

# The economic impact of local bus services

September 2024

FINAL DOCUMENT



#### Important notice

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### **Executive summary**

#### Local bus services in Britain facilitate 10 million journeys a day

Buses are the most used form of public transport. For every journey on the national rail network, more than 2.5 journeys are taken by bus. These journeys create direct economic impacts for passengers and operators, with additional benefits for supply chains and communities. This Report seeks to quantify these impacts.



### 10 million

journeys a day are made by bus



bible temployed in the bus sector

#### Economic activities of those involved in the provision of bus services

It is estimated that **105,500 people** in Britain were directly employed in the provision of bus services in 2022, including drivers, mechanics, schedulers, operations managers, customer service representatives, and those involved in corporate functions such as finance, information technology, human resources, and general management.

Additionally, **almost 53,000 people** were indirectly employed, working in supply chains including vehicle manufacturers, fuel suppliers, maintenance and parts, and technology providers (e.g. real-time information and ticket machines), and those responsible for bus stations, stops, and depots.

Those directly or indirectly involved in the provision of services also spend their wages in local economies, which induces additional local employment. The total net value of direct, indirect, and induced employment, including wages, operating costs, operating profits, and taxes, is estimated at more than £11 billion per year.



STOP

Executive summary

#### Economic and social activities of bus passengers

For many, buses are the best way to access work, education, healthcare, and leisure activities. Compared to not travelling at all, or travelling another way, bus services provide benefits to passengers in the form of lower travel costs and improved connectivity. Using Department for Transport ("DfT") appraisal guidelines, these benefits total **£8.7 billion per year**.

Additionally, there are benefits to bus users in terms of health and wellbeing improvements, arising for example from buses being a more active mode, valued at **£2.8 billion**, benefits associated with highway decongestion and modal transfer valued at **£0.6 billion**, and a further **£3.5 billion** in benefits from people who don't use the bus but value the services buses provide to others as well as valuing the preservation of the option to travel by bus even if they don't do so currently.

These economic impacts total £15.6 billion.

In addition to the quantified benefits noted above, buses also play an important role in social activities, promoting community cohesion and improving wellbeing in deprived areas.



#### Bus passengers' economic and social activities generate



per year



Bus commuters earn

#### **£72** billion

per year and generate additional tax revenue of more than

#### **£15** billion

per year

#### Economic impact of bus passengers interacting with local economies

Bus passengers spend £39.1 billion per year in local economies. On average, bus passengers – travelling for leisure, shopping, and commuting - spend £32 per return journey in shops, cafes, restaurants, and leisure facilities at their destinations. This spending supports economic activity in local and regional centres across Britain. Over 2.2 million commuters rely on buses to get to work, providing businesses in our local economies with access to labour. These commuters earn approximately £72 billion per year and generate tax revenue of more than £15 billion per year.

Without local bus services, some passengers would find alternative ways to access these centres, but other trips would be suppressed, leading to expenditure being undertaken online or not undertaken at all. This could result in High Streets losing **£9.2 billion** per year.

#### Economic value of investing in bus services

Investing in bus services can provide significant economic value. Based on a selection of typical investments to improve bus services, including providing priority over other traffic, higher service frequencies, and lower fares, every £1 of public funding spent on a package of measures could generate £4.55 in economic benefits, with targeted interventions generating over £5 in economic benefits.



## **O1** Introduction

#### This Report

This Report presents analysis exploring the economic impacts of providing and using bus services across Britain. The work was commissioned by the Confederation of Passenger Transport (CPT) and undertaken by KPMG between May and August 2024.

#### Objectives of the study

In 2023, there were 3.7 billion bus journeys in Britain, up from 2.8 billion in 2022. This amounts to more than 10 million journeys per day, helping people get to work, access essential services, and participate in leisure and social activities.

The objective of the study is to understand the range of economic impacts linked to these journeys. This can be viewed through three lenses:

#### Lenses



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LTZ 1304

- Lens 1: The economic activities of those involved in the provision of bus services, including benefits for companies, employees, and their supply chains.
- Lens 2: The economic and social activities of bus passengers, including direct benefits to passengers and benefits to other road users and the wider community.
- Lens 3: The economic impact of bus passengers interacting with local economies, including passenger spending on goods and services on the High Street.

Exploring these impacts enables an understanding of how buses create different types of economic value, deliver environmental and social benefits, and unlock wider activities.



#### Structure of the Report

Following this short introduction, the remainder of the Report is structured as follows:





- Section 2 provides an overview of the approach and analytical framework. It describes how each of the three lenses has been assessed.
- Section 3 sets out the estimated economic impact of the bus sector, including geographical splits, benefits to rural areas, and social impacts on wellbeing and health.
- Section 4 considers the potential impact of additional investment in the bus sector.

The Report also includes three appendices. The first offers a more detailed geographical breakdown of the findings by nation and region, the second provides details of the analytical assumptions and evidence, and the third provides the scope of services for this Report.

## **O2** Analytical framework



#### 02. Analytical framework

#### Benefits of local bus services

Good local bus services are vital to the functioning of communities across Britain. Buses have several advantages over other forms of transport in that they:



Given these advantages, buses provide a cost-effective, efficient, and clean transport service for many people in cities, towns, and rural locations.

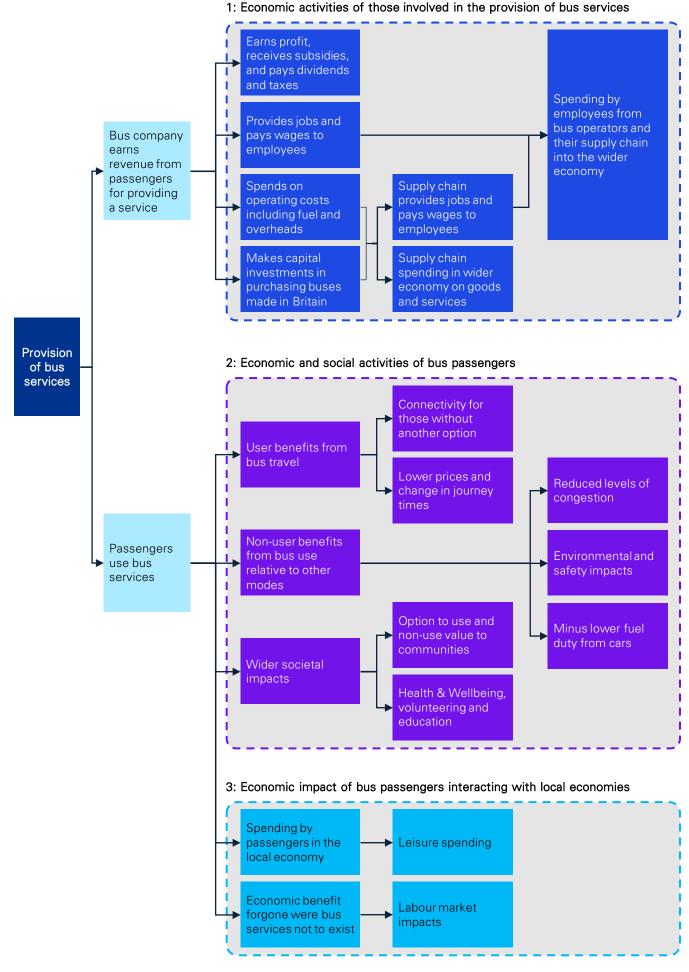
#### Analytical framework

We have structured our analysis to cover different areas of economic activity through the three lenses identified above. These are shown in **Figure 1** (next page) and described in the following text.

It is important to note that there are some overlaps between each lens, meaning that it is not straightforward to provide a single estimate of the total economic value of local bus services. Instead, the three-lens approach provides different perspectives on the contribution local bus services make to local communities.



#### Figure 1: Analytical framework consisting of three lenses



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02. Analytical framework

#### Economic activities of those involved in the provision of bus services

The first lens focuses on the economic activities of those involved in the provision of bus services. This includes:

#### Direct impacts comprised of:

- The creation of value from the returns to business investment assessed through company profits (and associated taxes), minus subsidies received from the government.
- Direct employment generated by these businesses and the wages paid to employees.
- Direct operating costs incurred, including fuel, administrative overheads, and maintenance.
- Capital investment focused on purchasing buses manufactured in Britain.

#### Indirect impacts comprised of:

- The spending of the supply chain into the wider economy on goods and services used as inputs for products supplied to the bus sector.
- The spending of bus manufacturers in the wider economy on goods and services used to manufacture buses.

#### Induced impacts comprised of:

• Spending by employees from companies operating buses and their associated supply chains into the wider economy.

In assessing these impacts, key source data includes the number of employees in the bus sector across different geographies, gathered from the Business Register and Employment Survey ("BRES") dataset collected by the Office for National Statistics ("ONS").<sup>(1)</sup> When this data is combined with average wages in the bus sector, sourced from the Annual Survey of Hours and Earnings ("ASHE"), also collected by the ONS, it enables the assessment of direct employment impacts. Our estimate of operating costs uses a breakdown of bus operating costs presented by CPT.<sup>(2)</sup>

To subsequently derive the indirect and induced impacts, economic multipliers were used, sourced from the relevant Input-Output tables, with the Land Transport (excluding rail) sector segmentation being applied. The Input-Output tables are prepared by the Office for National Statistics.<sup>(3)</sup>



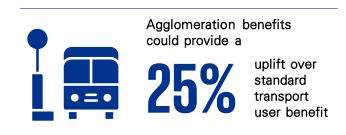
#### Economic and social activities of bus passengers

The provision of bus services brings benefits to users, non-users, and communities across Britain. Through this lens, the impact can be assessed as follows:

- The benefits of bus travel accruing to passengers, including better economic connectivity, social accessibility, and affordability relative to other transport modes.
- The benefits to other road users from the reduction of private vehicles, bringing reduced highway congestion and improving environmental outcomes—air quality, greenhouse gases, and noise—but generating less tax revenue from fuel duty due to fewer car journeys.
- The value that accrues to people and communities from having bus services available as a travel option, even if not used, through an estimated 'option and non-use value'.
- The wider societal impact, which includes health and wellbeing benefits of using bus services, as well as education and volunteering benefits.

The framework for assessing user and non-user benefits broadly follows the approach outlined in the DfT's Transport Analysis Guidance ("TAG").<sup>(4)</sup> This approach converts the number of bus journeys undertaken into monetary benefits by using a set of appraisal values for a range of benefits, derived from economic literature, and following the approach outlined in TAG.

By improving connectivity, bus services enable businesses to derive productivity benefits from being in closer proximity to other individuals and firms. These agglomeration economies (benefits derived from the clustering of economic activity) arise from improved labour market interactions, knowledge spillovers, and linkages between suppliers. These wider economic impacts have not been quantified in this analysis, given the challenges associated with assessing how the density of our urban areas would change were the bus network to be removed. However, they are expected to be significant, with agglomeration benefits found to represent up to a 25% uplift over standard transport user benefits.<sup>(6)</sup>



Option and non-use values are defined as the value placed by the community on the availability of a service, even if they choose not to use it. This can serve as a fallback plan in case things go wrong or be perceived as a benefit for the wider population, including friends and family who may be more able to visit them. In assessing the scale of these impacts, the values outlined in TAG per household are used.

In calculating the wider societal impacts of buses, a broader range of evidence has been compiled, reflecting the innovative nature of this appraisal. This draws on the approach adopted in a KPMG report for Greener Journeys (2016).<sup>(6)</sup> This enables an improved understanding of the social value created by enabling people to access better education and engage in volunteering to support local communities.



02. Analytical framework

#### Economic impact from bus passengers interacting with local economies

Buses take passengers to leisure, shopping, and employment destinations, where they interact with the local economy by purchasing goods and services. To understand the scale of this spending, we have combined passenger numbers and journey purpose estimates with data on the average spend per shopping, leisure, and commuting trip from a range of sources.<sup>(7)</sup>

If bus services were not provided, some passengers would seek alternative forms of transport to make their journey, while others would not travel at all. Using evidence from the DfT on the likelihood that passengers would not make the trip if the bus service were unavailable, we have estimated the proportion of spending attributed to journeys no longer made. While this expenditure may be diverted to other uses, such as online retail, it is far less likely to be spent on the High Street if the bus were not available.

Bus services enhance connectivity, enabling people to access a wider range of employment opportunities than might otherwise be the case. If the bus service were removed, those with limited alternative options, particularly those without a car, would have reduced access to employment opportunities. They might be forced to take a lower-paid job (implying a lower productivity role) or no longer enter the labour force.



## **03** Quantification of impacts

Using the analytical framework presented in **Section 2**, we have quantified the economic impact through each lens for different geographical areas. To support this assessment, we also present case studies to illustrate specific impacts.

#### Economic impact of local bus services in Britain

Figure 2 shows the economic impact of bus services across Britain, covering the economic activities of those involved in the provision of bus services, the economic and social activities of bus passengers, and the economic impact from bus passengers interacting with local economies.

Figure 2: Economic impact of local bus services in Britain

-			
01	Economic activities those involved in t provision of bus se	he	02
»»	Taxes, wages and industry profit and investment into supply chain	£5.5bn	Ģ
ວ	Spend by supply chain	£2.6bn	Ģ
শ	Spending by employees in operations and supply chain	£3.2bn	æ
			Ģ
	Total	£11.3bn	

<b>02</b> ac	<b>02</b> Economic and social activities of bus passengers							
	Increased connectivity and more affordable travel	£8.7bn						
	Impacts on other road users	£0.6bn						
	Option of having buses as a mode	£3.5bn						
	Wider societal impacts	£2.8bn						
	Total	£15.6bn						

<b>03</b> Economic impact of bus passengers interacting with local economies							
	Leisure spend	£12.9bn					
∎.e	Commuter spend	£9.0bn					
冊	Shopping spend	£17.3bn					
	Total	£39.1bn*					

Please note that all values are rounded to the nearest £0.1 billion

 $^{\ast}$  Of which £9.2 bn is expected to be additional



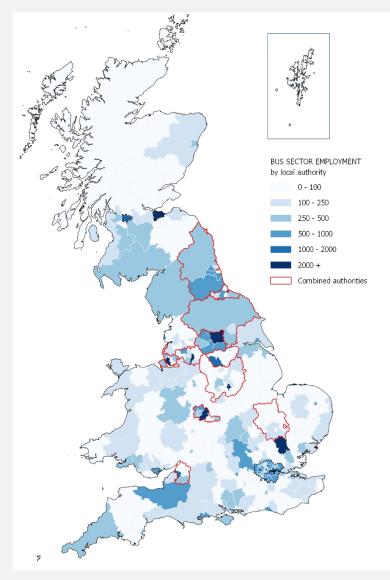
#### Economic activities of those involved in the provision of bus services

In 2022, 105,500 people in Britain<sup>(8)</sup> were directly employed in the provision of bus services. This includes drivers, mechanics, schedulers, operations managers, customer service representatives, and those involved in corporate functions such as finance, information technology, human resources, and general management, generating almost £3.1 billion in wages.

Additionally, almost 53,000 people were indirectly employed in supply chains, including vehicle manufacturers, fuel suppliers, maintenance and parts providers, technology providers (e.g. real-time information and ticket machines), and those responsible for bus stations, stops, and depots. This sector spent £3.4 billion on operating costs within the supply chain. The bus sector is estimated to spend £180 million per year on capital investment in UK-manufactured buses. The total net direct impact is assessed to be £5.5 billion.

While the economic impact of the direct employment and supply chain expenditure is significant, it also delivers indirect impacts through the spending of the supply chain on the inputs required to deliver the necessary goods and services. This impact is estimated to be worth £2.6 billion per year across Britain.

The geographic distribution of spending across Britain largely follows the distribution of employees and businesses. This is shown in **Figure 3**.



#### Figure 3: Bus sector employment by Local Authority area



The highest concentration of bus sector employees is in urban areas, with London, Birmingham, Manchester, Liverpool, Nottingham, Edinburgh and Leeds all having more than 2,000 bus sector employees.

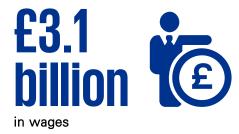
Typically bus sector employees (and therefore benefits from companies, employees, and the supply chain) are strongly correlated with population; however, there are exceptions to this which demonstrate the importance of the bus market in serving specific destinations and markets, particularly where limited transport alternatives exist.

#### The bus sector invests



UK-manufactured buses

The bus sector generates almost





3. Quantification of impacts



#### **Case Study 1** The role of buses in serving an

international airport

East Midlands Airport served 3.9 million passengers in 2023<sup>(1)</sup>, catering to individuals travelling for holidays, business trips, and visits to friends and relatives internationally.

The Airport is not served directly by rail, with the nearest train station being East Midlands Parkway, which is 5 miles away. Bus services, whether they are serving the airport from the train station or from nearby cities such as Nottingham, Derby, and Leicester, are key in enabling both passengers and staff to access the airport.

Skylink bus services enable access to Nottingham, Leicester, Derby, Loughborough, Long Eaton, Ilkeston, Stapleford, Coalville, Shepshed, Ashby-dela-Zouch, Swadlincote and Burton-on-Trent as well as East Midlands Parkway rail station, up to every 20 minutes, 24 hours a day, seven days a week<sup>(2)</sup>.

#### Sources:

- East Midlands Airport (2024), East Midlands Airport Facts & Figures eastmidlandsairportguide.com)
- East Midlands Airport (2024), Travelling to East Midlands Airport by Bus East Midlands Airport

Those directly or indirectly involved in the provision of services also spend their wages in local economies, which induces additional local employment generating a further £3.2 billion in economic impacts.

The total net value of direct, indirect, and induced employment, including wages, operating costs, operating profits, and taxes, is estimated at more than £11 billion per year.

#### Economic and social activities of bus passengers

#### Connectivity and affordability

For many, buses are the best way to access work, education, healthcare, and leisure activities. Compared to not travelling at all or using other modes of transport, bus services offer benefits to passengers in the form of lower travel costs and improved connectivity. The scale of these direct transport user benefits is significant, amounting to £8.7 billion per year across Britain, covering both affordability and connectivity advantages.

Connectivity and affordability benefits amount to



Connectivity benefits are measured in terms of the journey time differential between buses and other alternative modes of transport, as well as the reliability and quality of the service offered. This varies greatly across the country; in some areas - particularly rural locations - buses are the sole alternative to car travel, providing lifeline services, whereas in other areas, buses offer an affordable service compared to alternative modes.



Bus operators collaborating with employers

In recognition of their role in providing an essential service in accessing employment opportunities, many bus operators have collaborated with employers in outlining the benefits of travelling by bus and providing incentives to travel, some examples<sup>(1)</sup> include:

- Trentbarton and Kinchbus have worked with businesses at East Midlands Gateway, in offering travel to work roadshows, talking to employees about the benefits of bus travel and designing individualised travel plans which highlight what buses fit within shift times.
- Stagecoach has collaborated with Amazon to provide staff transport to remote fulfilment hubs that would otherwise require a car to access, giving wider access to employment for nondrivers and those without access to a car.
- Arriva UK Bus has worked with John Lewis Partnership to offer staff discounts on bus travel, with benefits that include free child travel at weekends and Bank Holidays.
- First Bus offers a Commuter Travel Club as an employee benefits scheme, offering discounted bus travel to employees of companies who are First Bus travel partners. If an employer has joined the scheme, their workers can typically benefit from a 10% to 15% discount on purchase (local variations apply).
- Oxford Bus has partnered with Belmond Hotels to obtain funding to restore a bus service to Great Milton village for the first time since 2016, while also allowing the partner to address their staff recruitment and retention concerns. The service has carried 15,000 passengers per month.
- Nottingham City Transport ("NCT") has arrangements with employers on the NG2 business park for discounted and in some cases complimentary bus travel to and from work. This has encouraged modal shift in a part of the city where car parking is restricted.



#### Quantification of impacts

Bus as the only public transport option

#### **Case Study 2**

Rushden in North Northamptonshire has a population of 32,000<sup>(1)</sup> and does not have a railway station. Therefore buses are the only scheduled, accessible, and reliable form of public transport, ensuring the local population can access services and amenities.

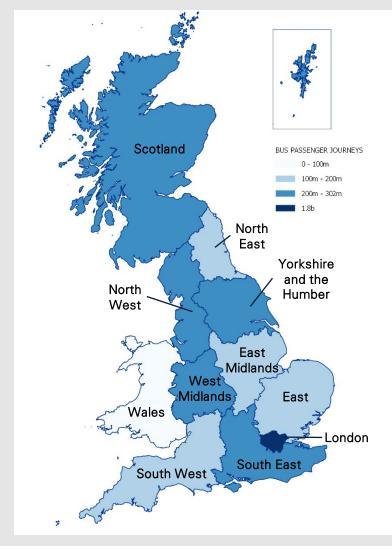
Rushden is classified within the 20% most deprived areas in Britain, facing challenges in areas like income, employment, education, and health. As at 2019, 24% of the population lived in income-deprived households (compared to 13% nationally) and 10% lived in overcrowded housing (compared to 2% nationally)<sup>(2)</sup>.

Despite being within the East Midlands metropolitan area, the closest railway station is Wellingborough, located approximately 4 miles from the town centre. Buses remain the only credible way to access major employment centres such as Northampton within an hour of travel time. There are regular services from Rushden to Northampton and other metropolitan areas running every 20-30 minutes<sup>(3)</sup>.

#### Sources:

- northamptonshire)

#### Figure 4: Distribution of bus journeys by region



The distribution of bus user benefits across the country follows the distribution of passengers (see Figure 4), with London generating the highest level of benefits, followed by South East England, and Scotland.

#### Impacts on other road users

The impacts on other road users reflect the positive effects associated with people travelling by bus instead of by car. These benefits include reduced highway congestion, improved safety, and decreased atmospheric and greenhouse gas pollutants. However, these positive impacts are partially offset by the reduction in indirect tax receipts resulting from lower fuel duty as people switch from cars to buses.

Buses provide an alternative to private transport. The more they are used instead of cars, the greater the benefit in terms of reducing congestion. This is particularly important in densely populated urban areas where space is limited. Additionally, fewer cars can reduce the need for investment in new roads and the maintenance of existing ones due to wear and tear.

Buses are one of the safest modes of transport in the UK. Road casualty data reported by the DfT for 2022 indicate that bus travel can be up to twice as safe as car travel.<sup>(9)</sup>

Public Health England highlights that human-made air pollution is responsible for between 28,000 and 36,000 deaths every year in the UK.<sup>(10)</sup> With lower emissions per passenger kilometre than cars, buses support cleaner air in our towns and cities, and make a significant contribution to lowering this risk.

Buses can play a role in the transition to Net Zero. Research shows that, in the UK, a petrol car journey emits between 2.6 and 3.5 times more CO<sub>2</sub>e per passenger kilometre than the equivalent bus journey.(11)

The total benefits for other road users amount to £565 million per year, the majority of which are congestion and safety benefits.

A petrol car journey emits between

2.6 and 3.5 times more CO<sub>2</sub>e per passenger than the equivalent bus journey





03. Quantification of impacts

#### **Case Study 3**

Buses at the centre of Net Zero

A £150<sup>(1)</sup> million project to create the UK's first allelectric bus city by 2025 has taken a major step forward with 50 new greener buses on the streets of Coventry.

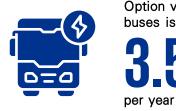
Transport for West Midlands ("TfWM") has been working with Coventry City Council on a scheme that has secured £50 million funding from the DfT<sup>(3)</sup> to develop charging infrastructure and to top up investment being made by bus operators in upgrading their fleets with electric vehicles.

230 electric buses will replace the existing diesel fleet by 2025, which is expected to reduce carbon emissions by 12,000 tonnes per year, equivalent to taking 5,000 cars off the roads. This project is also projected to improve air quality in Coventry by reducing nitrogen dioxide levels by 12% and creating 1,000 new jobs in the electric bus industry<sup>(1)</sup>.

The Coventry all-electric bus project is a landmark initiative with far-reaching implications, as it demonstrates the feasibility and benefits of transitioning to electric buses, paving the way for other cities to follow suit. The project also contributes to the UK's Net-Zero goals and improves air quality for residents<sup>(3)</sup>.

#### Sources:

- West Midlands Combined Authority (Coventry on the Road to becoming UK's first all-electric bus city)
- (2) Coventry City Council (Coventry becoming first all-electric bus city)
- (3) DfT (Coventry and Oxford set to be UK's first all-electric bus cities)



Option value of buses is valued at **3.5 billion** 

#### Option of having a bus service available

The provision of bus services brings additional benefits in the sense of option values, representing a fall-back option for those who usually do not need buses as well as when this may be the main mode of transport for friends and family.

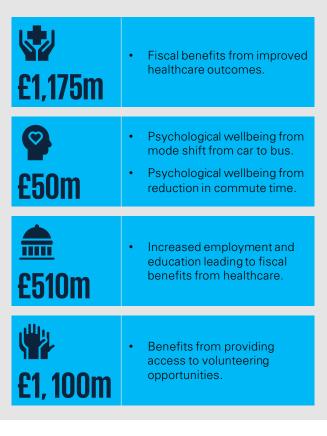
We have estimated, using TAG appraisal guidance, that this option value brings total benefits of  $\pm 3.5$  billion per year.

#### Wider societal impacts

Buses provide benefits to the economy and society beyond those typically considered in government appraisals, highlighting the role buses play in helping people access education and connect with friends and family. **Figure 5** illustrates the areas where we have available evidence to quantify these impacts.

When combined the total wider societal benefits amount to £2.8 billion per year, the majority of which are active travel and volunteering benefits.

#### Figure 5: Wider societal benefits







There are further wider societal benefits to bus travel which our analytical framework is unable to incorporate. The scope of traditional appraisal methods does not take account of all of the wider social impacts arising from participation in employment, education, health and community-based activities.

With 17% of people in the UK at risk of poverty<sup>(12)</sup> and almost 1 in 4 households in Britain without access to a car<sup>(13)</sup>, local bus services can help households to participate in society. Analysis conducted by KPMG and ITS Leeds<sup>(14)</sup> has shown that after allowing for other factors that influence deprivation, a 10% improvement in local bus service connectivity in town and city neighbourhoods is associated with a 3.6% reduction in deprivation as measured by the Index of Multiple Deprivation ("IMD"). This in turn would lead to economic and social impacts shown in **Table 1** below, including improvements in skills, health outcomes, and income deprivation.

		Most deprived neighbourhoods	Least deprived neighbourhoods	Mean over all neighbourhoods
	Total Population	2,246,950	1,983,367	2,276,823
	Employment deprivation	-2.7%	-1.3%	-2.7%
Change	Income deprivation	-2.8%	-1.6%	-2.9%
e Ch	Post 16 education	+0.7%	+0.3%	+0.7%
Percentage	Entry to higher education	+0.1%	+0.1%	+0.1%
Perce	Adultskills	+1.4%	+0.7%	+1.2%
	Years of potential life lost	-0.9%	-0.3%	-0.7%
0	Reduction in unemployment (jobs)	9,909	571	4,240
change	Reduction in income deprived (number of individuals)	22,647	1,079	9,404
Absolute change	Reduction in those with no adult skills (number of individuals)	7,313	1,245	4,247
∢	Years of potential life lost (years)	-2,596	-471	-1,641

Source: KPMG (2016), A Study of the value of local bus services to society: A report for Greener Journeys, August 2016 Notes:

Employment deprivation measures the proportion of the working-age population in an area involuntarily excluded from the labour market.

Income deprivation measures the proportion of the population experiencing deprivation relating to low income, including both those people that are out-of-work, and those that are in work but have low earnings.

Post 16 education indicator measures the proportion of young people not staying on in school or non-advanced education above age 16.

• Entry to higher education indicator measures the proportion of young people aged under 21 not entering higher education.

 Adult skills indicator is the proportion of working-age adults with no or low qualifications combined with the proportion of the working age population who cannot speak English or cannot speak English 'well'.

• Years of potential life lost, defined as death before the age of 75 from any cause.



#### 03. Quantification of impacts

#### Economic impact from bus passengers interacting with local economies

We have assessed the benefits generated by users spending money in the economy while making journeys on buses, as well as the impact buses have on the job market. These benefits have been categorised by journey purpose—leisure, shopping, and commuting.

Bus passengers travelling for shopping spend £17.3 billion annually in their local economies, including on high streets and in shopping centres. Passengers travelling for leisure spend £12.9 billion on dining out and visiting local leisure facilities, while commuters spend £9.0 billion on lunch and other goods and services. This represents approximately 10% of 'in-store' spending<sup>(15)</sup>.

A proportion of these trips would not occur without the availability of bus services. For some, buses are their only means of accessing essential services. It is estimated that £9.2 billion of the spending by shoppers, commuters, and leisure travellers would not occur within the local economy if bus services were unavailable. While this money might be spent elsewhere in the economy—such as on online retail, which now accounts for 27% of retail spending compared to around 10% a decade ago<sup>(16)</sup>—it may not benefit the local economy or high streets.

Over 2.2 million commuters rely on buses to get to work, contributing over £72 billion in Gross Value Added ("GVA") from their wages. While many of these workers might use other transport methods to reach their place of work, this is not an option for everyone, and some may have to take less productive, lower-wage jobs if bus services were unavailable.<sup>(17)</sup>.

Shopping spend

£17.3 billion

Leisure spend

Commuters spend

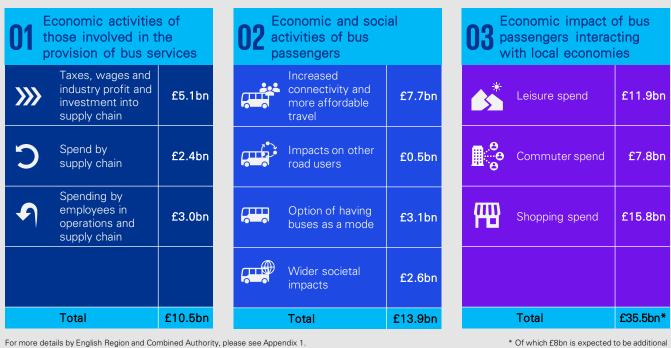
£9.0 billion

£12.9 billion



#### England

Figure 6	6: Ec	conomic	impact	of	local	bus	services	in	England
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For more details by English Region and Combined Authority, please see Appendix 1.

Figure 6 shows the economic impact in England through our three lenses, which reflects 80-85% of the total economic benefit across Britain.

There are approximately 91,000 people employed across the sector in England<sup>(18)</sup>, offering opportunities for employment and to develop skills, with £5.1 billion of value from taxes, wages, and industry profit. There are also additional benefits from the provision of bus services from the spend from the supply chain (£2.4 billion) and spending by employees in operations and supply chain (£3 billion).

Buses play a key role in offering affordable transport, where alternatives may not be available. These benefits, from passenger usage, are estimated to be £13.9 billion. This includes societal, wellbeing, and environmental impacts of having these services.

The economic impact of passengers interacting with the local economies is estimated to be £35.5 billion, with tourists using buses to get to town and city centres for shopping, commuting and leisure purposes. Commuters in England contribute to £59 billion in Gross Value Added ("GVA") from their wages.







**Case Study 4** First Bus promoting workforce opportunities

First Bus<sup>(1)</sup> has implemented a number of initiatives to promote social mobility, enabling people to acquire the required skills and training to enter the bus workforce:

- Route to Success: a free training programme for people with no bus driving experience which equips them with the skills to become professional drivers. The programme is delivered by training provider Realise in partnership with Combined Authorities in West Yorkshire & South Yorkshire. Over a 12-month period, the programme delivered 77 candidates through to operator interview.
- Lifelong Learning Initiative: a scheme in partnership with Unite, which is in its 23rd year and is the longest-running UK union/employer learning partnership. The scheme offers both vocational and non-vocational courses, is open to everyone, so that any worker, regardless of their position or seniority, can take part. To date, the scheme has helped employees 40,000 times.
- Apprenticeships: a programme growing vital engineering skills and providing social mobility opportunities. First Bus partnered with Reaseheath College in Cheshire to set up the UK's first bus and coach engineering academy for training apprentices on zero-emission vehicles.

Sources: (1) First Bus (2024), Lets Inspire the Nation to Use the Bus



#### **Scotland**

<b>[] 1</b> t	conomic activities hose involved in t provision of bus se	he	<b>02</b> a	conomic and soc ctivities of bus assengers	ial
<b>&gt;&gt;&gt;</b>	Taxes, wages and industry profit and investment into supply chain	£300m		Increased connectivity and more affordable travel	£815m
C	Spend by supply chain	£75m	<u></u>	Impacts on other road users	£55m
1	Spending by employees in operations and supply chain	£100m	<b></b>	Option of having buses as a mode	£285m
				Wider societal impacts	£230m
	Total	£475m		Total	£1,385m

Figure 7: Economic impact of local bus services in Scotland



\* Of which £570m is expected to be additional

Detailed results are available in Appendix 1.

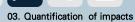
**Figure 7** shows the economic impact in Scotland through our three lenses. Approximately 7,000 people are employed across the sector<sup>(19)</sup>, driving £300 million of value from taxes, wages, and industry profit. There are also additional benefits from the provision of bus services from the spend from the supply chain (£75 million) and spending by employees in operations and supply chain (£100 million).

Using buses in Scotland brings significant benefits, estimated at £1,385 million annually. This includes improved access to jobs, education, and essential services for the 301 million passengers who use buses each year, generating £815 million in benefits. Increased bus usage also contributes £230 million to the economy through reduced healthcare costs, improved air quality, and increased social inclusion. Additionally, reduced car use due to bus travel leads to £55 million in benefits from less traffic congestion and lower carbon emissions. Finally, the option to use buses when needed, or for friends and family, is valued at £285 million.

Bus passengers in Scotland contribute significantly to local economies through their spending. Leisure passengers spend a total of £775 million, while commuting passengers spend £1,070 million and shoppers spend £1,115 million. Of this spending, £570 million is expected to be additional expenditure in Scottish high streets which wouldn't have happened were it not for the availability of a bus service. Commuters in Scotland contribute over £11,500 million in Gross Value Added ("GVA") from their wages into the local economy.

Approximately **7,000** people are employed across the sector in Scotland





#### Case Study 5 Buses supporting social inclusion

Lothian, the UK's largest municipal bus company, has been operating in Edinburgh for over 100 years. It is a prime example of how bus operators can actively promote social inclusion and equality, benefiting the wider community.

#### Workforce Inclusion:

 Lothian employs over 2,500 people and implements policies to create a supportive work environment. OTEL

- It has a dedicated team of Wellbeing Volunteers providing additional support for employees facing difficulties.
- It has put in place people policies to address diverse needs, including menopause, gender transition, active reservists, and flexible working.

#### Community Engagement:

- Lothian hosts social activities like the annual Golf Day and the Doors Open Day, which welcomed 7,000 visitors in 2023.
- Its accessibility and inclusion function focuses on improving accessibility across services and promoting independent travel.
- It provides one-to-one supported journeys to individuals seeking reassurance or who may have specific access needs when riding the bus.

#### Building Relationships and promoting accessible transport:

- Lothian builds relationships with local communities through its corporate and social responsibility agenda.
- It hosts travel clinics, forums, and community events, providing information, app training, and customer support.
- It participates in a quarterly Bus Accessibility Forum addressing accessibility concerns.

#### Sources:

(1) Lothian Business Plan 2024

Wester Hailes 33

Lothian

SAIS VTE



Economic impact of bus passengers interacting with local economies

#### Wales

<b>01</b> tl	conomic activities hose involved in t provision of bus se	he	<b>02</b> ª	conomic and soc ctivities of bus assengers	ial	(
<b>&gt;&gt;&gt;</b>	Taxes, wages and industry profit and investment into supply chain	£105m		Increased connectivity and more affordable travel	£190m	
ว	Spend by supply chain	£90m		Impacts on other road users	£15m	
4	Spending by employees in operations and supply chain	£110m		Option of having buses as a mode	£155m	
				Wider societal impacts	£45m	
	Total	£305m		Total	£400m	

Figure 8: Economic impact of local bus services in Wales

Leisure spend £245m £135m Commuter spend £135m Comping spend £330m Local £705m\*

\* Of which £165m is expected to be additional

Detailed results are available in Appendix 1.

**Figure 8** shows the economic impact in Wales through our three lenses. Approximately 3,500 people are employed across the sector<sup>(20)</sup>, driving £105 million of value from taxes, wages, and industry profit. There are also additional benefits from the provision of bus services from the spend from the supply chain (£90 million) and spending by employees in operations and supply chain (£110 million).

Using buses in Wales brings significant benefits, estimated at £400 million annually. This includes improved access to jobs, education, and essential services for those who use the bus, generating £190 million in benefits. Increased bus usage also contributes £45 million to the economy through reduced healthcare costs, improved air quality, and increased social inclusion. Additionally, reduced car use due to bus travel leads to £15 million in benefits from less traffic congestion and lower carbon emissions. Finally, the option to use buses when needed, or for friends and family, is valued at £155 million.

Bus passengers in Wales contribute significantly to local economies through their spending. Leisure passengers spend a total of £245 million, while commuting passengers spend £135 million and shoppers spend £330 million. Of this spending, £165 million is expected to be additional expenditure in Welsh high streets which wouldn't have happened were it not for the availability of a bus service. Commuters in Wales contribute almost £1,500 million in Gross Value Added ("GVA") from their wages.

Approximately

**3,500** people are employed across the sector in Wales



23 Use of this Report is limited – see Notice on page 2



#### **Case Study 6** Rural Wales, Demand Responsive Transport

A third of people in Wales live in rural areas<sup>(1)</sup>, with the local geography making transport services difficult to operate commercially in some areas. Demand Responsive Transport ("DRT") services, where buses alter their routes according to demand and don't operate specific timetables, is therefore especially important in ensuring accessibility to areas in Wales.

Fflecsi<sup>(2)</sup> is a brand applied to a number of different DRT schemes across Wales, supported by Transport for Wales and the local authorities in which each scheme operates. It stops where people request to be picked up and dropped off within a certain area, with requests made by app and phone, and technology used to plan routes in advance and adjust in real time based on the journeys people wish to make.

There are 11 Fflecsi services across Wales in collaboration with bus operators and local authorities delivering approximately 25,000 journeys every month. In places such as Ruthin (population 5,461), Fflecsi has provided access to a bus service for the first time, and the service has been expanded to include new villages and rural areas.

Sources:

- (1) This was as of the 2011 Census. The same analysis has not been run for the 2021 Census. Office for National Statistics, 2011 Census Analysis – Comparing Rural and Urban Areas of England and Wales, November 2013, p9.
- (2) Transport Wales (2024), fflecsi Demand Responsive Transport



#### Benefits of rural bus services

Across Britain, we estimate that more than 680 million journeys by bus begin within areas classified as rural<sup>(21)</sup>. These areas are likely to have limited alternative forms of transport, particularly for those without a car, for whom the bus network provides a lifeline service.

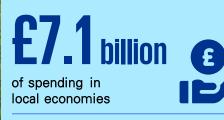
These trips – and the associated benefits – are disproportionately split across the country, with some regions, for example the South West, Wales and the East, having a proportionately higher rural population and therefore greater reliance on bus services than other regions.

**Figure 9** (right) summarises how the proportion of rural trips are spread across the country, illustrating those regions with high levels of rural travel and those regions with low levels.

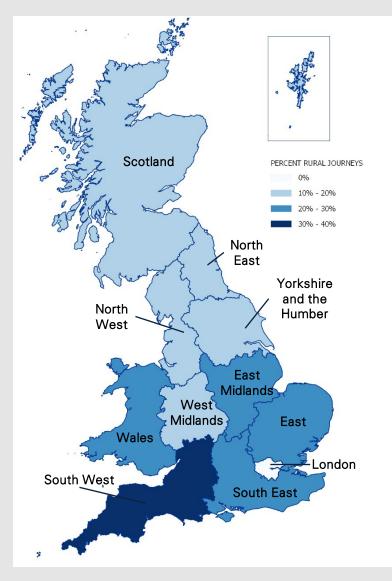
These trips which begin in rural locations generate benefits to passengers, other road users, and wider community, and also generate benefits from passengers interacting with local economies. The benefits to rural passengers from increased connectivity and more affordable travel amount to £1.6 billion, with a further £0.1 billion in positive impacts on other road users from decongestion and environmental benefits. The option of having a bus service available in rural areas generates a benefit of £0.6 billion. Finally, the wider societal benefits attributed to rural bus passengers from providing access for volunteers, improvements to health and wellbeing, and the fiscal impacts from access to healthcare and education, amount to £0.5 billion.

Those trips originating in rural areas also generate benefits for the local economies served by those trips. This includes an estimated expenditure of £3.2 billion in retail outlets, £2.3 billion worth of spend on leisure and an additional £1.6 billion of spending by those commuting on goods and services. This totals £7.1 billion of spending in local economies from those originating their trips in rural areas.

#### Bus trips originating in rural areas generate









## **Unlocking further economic and social value from investment**

Investing in bus services can provide significant economic and social value.

Investment in the sector combines spending by private operators, as well as interventions by national and local government.

This support is provided through a combination of revenue and capital investment, including:

- National investment in programmes such as the Bus Service Operators Grant ("BSOG"), Network Support Grant ("NSG"), Bus Service Improvement Plans ("BSIP"), Bus Partnership Fund, and national concessionary travel schemes.
- Local investment in supported services for non-commercial routes, local concessionary fare schemes in England, as well as investment in bus priority measures and other infrastructure, including stops and stations.

Government interventions should align with policy objectives and seek to maximise value for money. This needs to reflect that there are different types of markets across the country, and policies will unlock differing levels of benefit.

In general, urban markets are likely to benefit more from policies which reduce congestion and improve reliability for users. Rural markets are more likely to benefit from interventions which improve the number of scheduled services.

Using DfT-style appraisal, analysis shows a range of Benefit Cost Ratios ("BCRs") for investments, as set out in **Table 2**. Capital BCRs tend to be higher than revenue BCRs in the bus sector.

Table 2: Benefit-cost ratios ("BCRs") for capital and revenue expenditure initiative BCR<sup>(22)</sup>

Initiative		BCR
Revenue	Supported Services	2.5
€®∰	Bus Service Operators' Grant	3.7
	Concessionary travel	3.8
Capital	Bus priority	5.0
	Interchange/ Mobility hub	6.8



04. Unlocking further economic and social value from investment



#### A package of investments which is

**70%** & **30%** capital



revenue

could be expected to deliver economic benefits equal to



for each £1 invested

Individual BCRs are helpful to assess the value of a particular intervention but a mixed package of investment better represents government investment in the sector. A package of investments which is 70% capital and 30% revenue, could be expected to

deliver economic benefits equal to £4.55 for each £1 invested.<sup>(23)</sup> The breakdown of these benefits is set out in Table 3.

#### Table 3 Cost-benefit analysis of package of investments

Total	Value
User benefit	
From fare change	£0.10
From service change	£1.90
Non-user benefit	
Decongestion, Safety, Local Air Quality, Noise, Greenhouse Gases	£0.35
Reduced fuel tax revenue	-£0.11
Bus operator benefits	
Change in operating profits	£0.06
Wider economic benefits	
Improved labour market accessibility	£1.36
Health benefits from increased physical activity	£0.38
Health benefits from increased employment	£0.07
Volunteering contributions	£0.23
Fiscal savings from increased education	£0.14
Psychological well-being from reductions in commuting time	£0.04
Option value	£0.03
Total benefits	£4.55
Total cost	£1.00
BCR	4.55

Approximately half of the benefits are going to bus users and half to the wider community through decongestion, safety, and clean air benefits, as well as wider economic and social benefits relating to access to employment, education, and volunteering. This represents very high value for money, in line with the top 10% of DfT funded projects in 2019.<sup>(24)</sup>

The analysis in the wider report highlights that there are additional benefits that are not always captured in the DfT-style appraisal, for instance, jobs within operators and the supply chain, accessibility to well-paying jobs, and also spend in the local economy, all facilitated by access through bus services.

These benefits can be substantial; for example on average, bus passengers - travelling for leisure, shopping and commuting - spend £32 per return journey in shops, cafes, restaurants, and leisure facilities at their destinations.

## Appendices

Appendix

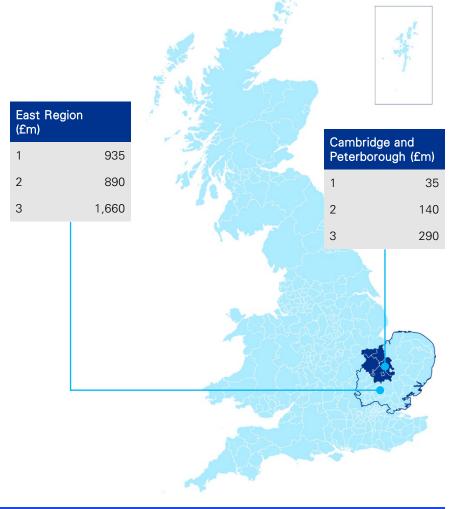
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### Findings by area



#### **East of England**



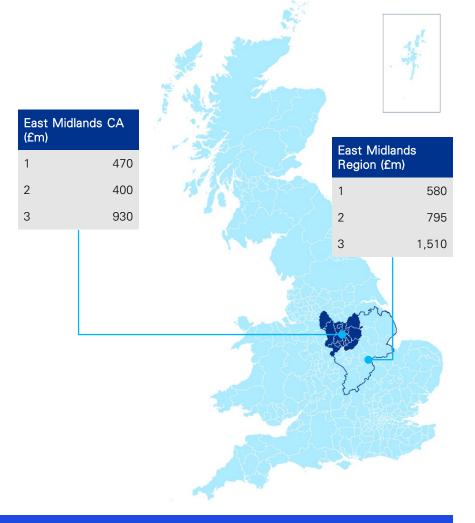


	All values in £m	Cambridgeshire and Peterborough CA	Non-CA areas	East of England Region
1. Economic	Taxes, wages and industry profit	15	460	480
activities of those involved	Supply chain impact of fleet renewal and labour impact	10	195	205
in the provision of bus services	Spending by employees in operations and supply chain	10	240	250
2. Economic	Increased connectivity and more affordable travel	55	380	435
and social activities of bus	Impacts on other road users	5	25	30
passengers	Option of having buses as a mode	60	260	320
	Wider societal impacts	20	85	105
3. Economic	Leisure spend	105	490	595
impact of bus passengers interacting with local economies	Commuter spend	55	255	310
	Shopping spend	130	625	755
Contribution to G	/A from bus commuter wages	475	2,600	3,100



#### **East Midlands**



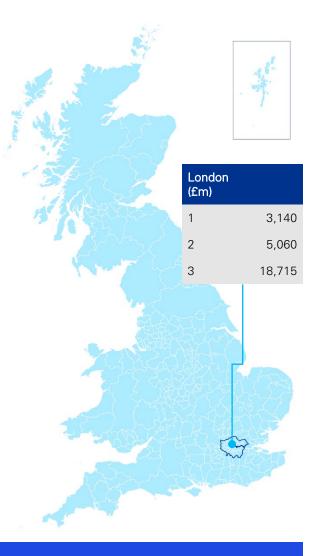


	All values in £m	East Midlands CA	Non-CA areas	East Midlands Region
1. Economic	Taxes, wages and industry profit	245	55	300
activities of those involved	Supply chain impact of fleet renewal and labour impact	100	25	125
in the provision of bus services	Spending by employees in operations and supply chain	125	30	155
2. Economic	Increased connectivity and more affordable travel	200	180	385
and social activities of bus	Impacts on other road users	15	10	25
passengers	Option of having buses as a mode	120	150	275
	Wider societal impacts	65	40	110
3. Economic	Leisure spend	310	195	500
impact of bus passengers interacting with local economies	Commuter spend	205	130	335
	Shopping spend	415	260	675
Contribution to G	/A from bus commuter wages	1,940	1,380	3,320



#### London



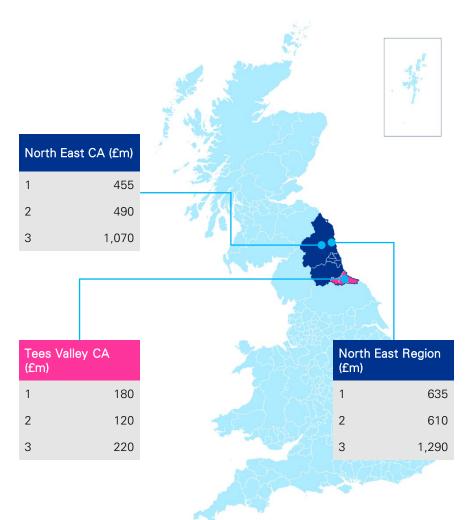


	All values in £m	London
1. Economic	Taxes, wages and industry profit	1,360
activities of those involved	Supply chain impact of fleet renewal and labour impact	795
in the provision of bus services	Spending by employees in operations and supply chain	985
2. Economic	Increased connectivity and more affordable travel	3,135
and social activities of bus passengers	Impacts on other road users	200
	Option of having buses as a mode	390
	Wider societal impacts	1,335
3. Economic	Leisure spend	6,440
impact of bus passengers interacting with local economies	Commuter spend	3,965
	Shopping spend	8,310
Contribution to G	/A from bus commuter wages	23,880



#### **North East**

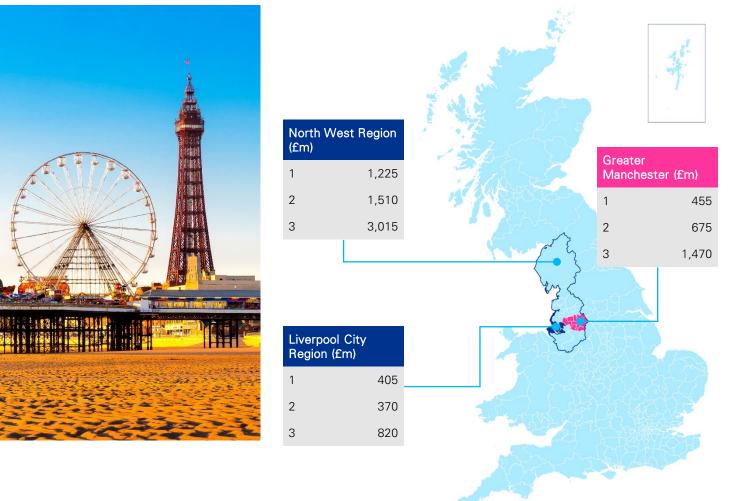




	All values in £m	North East CA	Tees Valley CA	North East Region
1. Economic	Taxes, wages and industry profit	235	95	330
activities of those involved	Supply chain impact of fleet renewal and labour impact	100	40	135
in the provision of bus services	Spending by employees in operations and supply chain	120	45	170
2. Economic	Increased connectivity and more affordable travel	245	50	295
and social activities of bus	Impacts on other road users	15	5	20
passengers	Option of having buses as a mode	150	50	200
	Wider societal impacts	80	15	95
3. Economic	Leisure spend	320	65	385
impact of bus passengers interacting with local economies	Commuter spend	260	55	315
	Shopping spend	490	100	590
Contribution to G	/A from bus commuter wages	2,150	395	2,545



#### **North West**

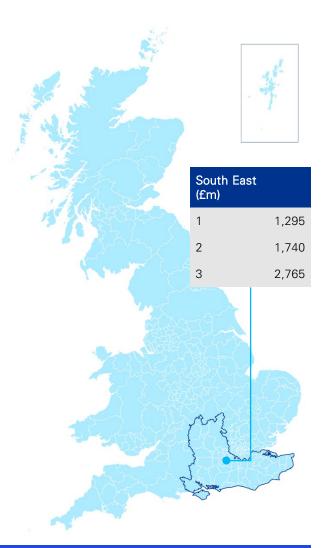


	All values in £m	Greater Manchester CA	Liverpool City Region CA	Non-CA areas	North West Region
1. Economic	Taxes, wages and industry profit	230	205	185	620
activities of those involved	Supply chain impact of fleet renewal and labour impact	100	90	75	270
in the provision of bus services	Spending by employees in operations and supply chain	125	110	95	335
2. Economic	Increased connectivity and more affordable travel	340	190	240	770
and social activities of bus	Impacts on other road users	25	15	15	50
passengers	Option of having buses as a mode	200	105	155	460
	Wider societal impacts	110	60	55	230
3. Economic impact of bus passengers interacting with local economies	Leisure spend	440	245	220	900
	Commuter spend	360	200	180	735
	Shopping spend	670	375	335	1,380
Contribution to G	/A from bus commuter wages	3,200	2,050	1,310	6,560



#### **South East**



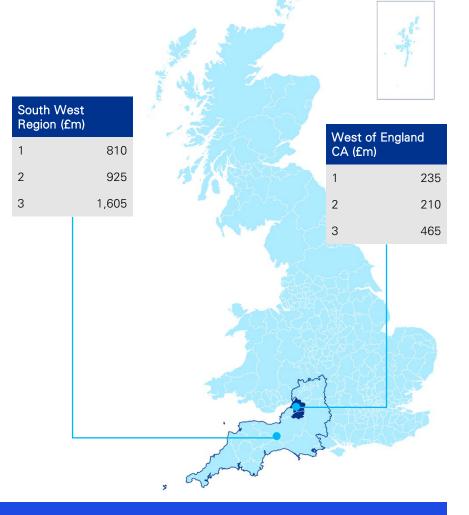


	All values in £m	South East Region
1. Economic	Taxes, wages and industry profit	670
activities of those involved	Supply chain impact of fleet renewal and labour impact	280
in the provision of bus services	Spending by employees in operations and supply chain	345
2. Economic	Increased connectivity and more affordable travel	1,040
and social activities of bus passengers	Impacts on other road users	60
	Option of having buses as a mode	435
	Wider societal impacts	205
3. Economic	Leisure spend	930
impact of bus passengers interacting with local economies	Commuter spend	620
	Shopping spend	1,215
Contribution to G	VA from bus commuter wages	5,915



#### **South West**





	All values in £m	West of England CA	Non-CA areas	South West Region
1. Economic	Taxes, wages and industry profit	125	290	410
activities of those involved	Supply chain impact of fleet renewal and labour impact	50	130	180
in the provision of bus services	Spending by employees in operations and supply chain	60	160	220
2. Economic	Increased connectivity and more affordable travel	105	370	475
and social activities of bus	Impacts on other road users	5	25	30
passengers	Option of having buses as a mode	65	235	300
	Wider societal impacts	35	85	120
3. Economic	Leisure spend	155	385	540
impact of bus passengers interacting with local economies	Commuter spend	105	255	360
	Shopping spend	205	500	705
Contribution to G	/A from bus commuter wages	1,030	2,450	3,480



# **West Midlands**

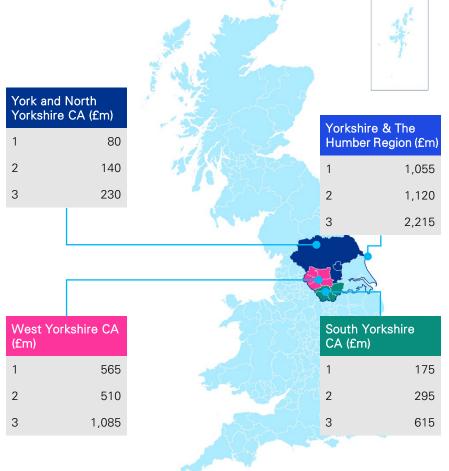


West Mid Region (£	lands m)				West M	lidlands CA
1	820	1	(A)		(£m)	
2	1,195	21	C ST		1	655
3	2,690		Lary		2	880
			1 Sec.		3	2,255
			える。	Ser and a		

	All values in £m	West Midlands CA	Non-CA areas	West Midlands Region
1. Economic	Taxes, wages and industry profit	345	80	425
activities of those involved	Supply chain impact of fleet renewal and labour impact	140	40	175
in the provision of bus services	Spending by employees in operations and supply chain	170	45	220
2. Economic	Increased connectivity and more affordable travel	490	135	625
and social activities of bus	Impacts on other road users	35	10	40
passengers	Option of having buses as a mode	195	150	340
	Wider societal impacts	160	30	190
3. Economic	Leisure spend	750	145	895
impact of bus passengers	Commuter spend	500	95	595
interacting with local economies	Shopping spend	1,005	195	1,200
Contribution to G	/A from bus commuter wages	4,415	945	5,360

# **Yorkshire and The Humber**



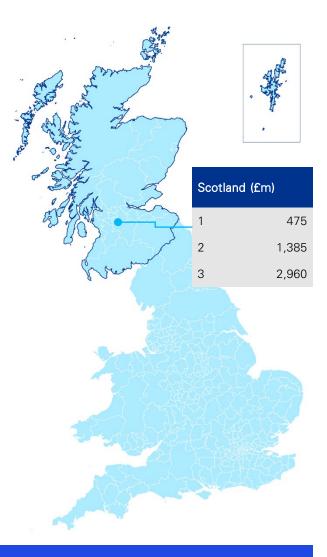


	All values in £m	South Yorkshire CA	West Yorkshire CA	York and North Yorkshire CA	Non-CA areas	Yorkshire and The Humber Region
1. Economic	Taxes, wages and industry profit	90	295	35	125	540
activities of those involved in the provision of bus	Supply chain impact of fleet renewal and labour impact	40	120	20	50	230
services	Spending by employees in operations and supply chain	45	150	25	60	285
2. Economic and social activities of	Increased connectivity and more affordable travel	140	250	55	95	540
bus passengers	Impacts on other road users	10	15	5	5	35
	Option of having buses as a mode	100	165	60	45	375
	Wider societal impacts	45	80	20	20	170
3. Economic	Leisure spend	185	325	70	85	660
impact of bus passengers	Commuter spend	150	265	55	70	540
interacting with local economies	Shopping spend	280	495	105	130	1,015
Contribution to GVA	Contribution to GVA from bus commuter wages			330	605	5,395



# **Scotland**



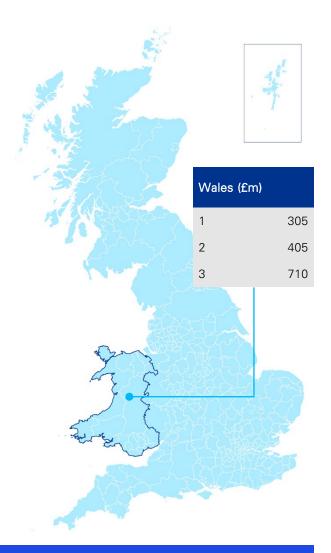


	All values in £m	Scotland	
1. Economic	Taxes, wages and industry profit	300	
activities of those involved in the provision of bus services	Supply chain impact of fleet renewal and labour impact	75	
	Spending by employees in operations and supply chain	100	
2. Economic	Increased connectivity and more affordable travel	815	
and social activities of bus passengers	Impacts on other road users	55	
	Option of having buses as a mode	285	
	Wider societal impacts	230	
3. Economic	Leisure spend	775	
impact of bus passengers	Commuter spend	1,070	
interacting with local economies	Shopping spend	1,115	
Contribution to G	Contribution to GVA from bus commuter wages 11,54		



# Wales



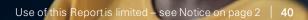


	All values in £m	Wales
1. Economic	Taxes, wages and industry profit	105
activities of those involved	Supply chain impact of fleet renewal and labour impact	90
in the provision of bus services	Spending by employees in operations and supply chain	110
2. Economic	Increased connectivity and more affordable travel	190
and social activities of bus	Impacts on other road users	15
passengers	Option of having buses as a mode	155
	Wider societal impacts	45
3. Economic	Leisure spend	245
impact of bus passengers	Commuter spend	135
interacting with local economies	Shopping spend	330
Contribution to G	/A from bus commuter wages	1,500

Appendix

# Methodology and assumptions





#### Introduction

This appendix describes the analysis used to calculate the benefits set out in this Report. A summary of key inputs and evidence for the three analytical components is discussed below.

## A1 Economic activities of those involved in the provision of bus services

This sets out the key inputs for the approach to estimating the economic benefits associated with purely the operation of buses in delivering services to passengers, reflecting the direct, indirect, and induced impacts.

#### Economic impact of bus operations

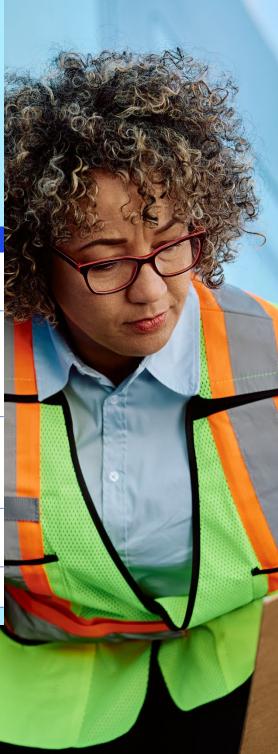
The economic impact of bus operations has been estimated through bringing together data published in national statistics covering employment, wages, industry operating and revenue, government support, and manufacturing data. Key sources of evidence are set out below.

Table 4: Data Inputs – Employment, Revenue, Cost and Manufacturing

#### Analytical Component Data sources

Employment and wages within sector	<ul> <li>ONS (2022) Business Register and Employment Survey</li> <li>DfT Bus Statistics (2022/23) Table BUS07</li> </ul>
Operations Economic Output	<ul> <li>CPT (2023) Bus Industry Costs in 2023 Figure 2-1: Breakdown of Bus Industry Costs, February 2023</li> <li>DfT Bus Statistics (2022/23) Table BUS04</li> <li>Benchmarked profit margins from bus companies from accounts published on Companies House</li> </ul>
Government support for bus operations	<ul> <li>DfT Bus Statistics (2022/23) Table BUS05</li> <li>Scottish government Bus Statistics (2022/23) Table 2.9</li> <li>Welsh government final budget 2024-25 BEL Tables</li> </ul>
Bus Manufacturing output	<ul> <li>SMMT (2023) UK New Bus and Coach Registrations</li> <li>Average bus price from TfL and Wrightbus</li> </ul>
Corporation tax paid on bus company profits	Corporation tax rate of 25% (for profits over £250,000)





Appendix 2



#### Appendix

#### Spend by supply chain

To estimate the impact of the supply chain the operating cost breakdown for bus companies has been considered, this is set out in the table below.

#### Table 5: CPT bus industry costs - breakdown

Supply chain com	Proportion	
Labour	Drivers	35.1%
	Engineers	6.4%
	Admin	4.2%
	On-Cost	4.5%
	Pensions	1.7%
Variable costs	Fuel	13.9%
	Parts	4.6%
Fixed costs	Overheads	19.9%
	Claims	2.1%
	Ownership	7.6%

This provides the direct operating costs spent within the supply chain. To obtain the associated indirect expenditure we have then applied Type I expenditure multipliers to this for Land Transport, this multiplier is between 1.75 and 1.28 depending on the region, this means that for each £1 spent on the supply chain we would expect between £0.28 and £0.75 of additional spend in the wider economy.

### Spend by employees in operations and supply chain

This component of the analysis explores the impact of spending by those directly employed by bus companies and those in the supply chain. We have applied Type II expenditure multipliers to this for Land Transport. The total (Type I and Type II) economic multiplier is between 2.78 and 1.45 depending on the region, this means that for each £1 spent by bus companies, we would expect between £0.17 and £1.04 to be spent by employees in the wider economy.

## A2 Economic and social activities of bus passengers



This analysis explores the benefits from the use of bus services relative to other modes of travel that would need to be used if bus services were not available, reflecting benefits to users, non-users and the wider economy and society.

### Increased connectivity and more affordable travel

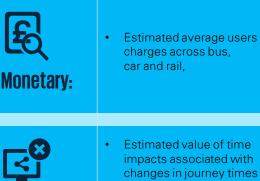
To understand the benefits that bus users gain from using the bus, an estimate of consumer surplus has been calculated. This represents the difference between the overall price (monetary and nonmonetary) that consumers pay and the price that they are willing to pay.

This approach is based on TAG Unit A1.3 which sets out the formula for estimating consumer surplus:

Change in consumer surplus = ½ x (T0 (Trips without bus services) + T1 (Trips with bus services)) x (P0 (Price without bus services) – P1 (Price with bus services))

To estimate this for the whole market, we have applied overarching assumptions discussed below:

- Existing market demand for bus travel including distance and journey purpose.
- Diversion factors, which provide estimates for the proportion of new traffic on a mode that would otherwise have used another mode or that would not have travelled (called 'generated demand').
- Generalised cost to travel based on distance using:



Non-

monetary:

Estimated value of time impacts associated with changes in journey times for commuting and noncommuting purposes reflecting average speeds of journey by mode.

The evidence and working for this are set out in the table below.



#### Table 6: Data input - journeys, distance, purpose, monetary and non-monetary costs

Input	Source
Number of passenger trips	<ul> <li>DfT Bus Statistics (2022/23) Table BUS01</li> <li>Transport Scotland Scottish Transport Survey (2022/23) Table 2.2b</li> <li>StatsWales (2022/23) Vehicle kilometres and passenger journeys on buses and coaches by year</li> </ul>
Journey Purpose splits	• NTS, 2023, Table NTS0409
Vehicle kilometres travelled	DfT Bus Statistics (2022/23) Table BUS02
Diversion factors	Rand and Systra (2018) Bus fare and journey time elasticities and diversion factors for all modes
Average user cost per KM	<ul> <li>Car: HMRC (2024) Tax Relief for Vehicle Usage</li> <li>Rail: ORR (2022/23) Data Portal: Passenger Rail Usage</li> <li>Bus: DfT Bus Statistics (2022/23) Table BUS04</li> </ul>
Value of Time	TAG Table A.1.3.1
Average speeds	<ul><li>DfT Travel Time, 2023, Table CGN0503</li><li>NTS, 2023, Table NTS0303</li></ul>

#### Impacts on other road users

Non-user benefits are calculated on the principles set out in TAG unit A5.4. These reflect that without bus, many trips would be undertaken via car, as per diversion factors. This increase in overall car vehicle km creates wider impacts for non-users (i.e., increased congestion) whilst adjusting for occupancy rates between vehicle types.

DfT TAG Databook provides parameters to estimate this additional traffic's externalities with these set out in the table below.

#### Table 7: Parameters to estimate traffic externalities

	Weighted average p/PSV km	Weighted average p/car km
Congestion	48.6	19.4
Infrastructure	0.0	0.1
Accidents	0.0	2.5
Local Air Quality	2.4	0.3
Noise	0.0	0.0
Green House Gases	26.4	4.3
Indirect Taxation	-20.1	-3.0

#### Option of having buses as a mode

There are expected to be option and non-use values that accrue to households from knowing they have the option of a given transport mode or that other people in the community are able to access this mode. These types of impacts are included in TAG Unit 4.1 although with recognition the evidence around these is limited.

These impacts are traditionally used to assess the removal or introduction of a new mode, and the assessment should be done at a per household level. The option and non-use values as per TAG Databook are set out below.

Table 8: TAG option and non-use values per househo	Table 8: TAG	option	and non-use	values	per	household
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Mode	Option & non-use value (£ 2023 prices)
Train	£375
Bus	£190
Train and bus	£375



There is limited evidence associated with the distance between household and bus stops at which these values are relevant, but TAG references the Passenger Demand Forecasting Handbook ("PDFH") analysis of a 2-5km range for rail stations. Review of DfT (2010) Travel in Rural and Urban areas had around 60% of those in rural areas, and 90% of those in medium to large urban areas, within a 13-minute walk of a bus stop with a service at least once an hour. Using these assumptions, we have applied the option and non-use values on a geographic basis to those households within a 13-minute walk of a bus stop.

We recognise there are other approaches to option values estimates, notably Mackie, Laird, Johnson (2012) apply estimated for regular bus users of £60 per year, and infrequent users of £38 per year, whilst non-users £1.20 per year in order to ensure that a bus service remained available. In their study, the estimated option and non-use value is £700 million per year, which would be around £930 million in 2023 prices.

#### Wider societal impacts

The wider impacts calculated in this analysis correspond to a set of wider social and economic benefits identified in the literature. Although some of them may be subject to high uncertainty, most of these benefits are increasingly accepted by the DfT in economic appraisals. The evidence used to calculate each type of benefit is shown below.

#### Table 9: Wider social impact assumptions

Component	Evidence
Health fiscal savings from increased employment	<ul> <li>HM Treasury, New Economy and Public Service Transformation Network (2014) 'Supporting public service transformation: cost benefit analysis guidance for local partnerships'.</li> </ul>
Fiscal savings from increased education	<ul> <li>HM Treasury, New Economy and Public Service Transformation Network (2014) 'Supporting public service transformation: cost benefit analysis guidance for local partnerships'.</li> </ul>
Health and Wellbeing	• Wallis, I., Douglas, N. and Lawrence, A. (2013) Economic appraisal of public transport service enhancements. NZ Transport Agency research report 533.
Volunteering	Royal Voluntary Service (2011) Gold Age Pensioners: Valuing the socio- economic contribution of older people in the UK
Psychological wellbeing	• ONS (2014) 'Commuting and personal wellbeing.
	<ul> <li>Martin, A., Goryakin, Y. and Suhrcke, M. (2014) 'Does active commuting improve psychological wellbeing? Longitudinal evidence from eighteen waves of the British Household Panel Survey'.</li> </ul>
	<ul> <li>HM Treasury, New Economy and Public Service Transformation Network (2014) 'Supporting public service transformation: cost benefit analysis guidance for local partnerships'</li> </ul>







#### A3 Economic impact from bus passengers interacting with local economies



In estimating the benefit that bus provides to local and national economy we identified what each journey type (leisure, commuting and shopping) adds to the local economy by using the average spend per each journey category.

The additionality component of this analysis reflects published diversion factors as to generated additional trips. These two components are discussed below.

#### Spend in local economy

This analysis pivots off the number of journeys broken down by journey type as per the NTS data. Average spend rates have then been applied at a regional level, a summary of this is set out below.

Table 10: Average spend per bus trip by reason for travel (CPT 2023 survey of bus passengers)

Description	Range / Value
Leisure	£24.95 – £41.05
Commute	£20.50 – £33.00
Shopping	£31.80 – £46.40

These spend levels have been sense checked relative to figures from other surveys of bus users, which reports on average £49 (2013 prices) from the Institute of Transport Studies ("ITS") and £30 (2015 prices) from TfL.



# **Scope of services**



Appendix 3

# Scope of services

We have carried out a four-phase approach including a review of existing data, developing an analytical framework, and consulting with key stakeholders to produce our final Report. These are expanded on below:



An initial **discovery** phase where we finalised the scope, summarised existing reports and assembled data and developed detailed project plan.



An **economic analysis** phase where we considered (a) the contribution of bus to GDP and (b) the economic benefit of a £1 of investment.



An **engagement** phase with key stakeholders via four workshops across England, Wales and Scotland (held at KPMG offices) where we explored regional differences and priorities.

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A **reporting** phase, anchored by a robust analytical framework, using charts, tables, and infographics to convey the results clearly, catering to diverse audiences.

The work uses data and assumptions with good provenance, and the analysis is structured according to best practice methodologies and described in a clear and transparent way. We have looked at the overall contribution of the bus industry to GDP. This involved looking at three areas:

- Direct impacts: economic impacts we can directly attribute and measure such including the value of services produced by bus operators, the jobs generated, and wages and taxes paid.
- Indirect impacts: economic impacts generated through partners and suppliers including vehicle manufacturers, technology providers and infrastructure providers.
- Dynamic impacts: economic impacts arising from the provision of bus services including the productivity gains associated by improved access to employment, education, retail and leisure activities, including supporting the vibrancy of town and city centres as well as rural economies.

We have also assessed the economic benefit of each £1 of investment for bus services. This involved:

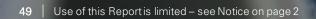
Estimating the economic, social and environmental impacts of each £1 invested in bus services.

Following the Department for
 Transport guidance on transport
 analysis (TAG) which provides an
 opportunity to consider the value of a
 much wider set of benefits, not just
 those impacting the real economy.
 This includes, for example, wider
 social impacts and environmental
 gains such as the impact on health
 and wellbeing.

Our final deliverable is this fully designed Report, with executive summary and technical appendix; supporting summary presentation and set of infographics plus underlying data and outputs. L.

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Appendix 3



# **References** and notes

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- (20) ONS (2022) Business Register and Employment Survey Including full time and part time employees as well as working proprietors.
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