonisation of our transport system – offer greater modal choice over private vehicles and invest in the transition to a zero carbon bus fleet | • Leading to a net zero system                       | <b>35. Ensure active travel proposals provide good links to key interchanges and public transport hubs</b><br><b>36. Consider new types of service as part of review of tendered services, using electric vehicles</b><br><b>37. Fleet replacement and retrofitting to achieve a net zero fleet</b><br>38. Review bus park and ride locations and systematically improve the offer<br>39. Ensure new and amended infrastructure takes account of urban realm to promote a better street environment<br><b>40. Positively change attitudes towards the bus and lead by example</b> | • More frequent and reliable services<br>• Improvements to planning/ integration with other modes<br>• Higher specification buses<br>• Invest in decarbonisation<br>• Complementary policy positions | • Have a zero carbon public transport network by 2040<br>• Eliminate AQMAs in our city region |

Note: Activities in **bold type** are those considered to be most appropriate for delivery through the initial Enhanced Partnership Scheme



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