



TEES VALLEY MAYOR

TEES VALLEY BUS SERVICE IMPROVEMENT PLAN ANNUAL REVIEW

NOVEMBER 2022



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Overview – Making Our Ambition a Reality

Our ambition

The Tees Valley is on the cusp of transformative economic growth that will have a national impact and we need to deliver a world-class transport system at pace to make this ambition a reality. A fundamental component of building a strong, reliable network is the shared commitment with operators to transform the Tees Valley bus services and grow passenger numbers. Whilst we are making significant capital investment in bus priority through the City Region Sustainable Transport Settlement (CRSTS) programme, there is still a need to secure the right level of revenue funding to ensure that:

- everyone, no matter where they live in the Tees Valley, is connected to opportunity; and
- existing business can grow and the Tees Valley is able to continue attracting new businesses and inward investment

Transforming bus services

The detailed narrative set out within the Tees Valley Bus Service Improvement Plan (BSIP) outlines the collective actions to transform buses across the Tees Valley over the five-year period from 2022/23 to 2026/27.

Working in close collaboration with stakeholders including the Tees Valley local authorities, local bus operators, neighbouring authorities, statutory consultees, business and the public (both bus users and non-users), Tees Valley Combined Authority (TVCA) has developed a BSIP that can be transformational with the right level of funding. We recognise the importance of ensuring everyone across the region has access to employment, education and other opportunities at an affordable price and we are working within the Enhanced Partnership to deliver what we can within the current available level of resource.

The Tees Valley Strategic Transport Plan (STP) 2020 – 2030 was developed following extensive public consultation and stakeholder engagement. The STP includes a package of required outcomes, two of which are to:

- deliver and maintain a frequent, high quality, reliable and integrated public transport network; and
- develop and improve transport interchanges, ticketing options and information – providing a seamless integrated experience for the travelling public.

This BSIP is pivotal to the delivery of these outcomes and has been developed based on a robust evidence base and ongoing engagement to ensure it meets the needs of residents across the region.

Five-point delivery plan

The BSIP is a live plan that reflects a shared commitment by TVCA and the bus operators to transform the Tees Valley bus services and grow passenger numbers. It sets out the improvements we will collectively deliver and links to other investment, including the bus priority CRSTS programme.

The key actions are structured around a five-point delivery plan:

- Sustainable network for the future a collaborative approach to establish a network focused on commercial services and emerging commercial services, which will require short-term financial support (subject to securing revenue funding).
- Bus priority improvements new infrastructure and digital investment to prioritise bus on core corridors and improve customer experience;
- Improved fare offer simpler fares, a new offer for young people and targeted promotions to drive growth;
- Enhanced customer experience putting the needs of customers at the heart of service delivery and improving information provision with one brand identity; and
- **Decarbonising the bus fleet** one of the first regions in the UK to have an entirely zero emission local bus fleet;



2022/23 Progress

Despite not receiving any Bus Service Improvement Plan (BSIP) funding for our October 2021 submission, TVCA and partners have progressed with forming an Enhanced Partnership and delivering the actions set out in the BSIP that are affordable without additional revenue funding.

We have used this annual review as an opportunity to detail the significant partnership achievements over the past year, which are summarised below. We have also refined our key actions and revenue ask of government, which we believe would have a transformational impact aligned to our CRSTS programme of bus priority improvements.

Sustainable Network for the Future

■ The bus network has been well protected overall, with no impact on coverage and only some minor changes to frequency. The England National Concessionary Travel Scheme (ENCTS) settlement has been critical to protecting the network.

Bus Priority Improvements

- City Region Sustainable Transport Settlement (CRSTS) programme delivery plan agreed by the Department for Transport (DfT), with a £46m allocation for bus priority.
- Design work progressing on the nine core bus corridors with delivery commencing in early 2023.

Work underway to improve the level of bus shelter provision/facilities, with a particular focus on the nine core bus corridors.

Improved Fare Offer

- Introduction of the pre 9:30 am 30p offer for ENCTS pass holders in Darlington in July 2022 to ensure a consistent Tees Valley wide offer.
- Ongoing preparation for the implementation of ENCTS companion passes across the whole of the Tees Valley, which will be introduced in early 2023.
- Simplified multi-operator zonal structure and enhanced multi-operator ticketing offer has been developed and will be implemented in early 2023.
- Kids Go Free offer over the summer and October school holidays, which we have now also agreed to continue across the Christmas holidays.

Enhanced Customer Experience

- Published the Tees Valley Bus Passenger Charter.
- Significant work undertaken to develop a new Tees Valley brand and prepare for improvements in the quality of information provision.

Decarbonising the Bus Fleet

■ £3m investment by Arriva in low emission buses.



Executive summary

The table below summarises the key actions in the BSIP. The revenue funding ask is for £4m per annum, which would enable us to kick-start the emerging commercial network and implement a reduced fare for the under 21 market that would align with the Transport North East proposal, ensuring a consistent offer for this key growth market across the whole of the North East.

Sustainable Network for the Future				
Key Aim	Key Actions	Financial requirement 2023/24 to 2026/27		
A collaborative approach to establish a network focused on commercial services and emerging commercial services.	 Work with the operators to ensure a sustainable post-Covid commercial network that protects coverage; and Kick-start an emerging commercial network, identified through comprehensive analysis, to better connect people to opportunity. 	£4m (£1m per annum)		

Key Aim	Key Actions	Financial requirement to 2026/27
New infrastructure and digital investment to prioritise bus on core corridors and improve customer experience	 A programme of bus priority improvements on nine core corridors; Delivery of digital infrastructure, including the Urban Traffic Management and Control (UTMC) system and digitally enabled information provision; Improvements to customer waiting facilities including disabled access, shelters and information; and Improved integration with rail, cycling and walking to provide high quality choice across a range of modes and a seamless customer experience. 	£45.21m Bus investment package allocated in the CRSTS programme - no BSIP financial requirement.

Tees Valley Bus Service Improvement Plan

Tees Valley Bus Service Improvement Plan

Improved Fare Offer				
Key Aim	Key Actions	Financial requirement to 2026/27		
Simpler fares, a new offer for young people and targeted promotions to drive growth.	Implement a simplified Tees Valley wide multi-operator zonal structure and range of tickets;	£12m (£3m per annum specifically		
	■ Implement a reduced fare for the U21 market, aligning with Transport North East. This would see a consistent offer for this key growth market across the whole of the North East.	for the U21 fare offer)		
	Implement targeted discounts on fares to encourage growth in key passenger groups, including families and those seeking work;			
	 Implement companion passes across the Tees Valley as a local enhancement to the English National Concessionary Travel Scheme (ENCTS); and 			
	■ Implement Tap on Tap off on all buses in the Tees Valley fleet.			

Decarbonising the Bus Fleet				
Key Aim	Key Actions	Financial Requirement		
To be one of the first regions in the UK to have an entirely zero emission local bus fleet.	 Rebid to the Zero Emission Bus Regional Areas (ZEBRA) Scheme should the opportunity become available; Continue to work with bus operators to explore their plans for decarbonisation of the fleet; and Develop a longer-term decarbonisation strategy with structured and costed delivery plan and explore all potential funding sources. 	No BSIP financial requirement.		

Enhanced Customer Experience					
Key Aim	Key Actions	Financial Requirement			
Putting the needs of customers at the heart of service delivery and improving information	 A single upgraded website, which will host fares, timetable, real-time and mapping information alongside travel planning advice; 	Activity being funded from other sources -			
provision with one brand identity.	Development of an overarching Tees Valley brand;	no BSIP financial requirement.			
identity.	A suite of products, including maps, timetables (at stop and printed leaflet) and electronic information, underpinned by data processes that will ensure they remain up to date and accurate;				
	An overarching marketing and communications strategy, which will seek to deliver marketing and promotional activity promoted through various channels, including social media;				
	 Updating the Tees Valley passenger charter annually to reflect the standards of service customers can expect; 				
	 Agreed timetable change dates, to limit service disruption for passengers; and 				
	 Audio-visual next stop announcements across the Tees Valley fleet (subject to manufacturer new vehicles/ funding). 				

Tees Valley Bus Service Improvement Plan 6 Tees Valley Bus Service Improvement Plan

Context

National Context

UK bus passenger numbers have been declining over the last decade. Furthermore, the impact of the Coronavirus pandemic has had a significant impact on the bus industry. Whilst the lasting impact is unknown, it is now imperative that every effort is made to increase passenger numbers. There is a need to deliver improvements to encourage existing users to return to bus, whilst also facilitating modal shift and attracting new bus users.

National Policy

The national policy context for BSIPs can be summarised as covering three policy areas:

- Bus Back Better: national bus strategy for England, which sets out the vision and opportunity to deliver better bus services for passengers across England, through ambitious and far-reaching reform of how services are planned and delivered. It stipulates that LTAs must develop a Bus Service Improvement Plan and implement an Enhanced Partnership or franchising;
- Future of Mobility, which sets out how bus services will fit within Government's wider future of mobility strategy through developments such as Mobility-as-a-Service, digital demand responsive transport and autonomous vehicles; and
- **Decarbonising Transport**, which sets out the need to decarbonise the transport sector, including buses, through the adoption of new technologies and increased modal shire.

class transport system at pace to make this ambition a reality. There is a requirement to deliver a step-change in the bus offer to ensure that: everyone, no matter where they live in the Tees Valley, is connected to opportunity; and

Tees Valley is on the cusp of transformative economic growth

that will have a national impact and we need to deliver a world

Tees Valley Context

business can grow and the Tees Valley is able to continue attracting new businesses and inward investment.

Prior to the Coronavirus pandemic, the Tees Valley bus network carried circa 30 million people per annum. We have seen passengers returning over the past year, but patronage levels are still not at the same level as pre-pandemic. On average, fare paying passengers are between 85-90% of pre-pandemic levels with concessionary passengers around 70-75% (as at November 2022).

The polycentric nature of the Tees Valley creates a unique geography and transport system, with multiple inter-connected towns, residential areas, employment sites and mix of urban and rural areas (Figure 1). This creates challenges around accessibility to employment, education and key services particularly in relation to our deprived communities.

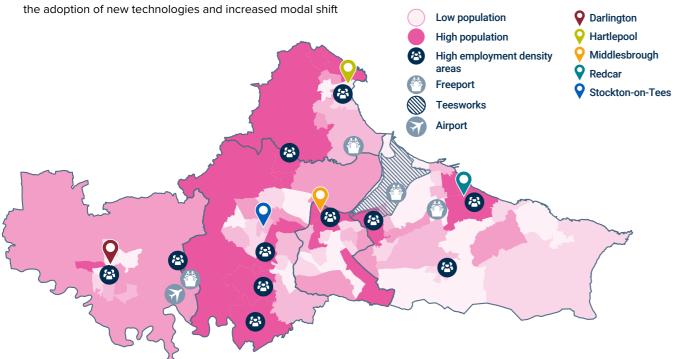


Figure 1 - Tees Valley context

TVCA was formed in 2016 and prior to this there was no strategic body with statutory responsibility for transport at a regional level (Figure 2). This meant the region was at a comparative disadvantage to many other combined authority areas who had invested in their regional transport systems for many years. TVCA has therefore been playing catch-up and we have made huge progress with our ambitious programme of improvements funded through the Transforming Cities Fund (TCF), other devolved funding and now the City Region Sustainable Transport Settlement (CRSTS).

Despite not receiving any Bus Service Improvement Plan (BSIP) funding, TVCA and partners have formed an Enhanced Partnership and are delivering the actions set out in the BSIP that are affordable without additional revenue funding. In addition to this, we are also working closely with the Department for Transport, Network Rail, National Highways and Transport for the North to deliver our major transport projects, including the redevelopment of Darlington Station and the A19 New Tees Crossing.

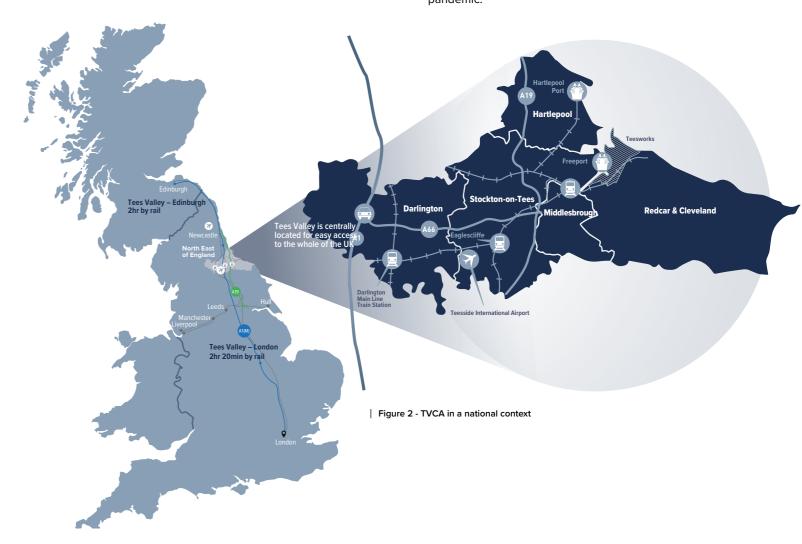
Investment at the right level is fundamental to us delivering a world-class transport system. The revenue funding required to deliver the actions set out in this BSIP is critical to maximise the impact of the capital investment through the City Region Sustainable Transport Settlement.

Tees Valley Policy

The <u>Tees Valley Strategic Economic Plan</u> sets out our aspiration to drive the transition to a high-value, low-carbon, diversified and inclusive economy. The <u>Tees Valley Local Industrial</u> <u>Strategy</u> identifies an overarching ambition that Tees Valley will be a global leader in clean energy, low carbon and hydrogen. The area will achieve a net zero carbon industrial cluster by 2040, providing good quality jobs with long term prospects that local people can access.

Teesworks, which incorporates the UK's largest Freeport, is focused on offshore wind, clean energy, advanced manufacturing and the chemicals and process sectors. This, alongside other Freeport sites in each of our five boroughs, is the cornerstone of the economic transformation of the Tees Valley and will generate an additional 41,780 net direct jobs and £3.2bn of GVA to the region. There are connectivity challenges associated with the Teesworks site and improved bus service provision is a priority.

The <u>Tees Valley Strategic Transport Plan (STP 2020 – 2030)</u> sets out how we will deliver a world-class transport system and provides the framework for transport investment. If we don't invest now at the right level, there is a real risk that the growth potential of the region will be constrained and the opportunity to level up Tees Valley lost. The challenge is further exacerbated by the legacy impacts of the Coronavirus pandemic.



Key issues and opportunities in the Tees Valley

Driving growth and productivity

The Tees Valley has a population of 675,000, which is 1% of the UK total, but it only accounts for 0.75% of UK Gross Value Added. This is an output gap of 25% or £4.3bn per annum.

Prior to COVID-19, Tees Valley Gross Domestic Product (GDP) stood at £16.1billion, the smallest economy of any city region or combined authority. In terms of GDP per capita, Tees Valley stood at £23,815 in 2019, around 72.4% of the UK rate of £32,876, which was the third lowest city region / combined authority area.

The output gap between the Tees Valley economy and other parts of England has been growing wider for a number of years and since the closure of the SSI Redcar steel site in 2015, the widening of this gap has accelerated. In real terms, Tees Valley GDP shrank by 1.5% between 2016 and 2019, the only city region/combined authority area to see a declining economy over this time.

City Region/Combined Authority real GDP threeyear growth rates, 2016 to 2019

	% Change in GDP between 2016 and 2019
Greater Manchester Combined Authority	5.9
England	4.6
Cambridgeshire and Peterborough Combined Authority	4.4
Greater London Authority	4.1
West Yorkshire Combined Authority	4.1
Sheffield City Region	3.2
West of England Combined Authority	1.8
North East Combined Authority	1.7
North of Tyne Combined Authority	1.5
West Midlands Combined Authority	1.5
Liverpool City Region Combined Authority	1.4
Tees Valley Combined Authority	-1.5
	Source: ONS

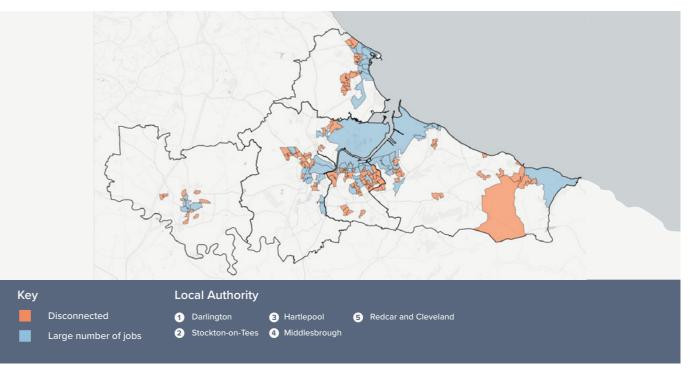
The Tees Valley is home to over 22,000 business units (ONS, 2020), of which 940 employ 50+ people. Whilst Stockton-On-Tees is home to the most businesses (31%), the remaining local authorities share the business units relatively equally: Middlesbrough (19.6%), Darlington (18.4%), Redcar & Cleveland (17.8%) and Hartlepool (12.8%).

The need to Level Up

The Tees Valley is a prime case for levelling up. The key socioeconomic challenges facing the region can be summarised as:

- Gross weekly earnings are lower than the national average across the Tees Valley and three of the local authority areas have a high level of disadvantage for this metric.
- The Tees Valley is one of the most income deprived areas in England and income inequality across the TVCA area is amongst the highest in the country.
- The employment/unemployment rates across the Tees Valley are worse than the national average and all local authorities are in the highest deciles of disadvantage for this metric.
- The proportion educated to degree level or equivalent is below the national average across Tees Valley and four of the local authority areas are in the highest deciles of disadvantage for this metric.
- The deprivation rankings for all local authorities are in the highest deciles of disadvantage, with two local authorities in the top ten most deprived nationally. 121 or 29% of Tees Valley's 417 Lower Layer Super Output Areas (LSOAs) are in the 10% most deprived nationally, almost three times the national rate.





| Figure 3 - Disconnection of Deprived Neighbourhoods

Furthermore, there are key accessibility challenges facing the Tees Valley, including a significant disconnection problem. Just under two-thirds (65%) of deprived neighbourhoods are disconnected (Figure 3), meaning people living in the area work in a narrow range of places nearby, which may indicate poor transport links or a skills mismatch (Rae et al., 2016).

The prevalence of labour market disconnection is in stark contrast to the other mayoral regions, where most deprived neighbourhoods either contain many jobs or are well connected to jobs nearby. Disconnection is present across all the Tees Valley local authorities, but is most severe in Middlesbrough, where 33 of the 49 deprived neighbourhoods are disconnected from the labour market¹.

The intra-urban connectivity rankings for public transport and car for all local authorities are in the highest deciles of disadvantage, which is due to a combination of road congestion and limited public transport provision. The interurban connectivity rankings are higher, but for public transport there is still only a medium level of performance.

The Tees Valley can be defined as a functional economic area with close to 9 in 10 local jobs filled by Tees Valley residents and similarly close to 9 in 10 local residents employed within the Tees Valley, i.e. relatively small and balanced levels of in and out-commuting. The priority is to therefore level-up the entire region. There is a need to ensure bus services better connect towns, residential areas, employment sites and the mix of urban and rural areas. However, it must also be recognised that there are cross-boundary services between North Yorkshire and the North East, which provide important connections in and out of the Tees Valley.

There is a higher than average number of households in Tees Valley with no car (31%) compared to 25% nationally, which means many people rely on the bus. Challenges around accessibility are further exacerbated by the fact that the bus network is currently largely centred on providing access from residential areas to the nearest town centre. However, due to the region's economic geography many large employment sites are out of centre, which can lead to longer access times by public transport. For people in deprived communities and/or in low paid jobs, the cost of transport can also be a barrier to accessing employment.

The need to Decarbonise Transport and Promote Modal Shift

The Tees Valley is one of the most carbon-intense regions in the UK, with emissions per capita over twice the national average. This is largely down to the level of heavy industry in the area. TVCA is committed to address this challenge and achieve a net zero carbon industrial cluster by 2040. Transport contributed 16.9% of total CO₂ emissions in the Tees Valley based on 2019 data, with the majority from road transport. Transport emissions per capita were 1.7 tonnes CO₂, which is slightly lower than the England average of 1.9 tonnes CO₂. 75% of Tees Valley residents travel to work by car or van (Figure 4), which is higher than the England average of 68%².



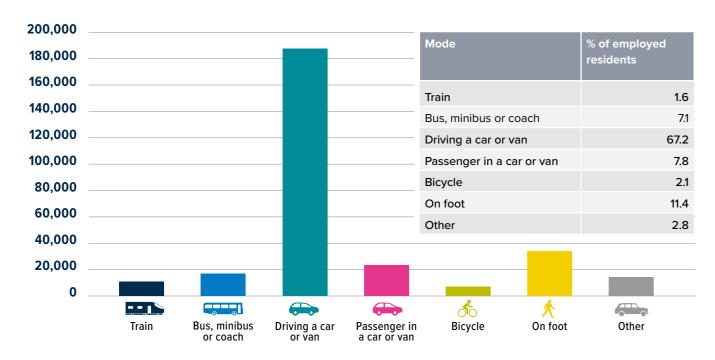
¹Inclusive growth in Tees Valley: an agenda for the new Mayor, Joseph Rowntree Foundation

² Transport Statistics Great Britain 2018 (publishing.service.gov.uk)

Method of travel to work

It is recognised that bus journeys are not made in isolation and are part of an overall journey package that can include walking and cycling. This BSIP is therefore fully integrated with our aspiration to make cycling and walking the natural choice for shorter journeys.

Method of travel to work



2011 Census data: 2011 Census - Nomis - Official Labour Market Statistics (nomisweb.co.uk)

Figure 4 – Method of Travel to Work in the Tees Valley (by mode)



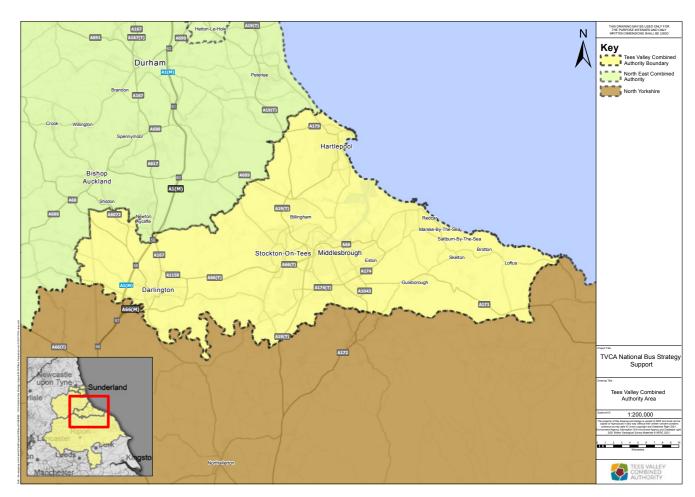


BSIP Area Overview

The BSIP covers the whole Tees Valley Combined Authority area, which includes Darlington Borough Council, Hartlepool Borough Council, Middlesbrough Council, Redcar & Cleveland Borough Council and Stockton-on-Tees Borough Council. The Tees Valley covers around 3,300 square miles and has a population of approximately 675,000.

Neighbouring Authorities who have been engaged during the production of this BSIP include North Yorkshire County Council (immediately to the south) and Transport North East (immediately to the north). Figure 5 identifies the geographical area covered by the BSIP and the relationship with neighbouring authorities.





| Figure 5 - Geographical area covered by the BSIP

The Tees Valley Highway Network

Highway infrastructure asset – this is the single most valuable asset owned by the local authorities and its ongoing maintenance is essential to the effective operation of the Tees Valley transport system, including the expedient movement of buses. Increased pressure on funding, coupled with a deteriorating age profile of the highway assets, has resulted in significant challenges for the local highway authorities. The local authorities are utilising their local highway authority allocations from the CRSTS to deliver against the priorities in their:

- Local Implementation Plans (LIP), which set out how the Tees Valley Strategic Transport Plan is delivered at a more local level; and
- Highway Asset Management Plans (HAMPs).

Key Route Network – the polycentric nature of the Tees Valley and the geographic distribution of major employment sites, particularly Teesworks and the Freeport, means that the Key Route Network (KRN) is critical to driving growth and productivity.

Transport modelling has identified specific locations and corridors on the KRN that are already at capacity or will be over capacity by 2025. The consequence of taking no action will be a significant increase in congestion, which will negatively impact upon journey times, reliability and air quality, and threaten the economic transformation of the region.

Digital strategy – TVCA is currently implementing the first phase of its digital strategy for transport. This has enabled us to start to develop a more integrated, smart transport system. The CRSTS is enabling us to deliver a wide-ranging package of digital infrastructure and services to accelerate our ambition for a digitally enabled transport system across the region. The package will include managing and optimising the network efficiently through further investment in the Urban Traffic Management & Control (UTMC) system. This will help buses to move more efficiently around the highway network and provides an opportunity to upgrade and integrate bus real time information to improve customer experience. Further detail is provided under the bus priority improvements action in our five-point plan.





The Tees Valley Bus Network

The Bus Network

Detailed analysis of the bus network was undertaken in autumn 2022 to understand:

- the relative provision of bus services and levels of service (frequencies and spread of operation by day);
- accessibility to a range of destinations including town centres, education, employment and essential services;
- the provision and adequacy of passenger infrastructure.

There are locations across the Tees Valley that are not currently served effectively by bus services. Locations have been identified from which it is not possible to access the nearest town centre by bus within a reasonable travel time during the week. There is an increase in the number of locations which are not served by a bus service at the weekend. The analysis shows that with short-term financial support there is the potential for the partnership to kickstart an emerging commercial network. An example of the comprehensive bus network analysis that has been used to inform this action is shown in Figure 6. The Tees Valley bus network maps are shown in Annex 2.

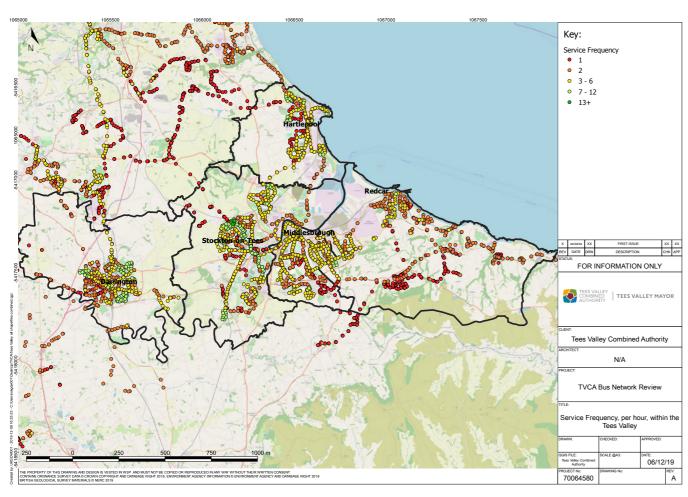


Figure 6 - Example of bus network frequency mapping

Core bus corridors

There are nine core bus corridors across the Tees Valley where there is significant potential to grow passenger numbers. Aligned to the Government's ambition for bus priority schemes, there is a programme to deliver improvements to prioritise bus on these corridors with a focus on two aspects:

- Measures to make it easier for buses to travel on these corridors, which could be physical, for example junction improvements and the introduction of bus lanes, or digital, for example giving buses priority at traffic signals; and
- Measures to improve passenger experience, for example improved waiting facilities and integrated real-time information underpinned by a passenger charter setting out expected standards of delivery.

The corridors have been selected on the basis that they connect areas of high deprivation with town centres and employment opportunities, currently experience congestion and delays, and have the greatest potential for passenger growth. They were identified following comprehensive data analysis and stakeholder engagement. This investment package is a fundamental component of our five-point plan and further detail is included in the bus priority improvements section of the BSIP.

Local Transport Authority financial support for bus services

TVCA is funding the Tees Flex on-demand bus service, which provides coverage in areas not served by a regular commercial service. The service was launched in February 2020 and the three-year trial comes to an end in February 2023. We are currently reviewing the service to determine next steps after the trial period.

Another service funded by TVCA is service 101, which runs from Middlesbrough - Teesport three times a day, aligning with workers shift patterns. Usage of service 101 since introduction in January 2022 has been encouraging and we are currently exploring options to extend the contract past the current funding arrangement. This includes liaising with local businesses who now rely on the service for their employees to get to work.

Other factors that affect the use of local bus services

Parking is the responsibility of the five Tees Valley local authorities. However, there is an aspiration to work collectively to ensure parking policy complements this BSIP wherever possible. The local authorities are also responsible for planning and there is a collective commitment to ensure that opportunities to promote public transport and active travel are identified and pursued through the planning process.

Passenger Information

Passenger information across the Tees Valley is currently available through several channels. The operators provide service and ticketing information, and the Connect Tees Valley website provides travel information across a range of modes. Timetables have generally been produced by the bus operators under their own branding. The availability of information can appear to be disjointed from a passenger perspective because of the number of sources, styles and variations in presentation. Mapping follows a similar pattern with no co-ordinated approach across all operators and services. There is evidence to show that passengers want information at stop and there is a need to ensure that this information is current. This is being addressed through the enhanced customer experience priority.

Travel Planning Information

The Let's Go Tees Valley service delivers a programme of behaviour change activity. This includes personalised travel planning (PTP) targeted at employees within large organisations, students and job seekers. The service is also working with housing developers to provide PTP to residents as they move into their new homes, linking behaviour change to a key life event. There is also a programme of promotional, incentivisation and marketing activity to encourage behaviour change. The service will be fundamental in contributing to the delivery of the enhanced customer experience priority in the

Brand Identity

TVCA is developing the concept of a Tees Valley transport brand that can be used for multiple purposes from general travel information to the promotion of new infrastructure and campaigns. The objectives for this brand are:

- to provide timely travel information for users of public transport;
- to promote different ways to travel around the region and try to influence consumer behaviour to make sustainable modes first choice; and
- to communicate the transport improvements and investments we are working on around the region.

The brand will ensure a single source of accurate and consistent information provision across the Tees Valley. It will be customer focused, ensuring that the provision of information meets customer requirements and encourages different travel behaviours. There will be digital functionality and a physical presence on the ground, for example bus stops, cycling routes, etc.

Current offer to passengers

Current offer to Bus Passengers

The Tees Valley BSIP can be transformational with the right level of revenue funding and the improvements will:

- deliver a step change in bus provision for current and new bus users; and
- provide a high quality alternative to car travel.

Operators and the market – the two main bus operators in the Tees Valley are Arriva and Stagecoach, with a smaller number of services operated by Go North East and independent operators.

Market share based on the number of operational local bus service vehicles is dominated by Arriva (60.1%) and Stagecoach (30.9%), with Go North East holding just over 3%.

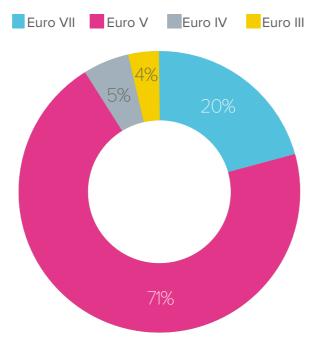
Some services are also operated by smaller independent operators: Coatham Coaches in Redcar & Cleveland; Hodgsons and Weardale Coaches in Darlington; and Paul's Travel in Hartlepool. These services together represent around 5% of the operational market. There is limited operator competition in Darlington and Redcar & Cleveland where services are almost operated exclusively by Arriva. In Hartlepool, services are operated almost exclusively by Stagecoach. In Middlesbrough and Stockton-on-Tees, both Arriva and Stagecoach operate.

Fleet – the total vehicle fleet for all operators across the BSIP area has an operational Peak Vehicle Requirement (PVR) of approximately 291 vehicles. The spare level is estimated at 14%, which means the total fleet is circa 310. The profile of the fleet is dominated by Euro V vehicles (almost two thirds) with smaller proportions of newer and older vehicles (Figure 7).

Operator	Fleet Size^	Market %*
Arriva	175	60.1%
Stagecoach	90	30.9%
Go North East	10	3.4%
Hodgson's coaches	11	3.8%
Weardale Coaches	3	1%
Coatham Coaches	1	0.3%
Paul's Travel	1	0.3%

[^] Fleet Size - Based on weekday Peak Vehicle Requirement (PVR) on local bus services
*Market Share – Based on number of operational local bus service vehicles

Tees Valley Fleet composition



| Figure 7 – Tees Valley area bus fleet composition

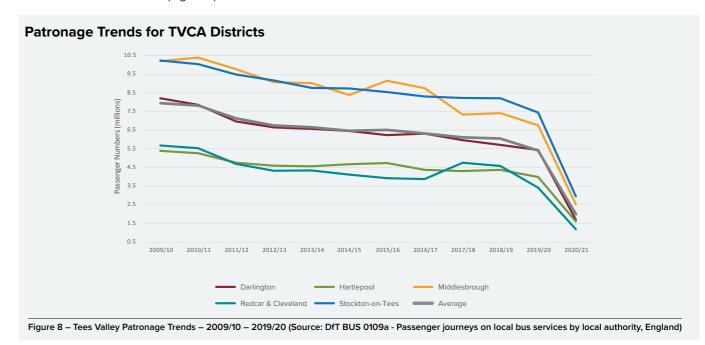
Tees Valley Fleet Composition

Operational challenges – there are a number of operational challenges, which impact on the current offer to passengers, including:

- a long-term trend of declining bus patronage leading to lower revenues;
- specific locations and corridors on the KRN that are already at capacity or will be over capacity by 2025, which is impacting on bus service punctuality and the reliability of bus services;
- a requirement to decarbonise and modernise the bus fleet;
- a requirement for bus services to connect new housing and job opportunities;
- a requirement to connect rural areas of the Tees Valley;
- a complex fares and ticketing system; and
- the cost of transport being a barrier for people in deprived communities and/or low paid jobs, particularly when seeking work or starting new employment.

Patronage

Patronage – there has been a decline in patronage on bus services in the Tees Valley over the past ten years, which has been relatively consistent across all local authority areas. Overall, patronage in 2019/20 (pre-Coronavirus pandemic) was around 70% of that observed in 2009/10 (Figure 8).



In addition, analysis of passenger journeys per head of population has also been undertaken, which shows a similar trend in that totals have fallen since 2009/10 to 66% of the baseline figure by 2019/20. This means that trip making by bus, as well as overall passenger journeys, have both consistently declined over the last decade.

The onset of the Coronavirus pandemic had an unprecedented impact on national bus patronage and all other forms of transport as a number of restrictions on movement and social interaction were implemented by Government to protect public health. Figure 9 below illustrates the national impact over time from March 2020 as patronage immediately

dropped to around 11% of normally observed levels.

In the Tees Valley patronage levels as of early October 2021 were between 71% - 76% of the figure pre-pandemic. In November 2022, they have now increased to around 80%.

The residual impact of the Coronavirus pandemic on passenger numbers is likely to continue into 2023/24. The BSIP funding ask reflects the need for continued network recovery funding to ensure that network coverage is maintained.

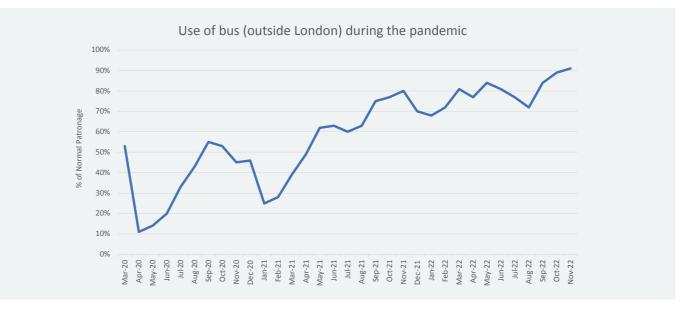
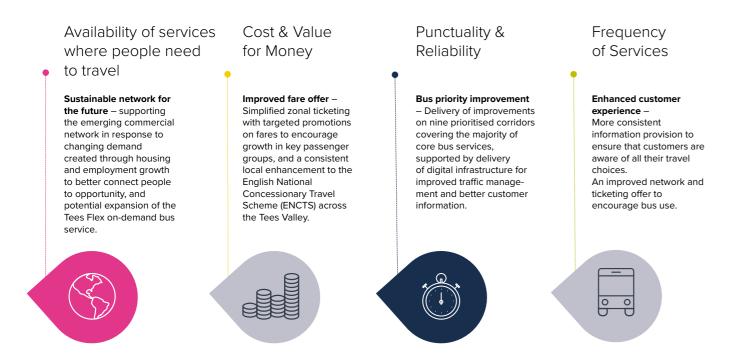


Figure 9 - Use of bus (outside London) during the pandemic. DfT Statistics

Barriers and Opportunities

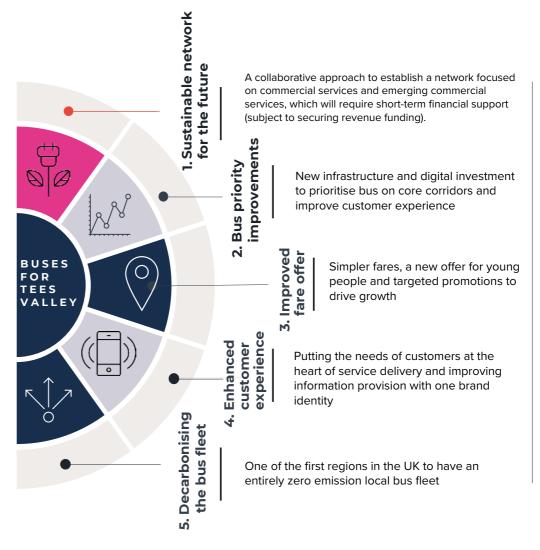
Evidence from a range of sources, including local and national user and non-user surveys, and stakeholder engagement, has identified a number of key barriers, which if overcome, will lead to opportunities to restore and then grow the number of journeys made by bus in Tees Valley. This is illustrated below and demonstrates how the five-point plan will address these barriers.



Delivering Transformation – the Five-Point Plan

From the analysis of all the data and engagement with the public and stakeholders we have developed a BSIP, which can transform the Tees Valley bus services and grow passenger numbers. The BSIP actions are structured around a five-point plan that is summarised below and detailed on the following pages.

Tees Valley Partnership – 5 Point Plan



Improved connectivity to key destinations including employment, education and essential services.

A focus on improving the efficiency of the bus network, enhancing customer experience and further developing the Urban Traffic Management and Control (UTMC) system.

Smart products – easy to use and understand, digital and contactless payment as the default – moving to capped pricing.

A single source of accurate and reliable information to give confidence and ease ofaccess to timely information.

Accelerated fleet replacement supported by the required infrastructure.

20

Tees Valley Bus Service Improvement Plan

Tees Valley Bus Service Improvement Plan

Sustainable Network for the Future

The Tees Valley Network

The Tees Valley network has been split in to two key categories:

A Core Commercial Network - This includes all high, medium, and low frequency services that are commercially viable to operate without financial support. These services make up the significant majority of the Tees Valley network and are essential in providing connectivity across the region.

An Emerging Commercial Network – These services are needed in response to changing travel demand and require short-term financial support as passenger numbers grow. Once funding has kick-started the service, then a focussed marketing campaign is deployed to grow the market to the point at which the service becomes commercially viable.

Emerging Commercial Network

A process of engagement with the public and stakeholders has resulted in a prioritised list of service improvements that have the potential to be commercial in the medium term. The ask of government is for revenue funding that can be used to kick-start these services in the short-term.

The service improvements fall into a number of broad categories:

- New services to areas of high employment (often based on shift patterns);
- physical route extensions;
- additional journeys over time periods not currently covered (e.g. evenings);
- service diversions to serve more areas; and
- better integration between bus and rail (route changes or extensions)

The prioritisation process is based on accessibility analysis and objective prioritisation (e.g. access to employment and maximising residential access).

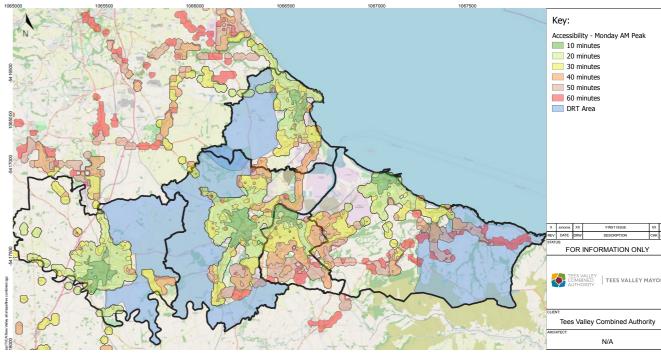
The principle of resource redeployment (i.e. from time saved through infrastructure improvements) has been agreed with operators to ensure the full benefits from the partnership can be captured. TVCA will also continue to explore opportunities to pool other public spend on transport, for example NHS, further education, and home to school, to deliver a more joined-up service offer and potential efficiencies.

Tees Flex

Tees Flex is an on-demand bus service that started operation in February 2020 for a three-year trial period. Operated by Stagecoach, between 07:00 – 20:00 Monday to Saturday using a fleet of eleven Mercedes Benz Sprinter minibuses, the service provides better access to rural communities across Darlington, Stockton, Redcar and Hartlepool (Figure 10).

Passengers can make a booking via an app or a manned telephone number and have the option to pay in advance via the app or on the vehicle with simple, affordable fares. We are currently reviewing the service to consider next steps after the trial period ends in February 2023.





| Figure 10 - Tees Flex zones (purple) and commercial bus network

Bus Priority Improvements

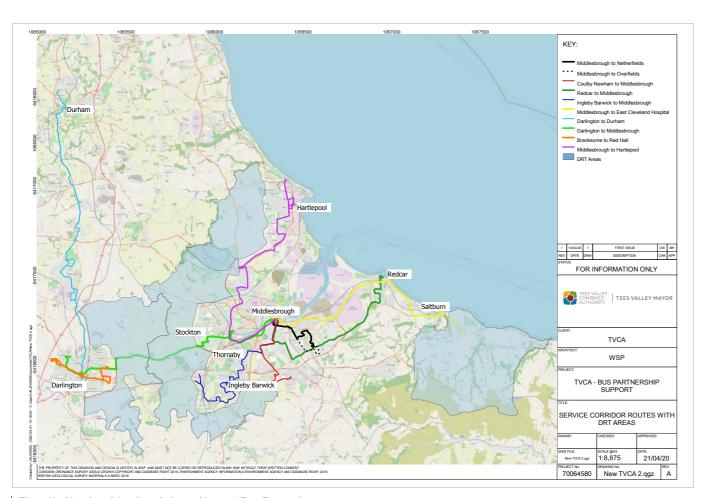
Programme of Bus Priority Improvements

TVCA is investing £45.21m of City Region Sustainable
Transport Settlement (CRSTS) into a programme of bus priority
improvements. Nine core corridors have been identified where
a phased programme of improvements will be delivered to:

- enhance the bus offer by reducing the impact of congestion and journey time variability on end-to-end bus journey times to make bus a more desirable mode choice;
- improve the punctuality of bus services to employment, education, essential services and leisure opportunities in the five key urban centres (Darlington, Middlesbrough, Stockton on Tees, Redcar & Hartlepool);
- increase the number of public transport interchange facilities across Tees Valley to improve integration between bus, rail and active travel; and
- improve the bus passenger experience and the level of satisfaction with the bus network.

The nine corridors listed below (Figure 11) have been subject to detailed assessments to understand the issues and identify the interventions:

- Middlesbrough to Netherfields/Overfields;
- Coulby Newham to Middlesbrough;
- Redcar to Middlesbrough;
- Ingleby Barwick to Middlesbrough;
- Middlesbrough to East Cleveland Hospital;
- Darlington to Durham;
- Darlington to Middlesbrough (via Stockton);
- Branksome to Red Hall (via Darlington); and
- Middlesbrough to Hartlepool

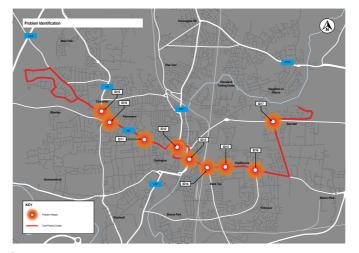


| Figure 11 – Mapping of the nine priority corridors and Tees Flex service areas

Tees Valley Bus Service Improvement Plan

The reliability and journey time improvements resulting from the infrastructure improvements will be protected by minimising the impact of roadworks and other occupations of the highway.

Following the preparation of initial corridor assessments, focussed engagement with the local authorities and bus operators was undertaken. This provided the opportunity to review the findings and agree the evidence base underpinning the problems and opportunities (Figure 12)



| Figure 12 - Example of corridor problem identification mapping

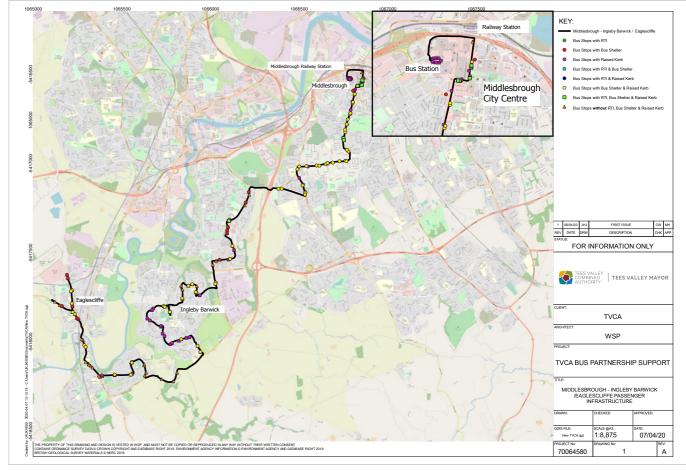
Through the prioritisation of specific problem focus areas, it was considered that the greatest benefit to the bus corridors could be delivered by addressing the issues of punctuality and slow bus speeds.

A prioritisation toolkit was developed, which provided a concise and evidenced score for each corridor against a series of metrics, including the opportunity for improvement, deliverability of improvements, the likely benefits, value for money and anticipated support from stakeholders.

The toolkit has enabled TVCA to make an informed decision on the advancement of option development for the corridors. Each of the corridors has been subject to a Whole Route Improvement Plan (WRIP) Study. There are five elements to this process:

- description of the problems evidenced and validated as part of the bus corridor assessment;
- summary of the long list of options generated;
- identification of the SMART programme objectives;
- description of the multi-criteria appraisal tool utilised to inform the option shortlist and the packaging of options;
- a summary of package costings.

The corridor improvements include a co-ordinated programme of on-highway infrastructure improvements, digital upgrades (e.g. Urban Traffic Management & Control System improvements), bus priority and passenger infrastructure (Figure 13) and information improvements. Both the fleet decarbonisation and customer experience priorities will initially be focussed on these priority corridors to maximise the impact of the investment and the potential for modal shift.



| Figure 13 – Example of detailed corridor map with passenger infrastructure identified

The impact of interventions will be assessed using various sources, including:

- Analyse Bus Open Data (ABOD) this system will allow us to plot and understand each key corridor to track bus punctuality per operator and service.
- DfT supplied traffic speed/congestion data
- VivaCity cameras these are currently in operation and monitoring the number of buses on each corridor per hour/ day.
- VivaCity smart junction an artificial intelligence (Al) control system which can quickly adapt to changing traffic conditions and efficiently implement traffic network strategies at both local and city-wide scales.
- **Simplifai** through Al analysis, we can use this to identify consistent congestion spots across the bus corridors.
- Enhanced Partnership infrastructure working group which will allow frequent communication with local bus operators during the delivery of the project.

By utilising these sources, we will compare bus punctuality before, during and after implementation of the interventions, including in real time through the Urban Traffic Management and Control (UTMC) system. This will ensure that we are maximising the impact from the investment in bus priority.

Urban Traffic Management Control System (UTMC)

The Urban Traffic Management Control System (UTMC) will enable us to better manage the highway network and improve the efficient movement of buses. The programme for delivery in 2023/24 includes

- The upgrade of the UTMC system
- Expansion of traffic signal connectivity to enable further development of a Smart Region approach to traffic management
- The repair, service & reinstatement of traffic counters to enable strategies for traffic management to be implemented
- Additional CCTV cameras linked back to control rooms
- Bus priorities module for the prioritisation of vehicles at junctions to reduce delays on buses

JTaaS routes - Dynamic journey time routes, providing realtime and accurate travel time information of transit vehicles to assist passengers in planning their trips to minimise waiting times

ANPR (Automatic Number Plate Recognition) cameras to provide journey time data

Diversion routes for unplanned events

VMS signs to support major events, roadworks, incidents, and road safety campaigns around the Tees Valley

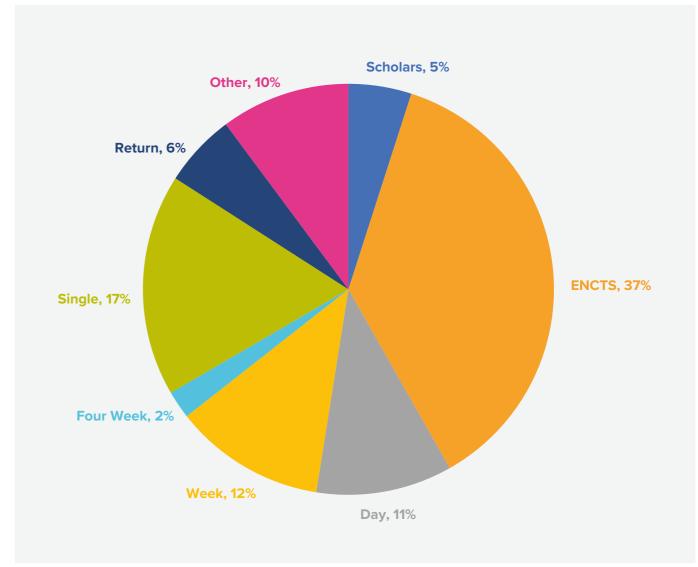


Improved Fare Offer

Current situation

The cost of travelling by bus, and the perceived value for money, are issues raised regularly in user and non-user feedback. The current fares structure within the Tees Valley is complicated. In addition to a range of distance based single and return tickets, both Arriva and Stagecoach offer season ticket products, which naturally fit with their operating areas. Currently Arriva serve the areas of Darlington, Stockton-on-Tees, Middlesbrough, Hartlepool and Redcar & Cleveland. Stagecoach operate in Stockton-on-Tees, Middlesbrough and Hartlepool. Other operators, including Go North East, also offer season ticket products, but these services operate over a smaller geographical area, limiting the potential for use. In total, there are 5 differing families of tickets, which between

them have 21 different geographies or zones for which bus season tickets can be bought. Whilst the current situation offers choice, it also creates complexity for customers. Data provided by bus operators provides an insight to the buying patterns of customers. The most common category is journeys made by English National Concessionary Travel Scheme (ENCTS) pass holders (37%), with adult single fares being the next most used fare type (17%) and then weekly (12%) and daily (11%) tickets (Figure 14).



| Figure 14 – Breakdown of fare types by passenger numbers

Simplifying the offer

Work has been undertaken to identify and understand all single, multi-journey and period ticket options across all operators to set out the baseline position. A significant number of tickets across the existing range already share common validity. However, the marketing is being diluted by different product names, terms, and zonal coverage.

A proposal has therefore been developed with the operators to simplify the current range of zones and enhance the multi-operator ticketing offer under the existing 'SmartZone' brand already in place. In addition to the geographic consistency, consistent periods of availability will also be made available across each product (day/week/month).

SmartZone ticketing options are already available across the whole Tees Valley and Stockton/ Middlesbrough zones. We are now progressing with the implementation of the Hartlepool SmartZone, which will be introduced in early 2023. The reason for prioritising the Hartlepool zone as the next development is because of the significant cross-over with multiple operators in the area.

The new ticketing structure will enable passengers to travel across zones using one ticket regardless of the operator.

Marketing will specifically focus on the simplified zones and the improved ticketing offer.

The five zones are Hartlepool, Stockton/Middlesbrough, East Cleveland, Darlington and the whole of Tees Valley, as shown in Figure 15.



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| Figure 15 – simplified zonal structure

Promotions

Targeted fares promotions can have a substantial impact on the bus market. By making travelling by bus easier and more affordable, it is possible to encourage modal shift and make bus the preferred option over alternate modes of transport (e.g. car).

We have worked collaboratively within the Enhanced Partnership to identify short-term key target markets, which are felt to have the greatest potential for growth. This includes discounted fares for families and individuals starting work. These have been informed by good practice case studies, market research and the purchasing patterns of existing customers.

Discounted Fares for Families

Over summer 2022, local bus operators across the Tees Valley offered free travel for up to 3 children, aged 11 and under when accompanied by an adult (fare paying on selected tickets or concession). The offer was well received and saw an upturn in passenger numbers. As a result of the success over the summer, Arriva and Stagecoach have agreed to extend the offer to future school holidays, to incentivise families to use the bus.

New Offer for Young People

Young people are a key target market in terms of growing passenger numbers in the Tees Valley and we have been working with the operators to develop a proposal to stimulate further growth in this market. Our ask of government is for revenue funding to enable us to implement a reduced fare for the U21 market, which is currently approximately 20% of Tees Valley bus users. This would be an extension to the proposal already being progressed by Transport North East and would provide a consistent offer for young people across the whole of the north east region. The impact of such a fare offer could be transformational over such a large geographic area and we have calculated that the Tees Valley would require approximately £3m of revenue funding per year to deliver this.

Provision of Travel Tickets for those Seeking or Starting Work

The Tees Valley currently offer up to 1 week's free travel to residents with a job offer who need a way to travel to/ from their place of employment. The principle behind this offer is that it enables residents seeking employment to access work before they have secured their first wage. As further job opportunities are coming to the area with the development of various sites across the Tees Valley, such as Teesworks, it is essential to continue supporting this proposal so we can assist in bridging the gap between travel costs and employment.

TVCA has worked with the operators to calculate the relevant revenue proportions and financial risks associated with incentivising ticket products and introducing further discounts for existing products, and this has informed the financial ask.





English National Concessionary Travel Scheme

Since our original BSIP was published in October 2021, we have been working to implement consistency across the Tees Valley in the local enhancements to the English National Concessionary Travel Scheme (ENCTS).

Previously, there had been differences in the enhancements offered by the local authorities, with Darlington offering companion passes and Middlesbrough, Stockton-on-Tees, Redcar & Cleveland and Hartlepool offering pre-9:30 travel for a cost of 30p.

In July 2022, we extended pre-9:30am travel for 30p to concessionary pass holders in Darlington, bringing consistency to that element of the scheme.

We are currently working towards extending the offer for companion passes across the other 4 Local Authorities, which will be in place by the end of 2022/23.

Integrated and Smart Ticketing

The implementation of Tap on Tap off on all buses in the Tees Valley fleet will make travelling by bus, for the best price, easily accessible and less confusing to passengers. It will enable bus users across the Tees Valley to Tap on to the bus when they start a journey and Tap off when they reach their destination. The back-office system would cap fares to ensure they are only charged the best price, whether that be a single or multi-operator product. Implementation of Tap on Tap off would also assist in reducing delays as there is less driver interaction, which can delay the bus, therefore helping to improve overall bus punctuality.

Tap on Tap off is currently being progressed by TVCA under a single operator approach, due to the operators within our region using different ticketing systems. The final phase would see an extension of the system to accommodate for multioperator ticketing.

Enhanced Customer Experience

Passenger Charter

We have recently published our <u>Bus Passenger Charter</u>, which covers all local bus services across the Tees Valley area.

Our Passenger Charter articulates to all passengers, including those with protected characteristics, the standard of service they should expect when using local bus services in the Tees Valley. It also sets out passengers' rights when travelling and what they can do if things don't go as expected, complying with the Consumer Rights Act 2015.

The areas covered in our full Passenger Charter include:

- passenger entitlements;
- our commitments to passengers;
- what to do if things go wrong;
- how passengers can help; and
- how to contact us with suggestions or concerns.

We will review our Passenger Charter at least every 12 months. Any changes we make will be after consultation with:

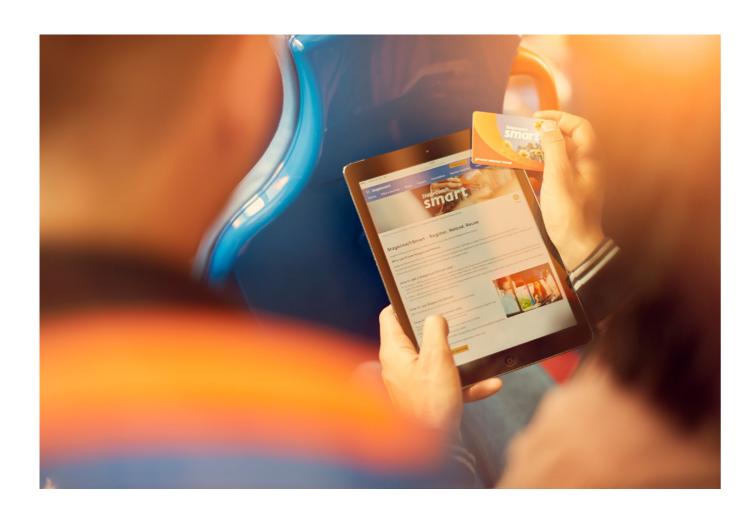
- passengers; and
- bus operators.

Our Passenger Charter is available on the TVCA website and also available in languages other than English, and alternative formats (e.g. braille or large print) upon request.

Information Provision

Effective information and communication are critical so that users and potential new users can understand how to use the bus network. This is intrinsically linked to the fares workstream, so that users or potential new users are able to find the information they need quickly and easily.

Currently, fares, service timetable and ticketing information is provided across a number of different sources. Ticketing information is provided on the Connect Tees Valley website, which provides links through to the operators' websites to purchase tickets.





Tees Valley Bus Service Improvement Plan

The Connect Tees Valley website provides comprehensive timetable information for all bus operators, and the journey planner is also multi-operator. Timetable information is also provided through the bus operator websites.

There is a further opportunity to provide a single source of consistent information across all travel modes under an overarching Tees Valley brand. This will enable customers to make informed decisions on their travel choices. An extensive study has been completed by TVCA to establish a comprehensive data map, drawing together all relevant sources of transport data and how they are accessed and used. This has enabled us to define a more effective means of collating, processing and distributing the data for operational and customer information purposes.

The data is being used to drive many of the improvements proposed under this priority action. Partners have worked together to establish the level of resource deployed on this activity. This includes those involved in travel planning, passenger information, website facilitation, and network design. These disparate elements of resource are being coordinated to maximise impact, with the programme of activity overseen by the partnership.

As set out earlier in the BSIP, the development of a Tees Valley brand will enable all the elements of information and communication to be drawn together in both digital and physical forms.

Compliance with the Public Sector and Equality Duty

An Equality Impact Assessment was undertaken as part of the preparation of the Enhanced Partnership Plan. The BSIP includes a number of actions that will improve provision for the protected characteristics including:

- implementing a consistency across the Tees Valley in the local enhancements to the English National Concessionary Travel Scheme (ENCTS);
- infrastructure improvements to include raised kerbs for low floor access;
- service improvements;
- better information provision; and
- commitments in the passenger charter

Development of the UTMC system will provide more integrated management of the network and the provision of better transport information across the Tees Valley for all modes of transport. This will give residents, workers and visitors in Tees Valley up-to-date information on their travel choices. It will also enable better co-ordination between the various organisations involved in the planning, operation and maintenance of the transport network, improve air quality, journey reliability and overall network resilience across Tees Valley

Traffic Signals Funding

In September 2021 TVCA were successful in a £500k bid to the Department for Transport to improve the reliability and efficiency of the traffic signals and associated assets across the Tees Valley. Middlesbrough Council are the lead authority to deliver this project due for completion before March 2023.

Additional funding from the City Region Sustainable Transport Settlement (CRSTS) programme will deliver the Tees Valley Digital Transport Strategy for the next five years from 2022-2026. The digital transport strategy identifies a number of digital and transport needs of the residents, businesses and key stakeholders of the region. This user-centric approach ensures that digital solutions will be developed that meet these needs and solve real issues and challenges. This strategy supports the wider Tees Valley Digital Strategy, which sets an ambitious target of becoming the UK's first truly Smart Region by 2032, covering the three foundations of digital infrastructure, digital innovation and digital inclusions and skills.

This digital programme of investment will benefit all road users, including buses.

Bus Shelters

TVCA and the local authorities are currently procuring contractors for the maintenance and upgrade of all bus shelters across the Tees Valley. This will ensure a consistency of provision and that all shelters are appropriately maintained, accessible and that passengers feel safe when waiting for the bus

Modal Integration

TVCA is making significant investment in active travel, both in terms of improved infrastructure provision and a programme of behaviour change activity. Sustrans is operating five active travel hubs across the Tees Valley, which offer advice, cycle maintenance, training and guided rides. We want to ensure that there is integration between this programme of work and the BSIP to ensure that people can travel seamlessly across modes.

Decarbonising the Bus Fleet

Scale of the challenge

As referenced earlier in the BSIP, the total fleet in the region currently stands at 288 vehicles. Of these, 80% are Euro V or older and none are currently zero emission.

All operators in the region share the ambition to decarbonise their fleet. However, it must be recognised that the transition to zero emission vehicles requires additional capital investment in the short to medium term. Operators recognise the potential to save on operating costs in the long term as the Total Cost of Ownership ("TCO") models change.

There are several dependencies that the operators cannot directly control, which include:

- sufficient Government or other sources of funding to ensure fleet transition can be delivered:
- development of zero emission bus technology to the extent that operators can achieve economies of scale regardless of fuel type;
- UK grid electricity decarbonisation and sufficient quantum of green hydrogen or electricity to be entirely zero emission;
- implementation of the incentives needed as indicated in the Government's Decarbonising Transport Strategy 2021; and
- passenger numbers continuing to recover from the impact of the Coronavirus pandemic providing the revenue needed to underpin investment.

With regard to investment in the Tees Valley fleet, Arriva has recently purchased 14 brand new Euro 6 Low Emission buses for their Darlington depot. We will continue to work with the operators to understand and seek to influence their decarbonisation plans for the Tees Valley, whilst exploring all grant funding and commercial opportunities to support the operators in decarbonising their fleets.

Choice of Technology

At this stage none of the operators have made a firm decision on their choice of technology across the whole fleet. The fleet decarbonisation roll-out strategy will recognise that different technologies lend themselves to different operational requirements.

The decarbonisation of the bus fleet will be fully aligned with the ambition of the Tees Valley Hydrogen Transport Hub. TVCA is committed to supporting multi-modal trials in the Tees Valley focussing on the potential for a fully integrated hydrogen transport system.

A review of current zero emission bus projects that partners have delivered has provided some valuable learnings and data that will be incorporated into our strategy going forward.

Both Arriva and Stagecoach trialled hydrogen bus demonstrators in 2021/22 as part of the Government competition to accelerate the use of hydrogen transport in the Tees Valley. There is also a live government competition for hydrogen vehicle trials in the Tees Valley, with an announcement on the successful bidders anticipated by the end of 2022.



Vehicle Deployment

The intention is to deliver the diesel exit strategy at pace, but the timeline for delivery is funding dependent. There is an on-going need to assess the current fleet operational profile and how the network requirements could be met using a combination of the different zero emission technologies. This approach will consider the passenger needs, route requirements and energy demands.

Total Cost of Ownership

Internal assessments by both Arriva and Stagecoach indicate that, based on today's market, the battery electric TCO is cheaper than that for hydrogen fuel cell. However, even for battery electric there are still significant lifetime costs over and above a diesel equivalent. These additional costs include the charging infrastructure and the 8–10-year anticipated replacement of the batteries.

An analysis of the cost of transitioning the full fleet, excluding any timeline impact or economies of scale, has been undertaken and shows the base cost of a single deck diesel compared to base cost battery electric and hydrogen fuel cell vehicles.

These costs will reflect the planned 22p per km BSOG green incentive, ahead of the wider review announced in the Government's Decarbonising Transport Plan, and be updated in accordance with any subsequent changes.

Charging Solutions and Depots

There is a need to undertake a depot review to understand:

- whether there is sufficient power available;
- the space required to accommodate different refuelling infrastructure and the revised vehicle parking arrangements needed; and
- whether building upgrades are needed to accommodate and maintain multiple buses of different fuel types in one depot, in a safe and efficient manner.

Battery electric vehicle fleet operation is different to that of a diesel fleet and requires a review of the operating regime in a bus depot. A market review of current battery ranges provided by the manufacturers shows an average achievable range of 250km before recharge. Routes in the region are generally under 300km and so overnight slow charging infrastructure is considered to be the best solution.

Hydrogen fuel cell buses are similar to diesel operationally and can refuel within 6/8 minutes depending on infrastructure. This can either be at a depot or at an alternative location. Such a location needs to be easily accessible by all operators to minimise costs of travelling to refuel without fare income.





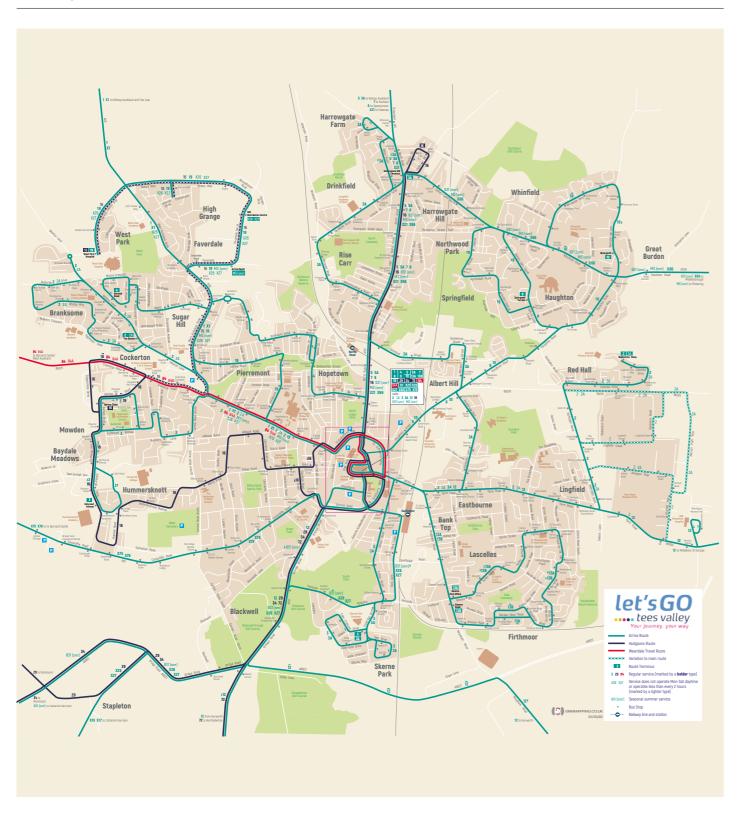


Annex 1 – Summary of Funding Ask

Action	Detail	Capital / revenue	2023/24 (£m)	2024/25 (£m)	2025/26 (£m)	2026/27 (£m)	Total (£m)	Notes
Sustainable Network for the Future	Funding to support emerging commercial network	Revenue	1.00	1.00	1.00	1.00	4.00	£4m (£1m per annum)
Bus Priority Improvements	CRSTS bus investment package	Capital (identified in CRSTS bid)	N/A	N/A	N/A	N/A	N/A	£45.21M bus investment package allocated in the CRSTS programme. No BSIP financial requirement.
Improved Fare Offer	Promotions and discounting	Revenue	3.00	3.00	3.00	3.00	12.00	£12m (£3m per annum). Specifically for the U21 offer.
Enhanced Customer Experience	Information provision, brand development and marketing/ promotional activity	N/A	0	0	0	0	0.00	Actively funded from other sources. No BSIP financial requirement.
Decarbonising the Bus Fleet	Decarbonising the fleet	Capital/ revenue split - TBC	N/A	N/A	N/A	N/A	N/A	No BSIP financial requirement.
						Total	16.00	

Annex 2 – Maps

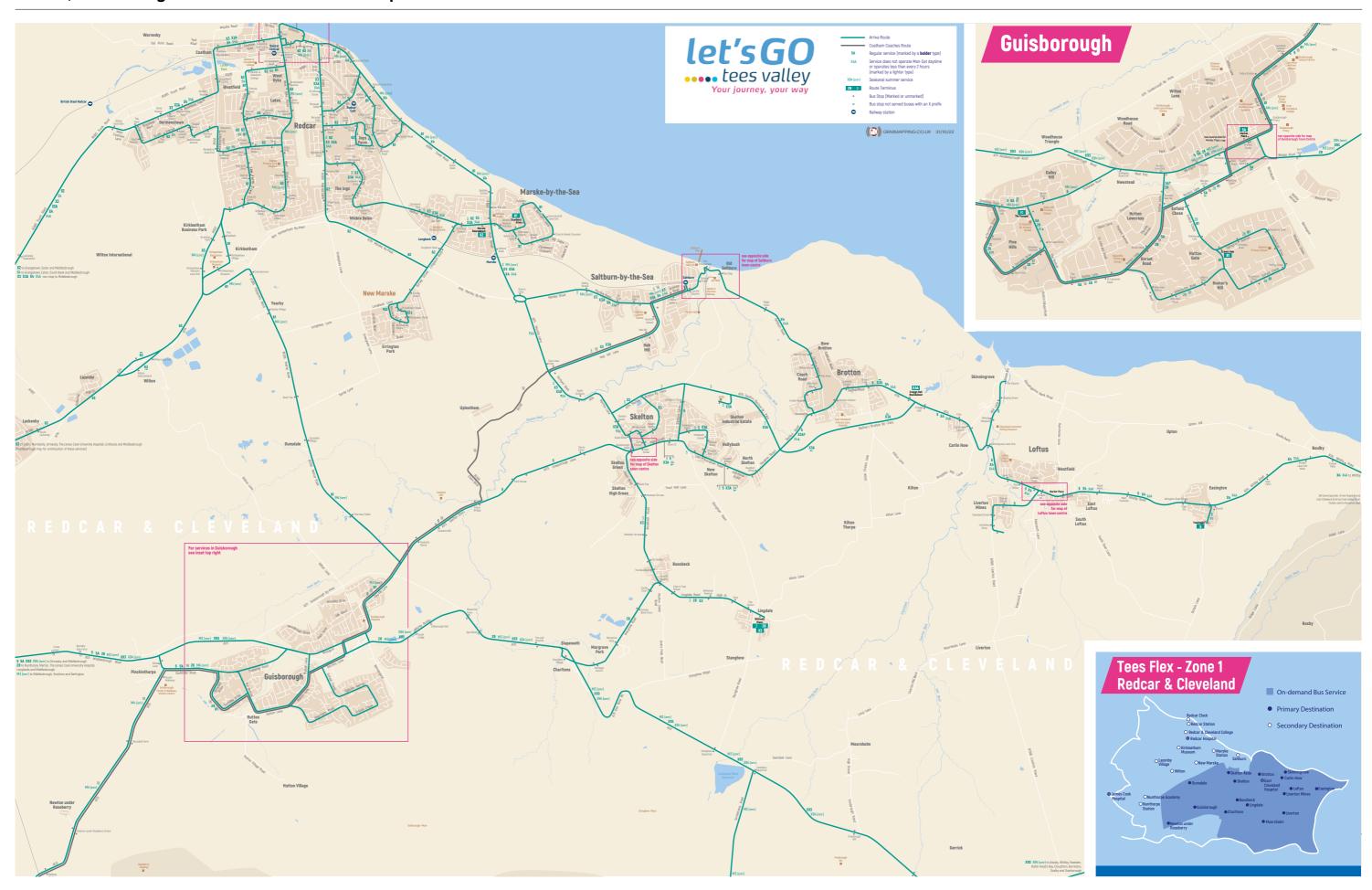
Darlington bus map



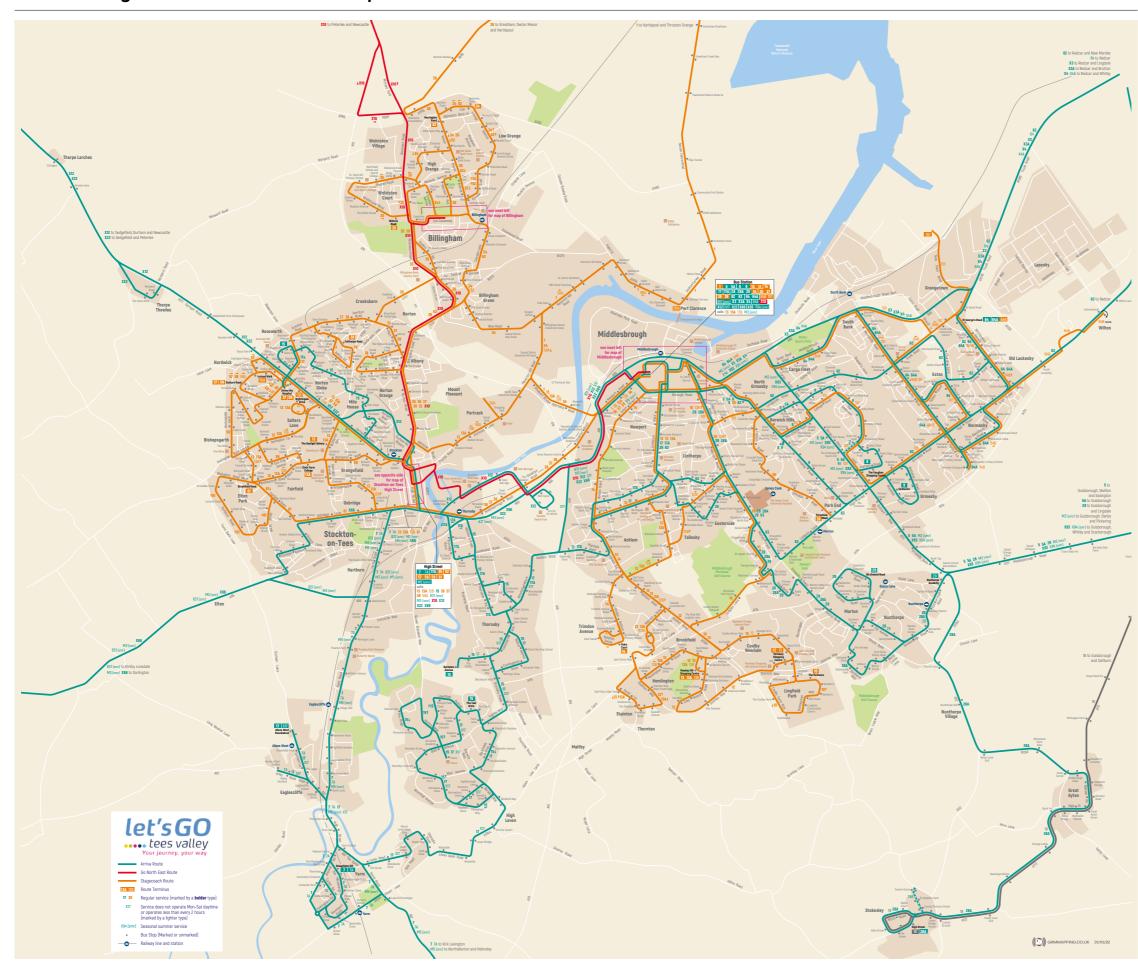
Hartlepool bus map



Redcar, Guisborough and East Cleveland bus map



Middlesbrough and Stockton area bus map



Annex 3 – Impact

The BSIP sets out the current position, the future ambition and how this will be achieved.

Current Position

Including an outline of current bus provision, a description of current key performance indicators and operational metrics, the level of Local Transport Authority (LTA) subsidy and a summary of geographic and demographic influences on the current network.

Future ambition

Including outline plans for network improvements, the likely future split of commercial and supported services, bus priority improvements, delivery of more simple fares, fares promotions, integrated ticketing and innovations in service delivery to mitigate external influences.

How it will be achieved

Including a set of performance targets designed to be ambitious, but ultimately deliverable, through efficient and effective collaborative working. Also, the range of supporting policies and delivery tools that the LTA and operators will apply to the bus network to deliver the BSIP aims and objectives.

Logic Model

The logic model below (Figure 1) clearly articulates the Theory of Change behind the BSIP and sets out how it will address the identified challenges. It provides a causal link between the respective inputs, outputs, outcomes and ultimate impact. It will inform the monitoring and evaluation framework for the BSIP.

Transport Need

Financially sustainable bus network

Improving the competitive position of bus

Responding to a changing demand for travel

Delivering an integrated public transport system

Challenges

Declining bus patronage

Traffic congestion - impacting on bus service punctuality and reliability.

No zero-emission buses in fleet

Reduction in marginal services causing accessibility issues for residents without access to a car.

Lack of standardisation of bus waiting areas across the network

Complex fares and ticketing system

Lack of affordability – particularly for young people/ people in full time education / training.

Lack of bus service connectivity barrier to accessing jobs, education and leisure facilities.

Multiple sources of information for the Tees Valley Bus Network, of differing standards, and not all with direct ticket retailing capabilities

75% of Tees Valley residents travel to work by car or van

Inputs

BSIP five-point plan

Capital and revenue investment from Government

Capital investment from bus operators

TVCA, local authority & bus operator staffing resource

Collaboration between TVCA, local authorities and bus

Public and stakeholder consulta-



Transition to zero-emission local

Simpler fares and targeted promotions

Improved customer offer and information provision

New infrastructure to prioritise bus on core corridors

Improved service coverage

Outcomes

Improved service efficiency

Reduction in service variability

Increased user confidence in bus services

Increased accessibility to health and leisure facilities

Increased accessibility to training & education opportunities

Increased accessibility to employment

Customers able to access information for the whole bus network from a single information source

Passenger growth from simplified fares and targeted promotions

Modal shift from car to bus

Increased revenue generation from passenger fares

Improved journey quality

Increased customer satisfaction

Impacts

Increased GVA / narrowing output gap

Increased employment rate
Levelling Up communities

Doduction in carbon

Reduction in carbon

Future growth in revenue for HM Treasury



Annex 4 – Stakeholder support and public engagement

Stakeholder support

The BSIP has been endorsed by the Tees Valley Mayor Ben Houchen and the five local authority leaders.

Given the benefits will impact the whole Tees Valley, the Mayor has received support from the following MPs:

- Peter Gibson MP Darlington
- Jill Mortimer MP Hartlepool
- Jacob Young MP Redcar
- Matt Vickers MP Stockton South

The bid is supported by the Tees Valley Local Enterprise Partnership, whose role is to ensure the voice of business is heard in the development and delivery of the strategies of the Tees Valley Combined Authority.

The bid is also supported by Arriva, Stagecoach and Go North East who represent 95.3% of the market share in the Tees Valley. The other smaller operators have also been engaged during the BSIP development.

Public engagement

The BSIP is underpinned by several engagement exercises, which provide insight into the attitudes, views and perceptions of bus users, non-users and stakeholder organisations. There have been four main areas of research:

- public consultation undertaken during the preparation of the Tees Valley Strategic Transport Plan and Bus Implementation Plan;
- a survey of irregular and non-users of buses commissioned by Let's Go Tees Valley;
- the various tranches of the Transport Focus Bus Passenger Surveys; and
- a more recent public and stakeholder engagement exercise during the production of the BSIP itself in September 2021, to get an up-to-date view from both bus users and non-users.

The **Strategic Transport Plan consultation** asked respondents to indicate the level of priority for each of the Strategic Transport Plan outcomes. The results revealed that to 'Deliver and maintain a frequent, high-quality, reliable and integrated bus network' was the highest priority for the Strategic Transport Plan with 84% of respondents selecting this as either a very high or high priority. In addition, and very relevant for bus was to 'Improve accessibility and the equality of opportunity

for more remote and deprived communities' with 81% of respondents selecting this as either a very high or high priority.

This was supported by a further question that asked respondents which mode of transport they would use if improvements were made to infrastructure and services. The results indicated that usage on buses could increase by 21% with the appropriate investment in infrastructure and services.

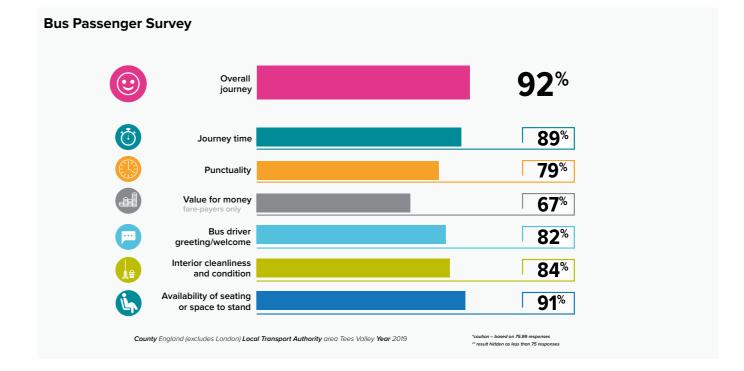
Key findings from the survey of irregular and non-users of buses were:

- Car was the most frequently used method of transport, with 74% travelling by car as a driver at least once a week and 52% travelling by car as a passenger at least once a week. This is broadly consistent with the national statistics presented earlier.
- Having an alternative means of transport was the top reason for not using buses, or not using buses more, with 63% of respondents giving this as a reason.
- 39% do not use a bus because they would have to use more than one to get where they need to go, 33% because buses are too expensive, 32% because they cannot get to the destination they need to by bus and 31% because buses are not frequent enough.
- The top three things that would encourage respondents to use buses, or use buses more, were cheaper fares (48%), more frequent services (43%) and more reliable services (38%).
- The top factors that respondents thought are important in making a good bus service were a bus that turns up on time (67%), fares that are affordable (47%), a frequent service (43%) and buses to destinations they want to travel to (42%).
- 59% of respondents would be willing to make a journey by bus that they currently make by other means if there was a good bus service.

Transport Focus consult almost 50,000 passengers a year to produce the Bus Passenger Survey. This measures passengers' satisfaction with their local bus service for a representative sample of journeys. The latest set of results, disaggregated to a Tees Valley level, were published in March 2020.

Passengers rated their satisfaction of a wide range of aspects including the bus stop, waiting for the bus, on the bus, the outside of the bus, the bus driver as well as their overall satisfaction with that bus journey and value for money.

The Transport Focus research shows that overall satisfaction scores for the bus journey and other aspects in Tees Valley are higher than the national scores across all areas (Figure 11).



However, there are aspects that scored lower, with punctuality and value for money being the two lowest scores.

The most recent **BSIP preparation research**, which provided a relatively even spread of responses across gender and age range, has noted a significant change in attitude. The majority of individual respondents (62.24%) were somewhat or very dissatisfied with the bus services in Tees Valley, with just 14.74% of respondents claiming to be satisfied or very satisfied. This is a significant shift from the last Transport Focus survey carried out before the Coronavirus pandemic.

Of those who were not currently bus users, the most common reasons preventing individual respondents from using the bus more/at all were:

- There are no services available in my area when I need to travel (32.02%)
- I have a car available and prefer to use that (30.51%)
- Buses do not go where I want to go (29.31%)
- Cost/Value for Money (26.28%)

Awareness of the current channels available for information was low, with 61.33% of individual respondents saying they were not aware of the Connect Tees Valley website and 75.68% not aware of the Let's Go Tees Valley website.

When looking at possible improvements, a large number of individual respondents said that more reliable (47.31%) and more direct (44.61%) services, as well as extra services in the morning or later in the evening (42.81%) would encourage them to use the bus more.

More frequent evening and weekend services were highlighted as a priority by most individual respondents (43.47%), closely

followed by more reliable buses (42.55%), real time information tracking (38.60%) and more punctual buses (37.08%).

Overarching Conclusions – there are consistent themes across all four surveys, which respondents say would facilitate greater use of buses in the Tees Valley. These are:



 Reliability and punctuality – buses turning up as expected and on time



 Frequency – provision of services on a more regular basis



Accessibility – services where people need to travel



More extensive evening and weekend services



Fares and/or tickets which provide better value for money

This intelligence has informed the development of the fivepoint plan.

The most recent survey indicates that satisfaction with bus services has dropped significantly. However, it must be recognised that this is a single survey and is not a sustained trend. It is felt that the feedback could be driven by the impact of the Coronavirus pandemic. There will therefore be a need for close monitoring of passenger feedback as the priorities in the BSIP are implemented.

Annex 5 – Governance

In response to the Government requirement, TVCA has published a notice of intent to prepare an Enhanced Partnership Plan and accompanying Enhanced Partnership Scheme, in accordance with section 138F of the Transport Act 2000

It is intended that the Tees Valley will be covered by a single Enhanced Partnership Plan and Scheme. The partnership will cover the Tees Valley area including Darlington Borough, Hartlepool Borough, Middlesbrough, Redcar & Cleveland Borough and Stockton-on Tees Borough.

All operators running bus services in the Tees Valley have been invited to participate in preparation of the Enhanced Partnership Plan and accompanying Scheme(s). The Scheme came into effect on 10 October 2022.

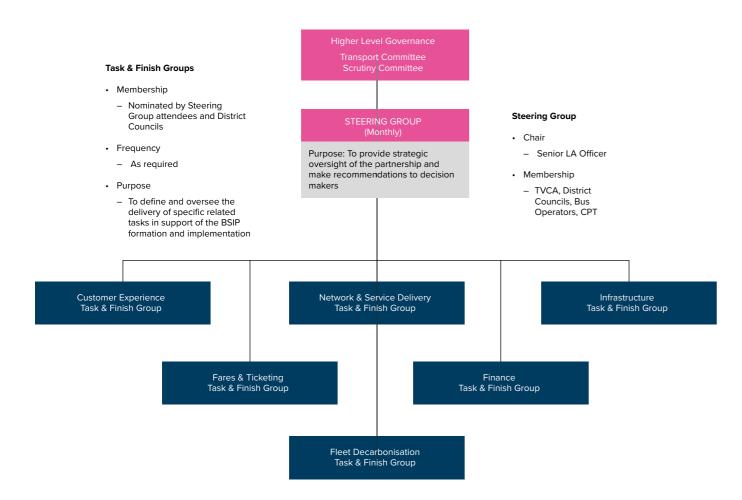
The proposed duration of this initial BSIP is five-years from 2022/23 to 2026/27, after which there will be a need to review and update. The intention is to review progress on a quarterly basis and prepare publicly accessible update reports on a routine basis.

The formal governance arrangements for the BSIP are defined through a recently formed bus partnership steering group. The steering group is supported in its decision making by themed working groups, all of which take forward the more detailed workstreams.

The steering group and working groups have representatives from TVCA, the local authorities, bus operators and the Confederation of Passenger Transport (CPT).

There will be oversight of the BSIP from the TVCA Cabinet, Overview & Scrutiny Committee and Transport Committee. The structure of this governance is illustrated in Figure 16.

The Enhanced Partnership was developed in October 2022 and includes consideration of the formal process for resolution in cases of challenge or mediation within the partnership.



| Figure 16 - Illustration of the TVCA BSIP and EP Governance Structure

Annex 6 – Complementary Funding

Government investment through the Bus Service Improvement Plan will complement other transport investment in the Tees Valley. This is made up of locally generated funding and other Government funding streams.

Locally Generated

Developer Contributions – A package of committed developer contributions for transport improvements has been identified through Section 106 agreements. These developer contributions will deliver improvements that complement this investment package. The level of contribution currently secured but remaining to be spent is £29,578,890. It is expected that the vast majority of this will be spent in the period from April 2022 to March 2027 and potentially further contributions will be secured.

Local authority spend on transport – The local authorities are investing additional locally generated revenue on highways maintenance and other improvements. The projected total is £70,459,320 over the five-year funding period, but this will be subject to annual local authority budget approval.

In addition, there is staff resource within the local authorities and bus operators focussed on activities related to bus travel. These include:

- management of bus passenger information, including coordinating repairs, maintaining timetable frames, updating timetable information and suspension notices;
- general travel advice and marketing including bus travel and travel to work:
- production of bus timetables and mapping information;
- maintenance of websites; and
- maintenance and repair of bus shelters and other passenger infrastructure.

We have estimated that up to ten Full Time Equivalent (FTE) posts are involved in this activity across the TVCA area. A full time Bus Partnership Officer has been included in our resource plan to oversee delivery of the BSIP.

Concessionary bus travel payments – The Local Government Association has estimated that 77.3% of concessionary bus payments are funded through the main Revenue Support Grant for local authorities and 26.7% is funded through locally generated revenue. In the Tees Valley this locally generated payment equated to £4,057,986 in 2021/22. TVCA awaits further government guidance on concessionary bus travel payments.

As we emerge from the Coronavirus pandemic there will be a need to transition back to the position whereby operators are reimbursed for the actual number of concessionary passengers carried. This approach is in accordance with the principle that states operators should be left 'no better and no worse off' as a result of the existence of concessionary travel schemes

Other Government Funding Streams

Transforming Cities Fund (TCF) – TVCA continues to make very good progress on the delivery of the TCF programme and is confident that the funding will be spent by the March 2023 deadline. The programme is delivering the first phase of new infrastructure to prioritise bus on core corridors. The overall delivery confidence assessment for the TCF programme is green/amber. As the programme has matured over the last year and moved into the delivery phase, the delivery confidence assessment has improved.

City Region Sustainable Transport Settlement – The TVCA CRSTS bid sets out why we need to deliver a world-class transport system to underpin our transformative economic growth. It is imperative that we are funded at the upper bound funding allocation as this will enable us to deliver the full programme in the bid at pace. If government don't invest now at the right level, there is a real risk that the growth potential of the region will be constrained and the opportunity to level up the Tees Valley lost.

Zero Emission Bus Regional Areas (ZEBRA) Scheme – the TVCA Expression of Interest for a hydrogen bus trial through the ZEBRA Scheme has been shortlisted to progress to the business case development stage.

Towns Fund – Darlington, Hartlepool, Middlesbrough, Redcar and Thornaby have been awarded capacity funding to enable the local authorities to develop business plans to secure up to £125million from the Towns Fund, which include a focus on transport.

Annex 7 – Headline Indicators and Targets

The timescale for production of the BSIP has been complicated by the ongoing Coronavirus pandemic, which has had an unprecedented impact on travel habits and attitudes.

Some data has not been gathered through the period of the pandemic either because it has been against Government advice to do so (due to social contact or movement restrictions), or the data is so unrepresentative that it would be of little future use. Examples of this include customer satisfaction surveys and traffic flow data.

In addition, the setting of SMART outcomes should be done with an understanding of resource availability, particularly funding.

The outcomes are taken from the logic map included earlier in this BSIP and shown in the adjacent table, with the proposed method of measurement. Each will have a baseline agreed through the Enhanced Partnership and progress will be measured on a six-monthly basis. Formal reporting will be undertaken as an integral part of the BSIP annual review.

Core targets are included in the BSIP overview table further on in the document, as required by the DfT Guidance.

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Annex 8 – Reporting

Monitoring and evaluation of the TVCA BSIP will be critical. As the ongoing impacts of the Coronavirus pandemic are unknown, regular monitoring and reporting of key metrics will enable the partners to understand the impact of interventions and to make any adjustments if required.

Six monthly reports of performance against the targets identified will be published on the TVCA website. The Bus Partnership Steering Group will continue to meet on a monthly basis. Since the initial BSIP, we have appointed a new Bus Partnership Manager to manage the implementation of the BSIP on behalf of the partnership and to co-ordinate monitoring and reporting of progress.

It is important to understand that the BSIP will be a living document. The BSIP will be reviewed regularly, updated as required by the partnership, or in response to feedback from stakeholders. There will be a formal review on an annual basis to ensure that the BSIP remains fit for purpose.







Annex 9 – Overview Table

This section is intended to summarise the key outputs of the BSIP and how it meets requirements set out in the Strategy. The purpose of this section is to give readers, including passengers and the Department for Transport, an overview of the commitments in the BSIP which LTAs and operators will work towards to improve local bus services.

Name of Authority or Authorities:

Tees Valley Combined Authority		
Date of Publication:	30th November 2022	
Date of next annual update:	28th October 2023	
URL of published report:	www.teesvalley-ca.gov.uk/transport	



Targets	2018/19	2019/20	Target for 2024/25	Description of how each will be measured (max 50 words)
Journey time	To be measured by corridor – based on the the corridor Site Assessment Reports (SAR	e nine priority corridors. Baseline Data available in is)	To be confirmed following completion of the Whole Route Improvement Plans and upon confirmation of funding availability	Using Real Time vehicle data along measured sections. Outputs compared with baseline data before improvements have been made
Reliability & punctuality	To be measured by corridor – based on the nine priority corridors. Baseline Data available in the corridor Site Assessment Reports (SARs)		To be confirmed following completion of the Whole Route Improvement Plans and upon confirmation of funding availability	Vehicle mileage operated by service (services operated) and journey time reliability using real time vehicle data. - DfT BUS 0902 & 0903 statistical data set
Passenger numbers	30.292m	27.035m	33.321m (a 10% increase on 2018/19 levels, which is dependent on securing the funding ask set out in the BSIP)	To ensure we have a consistent dataset over time - DfT BUS 0109a - Passenger journeys on local bus services by local authority, England
Average passenger satisfaction	90% (Overall journey) 86% (Journey time) 76% (Punctuality) 71% (Value for Money) 81% (Bus driver) 84% (Interior cleanliness) 88% (Availability of seating/ standing space)	92% (Overall journey) 89% (Journey time) 79% (Punctuality) 67% (Value for Money) 82% (Bus driver) 84% (Interior cleanliness) 91% (Availability of seating/standing space)	To continue to improve against all measured scores	Using the annual Transport Focus Bus Passenger Survey to provide ongoing consistency of data with the baseline

Tees Valley Bus Service Improvement Plan Tees Valley Bus Service Improvement Plan



Delivery Deservery DCID detail religion	Voc/No	Evaluation (may FO words)		
Delivery – Does your BSIP detail policies to:	Yes/No	Explanation (max 50 words)		
Make improvements to bus services and	planning			
More frequent and reliable services				
Review service frequency	Yes	Service frequency and accessibility improvements are included under the Network priority. The aspiration is to improve services to cater for anticipated passenger growth, which will be dependent on funding availability to support the emerging commercial network.		
Increase bus priority measures	Yes	Nine priority corridors have been identified in the Infrastructure priority and are being progressed initially using the TCF allocation, and then through our CRSTS bid to Government.		
Increase demand responsive services	Yes	An integral part of the Network priority is the Tees Flex on-demand bus service. The service provides coverage in more rural areas and links into the commercial network. There is an aspiration to continue and potentially expand the service.		
Consideration of bus rapid transport networks	Yes	The principle of bus rapid transit will be considered on the core corridors where point to point demand exists. This is incorporated within the Network priority.		
Improvements to planning / integration v	with other mode	es		
Integrate services with other transport modes	Yes	Integration across modes is fundamental to delivering a world-class transport system. This will be achieved through a combination of the Infrastructure priority, the Network approach to core corridors and hubs, and the improvements to integrated ticketing and information (Fares and Customer Experience priorities).		
Simplify services	Yes	The network is not overly complex. However, there is a need to communicate service availability more effectively through the Customer Experience priority to ensure customers can make informed choices.		
Review socially necessary services	Yes	This is addressed through the Network priority, with the Tees Flex on-demand service and support for the emerging commercial network.		
Invest in Superbus networks	Yes	This is covered through the identification of the nine core corridors in the Infrastructure priority and the services that operate along them. These corridors will also be the focus of investment for Fleet Decarbonisation.		
Improvements to fares and ticketing				
Lower fares	Yes	Improving and standardising the ticket range through the Fares priority will provide better value for money. We will also roll-out targeted fare promotions to encourage passenger growth.		
Simplify fares	Yes	There is a proposal to standardise and simplify both the ticket range, and the way this is communicated to both users and potential users under the Fares priority.		
Integrate ticketing between operators and transport	Yes	The existing range of multi-operator tickets will be extended to include all operators and services under the Fares priority. This will initially cover bus, but the ambition is for integration with rail ticketing too.		

Make improvements to bus passenger experience	
Higher specification buses	
Yes	Bus operators across the region have already invested heavily in new Euro VI vehicles and the standard of the fleet is generally good. Further investment will be targeted through the ZERBA pilot and additional roll-out of zero emission buses through the Decarbonisation priority.
Yes	All new vehicles will be fully accessible and inclusive, in accordance with current legislation and Public Service Vehicle Accessibility Regulations (PSVAR) requirements. There is also an ambition to Retrofit audio-visual next stop announcements across all buses in the Tees Valley fleet.
Yes	Although safety has not been flagged as a concern by customers in the region, improvements will be delivered through better passenger infrastructure, investment in vehicles and improved punctuality to reduce wait times.
Yes	Ensuring visitors to the region can get access to clear information to help them plan journeys will be incorporated in the Customer Experience priority, whilst simplifying the ticketing offer is included within the Fares priority.
Yes	Significant investment is proposed through the ZEBRA bid and the longer-term Fleet Decarbonisation priority.
Improvements to passenger engagement	
Yes	There is a commitment to develop a passenger charter in advance of the Enhanced Partnership coming into effect in April 2022.
Yes	In the Customer Experience priority, there is an action to develop a Tees Valley transport brand, which will ensure a consistency across all elements of information and communication in both digital and physical forms.
Yes	
Other	
Yes	The bus corridor improvements programme under the Infrastructure priority is fully aligned with our cycling and walking investment programme to provide customers with high quality choice across all modes.
Yes	The Tees Valley Hydrogen Transport Hub provides the opportunity to integrate the Decarbonisation priority with other activity across the Tees Valley. The focus is on piloting a holistic hydrogen transport system in the Tees Valley.
	Yes

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TEES VALLEY MAYOR

Tees Valley Combined Authority

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