

THE CROSS-SECTOR BENEFITS OF BACKING THE BUS



THE CROSS-SECTOR BENEFITS OF BACKING THE BUS IN SUMMARY



With nearly five billion bus trips made every year¹, for most people in Great Britain the bus *is* public transport. Public support for the bus represents excellent value for money, making a significant contribution to the achievement of policy objectives across Government – from boosting employment to tackling physical inactivity; increasing exports to enabling access to education; and from cutting greenhouse gas emissions to supporting culture and sport.

This report articulates the benefits of investing in the bus – department by department – relating the benefits to the individual objectives that each department works to. It shows that the bus is key to achieving key objectives of almost half of all Government departments across Whitehall.

It is vitally important to highlight this contribution given that the cross-sector benefits of the bus often go unrecognised in the complex way in which bus services are financially supported by Government. Changes to these funding streams are often made without consideration of the cumulative impact on bus services and the knock-on effects on the ability of other departments to achieve their objectives. In light of this, this report makes recommendations on how the funding of bus services could be reformed to recognise the cross-sector benefits it brings.

This report is an update of our ground-breaking 2014 report, which first outlined the cross sector benefits of the bus. It has been rewritten to recognise new Government departments, their changing policy objectives, and to include the latest statistics on the contribution of this vital mode of public transport.





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AN INTRODUCTION TO THE BUS

Who uses the bus?

Buses form the backbone of public transport. Over four billion bus trips are made every year in Great Britain², around two and a half times the total number of rail passenger journeys. Local bus services cover nearly 1.2 billion miles a year⁴.

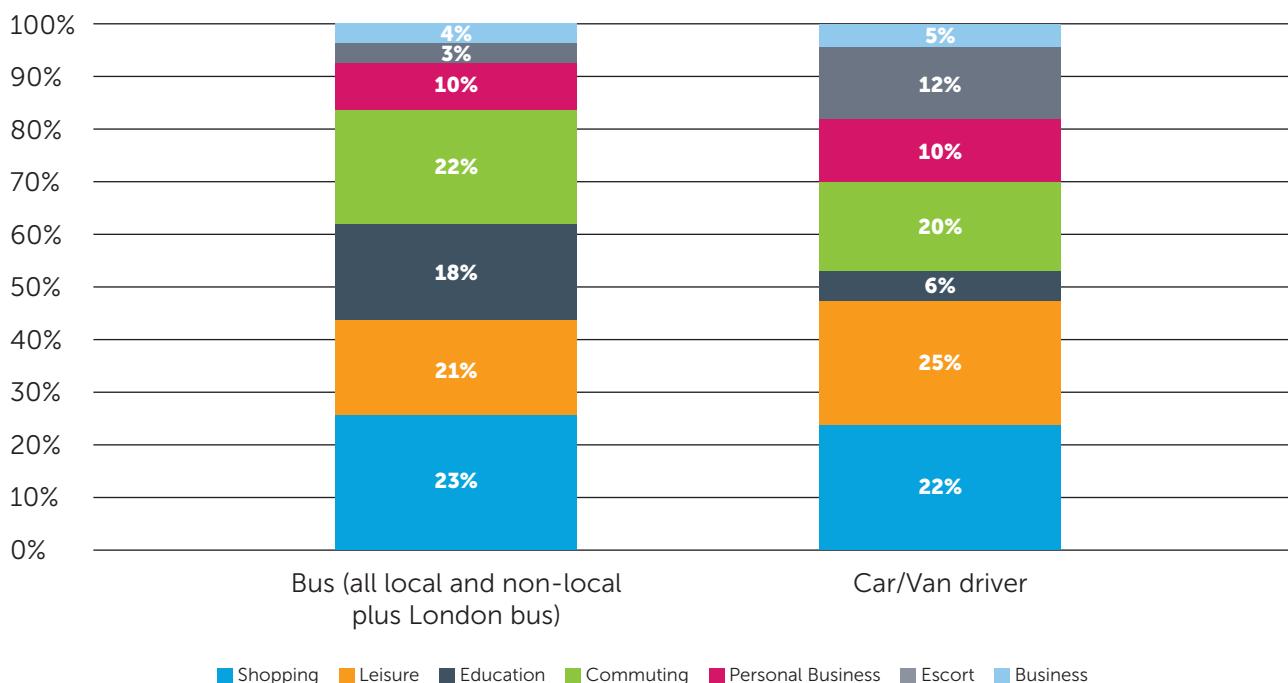
Some 99% of people in England are within thirteen minutes' walk of a bus stop. Accordingly, bus services are used by a wide variety of people. Research by the Institute for Transport Studies found that 30% of people are frequent bus users, including:

- A quarter of men and a third of women.
- Over half of 16-19 year olds and over a third of 20-29 year olds.
- Around 20% of full-time employees and 30% of part-time employees.

- 70% of those with no car available (25% of British households have no car or van⁸, many more have only limited access to a vehicle).

People use the bus to reach many different types of activity. The figure below compares the journey purpose split for bus and car travel. It shows the range of journeys people make by bus and that, compared to car trips, a greater proportion of bus trips are linked to the most economically productive activities. Some 44% of bus trips are for work or education purposes compared to 31% of car/van driver trips. More bus trips than car trips⁹ are also made for shopping, indeed, more people access the high street by bus than by any other transport mode¹⁰.

Journey purpose split by mode 2017



Source: DfT National Travel Survey 2017 table NTS0409

IN THE REST OF ENGLAND, AS WELL AS IN SCOTLAND AND WALES, BUS SERVICES ARE PROVIDED ON A FULLY COMMERCIAL ('DEREGULATED') BASIS. THIS MEANS THAT, SUBJECT TO MINIMUM SAFETY AND OPERATING REQUIREMENTS, ANYONE CAN START UP A BUS SERVICE.



How are bus services provided?

In England there are two systems for providing bus services. In London, bus services are planned and funded by Transport for London (TfL). TfL specifies which bus services are to be provided; deciding the routes, timetables and fares. Private companies then bid to provide those services.

In the rest of England, as well as in Scotland and Wales, bus services are provided on a fully commercial ('deregulated') basis. This means that, subject to minimum safety and operating requirements, anyone can start up a bus service. In practice, over 70% of bus services are provided by five large operators (Stagecoach, First, Go-Ahead, National Express and Arriva)¹¹.

Local Transport Authorities are permitted to support services where no commercial service has been provided but where a need exists (for example, unprofitable off-peak services or services to rural areas and isolated housing estates). These 'socially necessary' services (also known as 'tendered' or 'supported' services) make up around 15% of the total bus mileage operated in England outside of London¹².

In Northern Ireland, all bus services are provided by a state-owned corporation, Translink.

How are bus services funded?

In England outside London, public support for bus services comes in six main forms.

1. Local Transport Authority (LTA) funding of non-commercial, socially necessary bus services ('tendered' or 'supported' services).

Support for these non-commercial services costs around £370 million in 2017/18 outside of London¹³ but can generate benefits in excess of £3 for every £1 of public money spent¹⁴. Most of these benefits accrue to bus users who would otherwise not be able to access opportunities or who would have seen a steep increase in their transport expenditure.

2. LTA funding of concessionary travel including the Government's statutory English National Concessionary Travel Scheme (ENCTS) for older and disabled people as well as discretionary spending on enhancements to that scheme and on concessions for other groups like children and young people and jobseekers.

The annual cost of the ENCTS is around £900 million¹⁵. Across Metropolitan areas, £1.48 of benefits are generated for every £1 of public money spent on the scheme¹⁶. These benefits accrue to other transport users and society at large as well as to those receiving the concession. In 2010/11, Government funding covered the vast majority of Concessionary Travel costs, but this has since been reduced over a number years, meaning funding from the Government now covers less than half of overall costs, with the rest of the cost borne by local authorities¹⁷.

3. Government funding of the Bus Service Operators Grant (BSOG) as a rebate on fuel duty for bus operators.

In England¹⁸, BSOG funding amounted to £249 million in 2017/18¹⁹. Support for BSOG generates in excess of £3.35 of benefits for every £1 of public money spent in Metropolitan areas²⁰. Over a quarter of these benefits accrue to other road users through decongestion. Since 2011/12, there has been a 42% reduction in the BSOG budget for England²¹.

IN ENGLAND , BSOG FUNDING AMOUNTED TO £249 MILLION IN 2017/18. SUPPORT FOR BSOG GENERATES IN EXCESS OF £3.35 OF BENEFITS FOR EVERY £1 OF PUBLIC MONEY SPENT IN METROPOLITAN AREAS ALONE

4. Ad hoc national funding programmes like green bus funds and LTA capital investment in interchanges, stops, shelters and bus priority schemes.

LTA funding is estimated to amount to between £150 million and £200 million per year, on average²².

5. Local Education Authority funding for home to school transport (including bus).

Expenditure on home to school transport in England in 2016/17 was around £1.1 billion²³.

6. LTAs, to a greater or lesser extent, providing financial support for bus service information (including call centres, websites, mobile apps and printed information) and for the staffing of bus stations, monitoring of service use, security and other services.

Overall the public funding that the bus relies on comes from different Government Departments working largely in isolation from each other e.g. from different Government Departments (principally DfT, DfE and MHCLG) working largely in isolation from each other. This means that there is a limited understanding of the cumulative effects their decisions have for bus services overall.

Public spending on bus has cross-sector benefits that also extends far beyond, the Departments that provide the funding.



WHY THE BUS MATTERS ACROSS SECTORS

The bus benefits a wide range of policy areas, across a variety of Government departments. These benefits are discussed in more detail in the individual departmental chapters that follow this section.

The bus matters to the economy

The bus plays a key role in achieving strong and sustainable economic growth by connecting people and businesses to opportunities, reducing congestion and increasing economic productivity. In Metropolitan areas alone, bus networks are estimated to generate over £2.5bn in economic benefits against public funding of £0.5bn²⁴. Around half of these benefits are to bus users stemming from greater access to jobs, training and leisure opportunities.

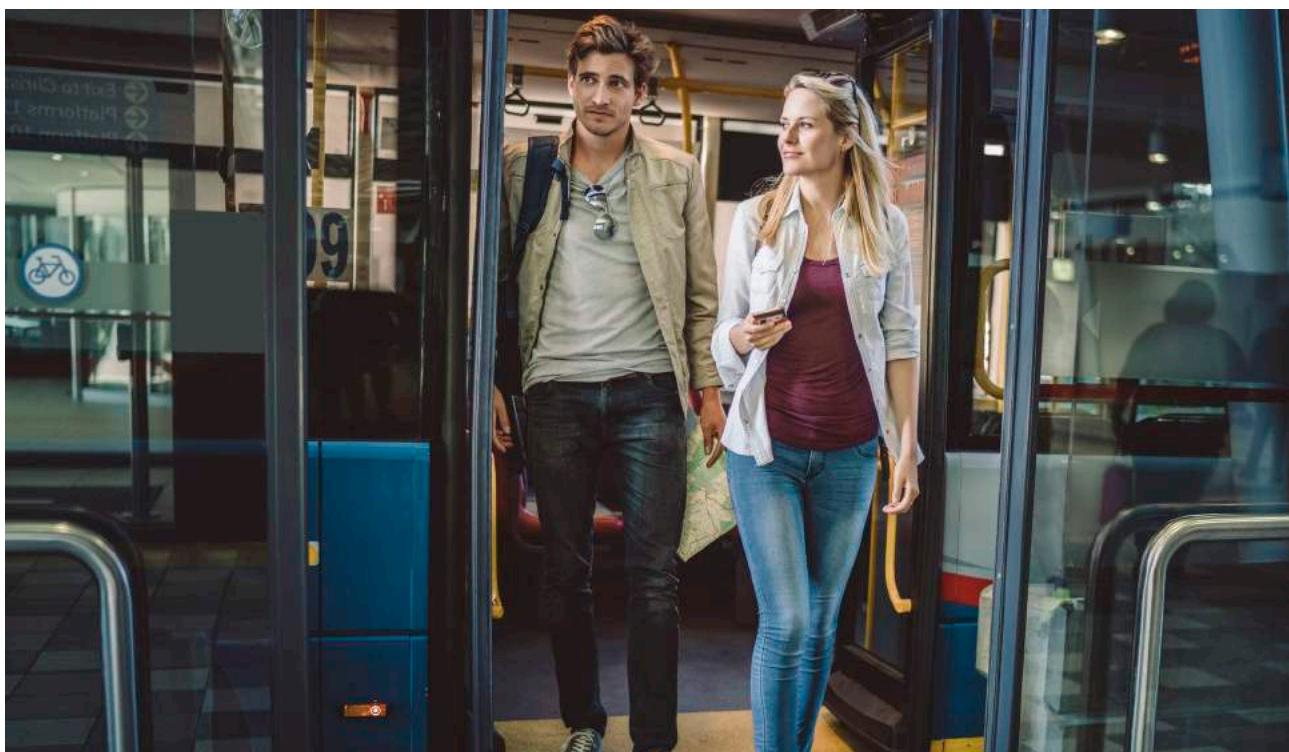
The remaining benefits accrue to other transport users and society at large, through reduced congestion, pollution and accident rates as well as through improved productivity. The bus is also important in stimulating economic growth outside the urban conurbations, in our towns, villages and rural areas. More people access high streets by bus than by any other mode, bringing a combined retail and leisure spend of £27.2bn²⁵.

In rural areas, buses connect local businesses to customers and employees and support tourism.

The bus plays a vital role in enabling access to employment. In British cities outside London, 77% of jobseekers do not have regular access to a car, van or motorbike²⁶. Having found employment, affordable bus travel helps ensure that work pays and can be sustained. One in 10 bus commuters would be forced to look for another job, or give up work altogether, if they could no longer travel by bus²⁷.

The UK bus industry itself is a major employer and enjoys a growing international reputation for high quality bus manufacturing, contributing to UK exports.

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The bus matters to social mobility

The bus contributes to a fairer and more equal society by ensuring that, regardless of their background, people can access the opportunities they need to achieve social mobility. The bus connects people of all ages to education helping to improve their long-term prospects. Some 400,000 workers are in better, more productive jobs as a direct result of the bus²⁸.

The bus is a unique and effective tool of social policy – it is automatically targeted at those groups who are most in need of support without resort to complicated means-testing arrangements. This is because the groups most in need are the same as those most likely to rely on the bus, including young people, people on low incomes, older people, disabled people and jobseekers.

THE BUS CONNECTS PEOPLE OF ALL AGES TO EDUCATION HELPING TO IMPROVE THEIR LONG-TERM PROSPECTS. SOME 400,000 WORKERS ARE IN BETTER, MORE PRODUCTIVE JOBS AS A DIRECT RESULT OF THE BUS.

The bus matters to communities

The bus helps to build communities. It plays a key role in expanding the supply of accessible land for housing and other developments by ensuring these are still within easy reach of amenities. Places that are built around the bus, together with walking and cycling, benefit from reduced traffic volumes and liveable streets that encourage interaction and community spirit. The bus also connects people to volunteering opportunities and provides a communal experience in itself, enabling people to play an active part in society.

The bus matters to health

The bus is an easy way for people to incorporate physical activity into their daily lives – just walking to and from the bus stop can provide up to half of the recommended daily level of exercise²⁹. The bus also enables people, regardless of their background, to access health promoting activities from sports centres to supermarkets stocking healthy food.

By cutting congestion and utilising green technology, bus services improve air quality. Around £8 million in air quality damage cost savings have been achieved through the low emission buses in operation to date³⁰.

Bus services can also contribute to mental wellbeing by helping people to stay active and also by enabling them to connect with others, keep learning, give to others and to take notice – recognised as the five ‘ways to wellbeing’³¹.

By helping people maintain and enhance their health, the bus helps to make the NHS more efficient by minimising admissions.

It can also reduce costly missed appointments by providing direct and punctual transport links. Changes to the way bus travel is organised could offer scope for further efficiencies in patient transport.

The cost to the NHS of non-emergency patient transport is at least £150 million per year whilst the cost of missed hospital appointments (a significant proportion of which are due to transport problems) stands at £750 million³². The NHS could save money and improve passenger experiences by making better use of wider public sector bus fleets and expertise to deliver this service. If, by providing patient transport in a more efficient way, we could prevent just 10% of the 5.6 million missed hospital appointments³³, the NHS could save £74.5 million per year³⁴.



BY 2016, THE 4,000 GREEN, LOW EMISSION BUSES IN OPERATION HAD SAVED OVER 55,000 TONNES OF GREENHOUSE GAS EMISSIONS PER ANNUM (COMPARED TO THE EQUIVALENT NUMBER OF CONVENTIONAL BUSES) AND SAVED AROUND £8 MILLION IN AIR QUALITY DAMAGE COSTS.

The bus matters to the environment

Just one double decker bus can take 75 cars off the road³⁵. If drivers switched one car journey a month to bus or coach, it would mean one billion fewer car journeys and a saving of two million tonnes of CO₂³⁶.

Congestion dramatically increases emissions from road vehicles. Under heavily congested conditions tail pipe emissions can be increased by as much as three or four times³⁷. Buses cut congestion by taking car journeys off the road and making better use of limited space.

Planning which connects developments to bus networks and promotes their use helps to reduce car dependence and negative impacts on the environment.

The UK has considerable expertise in bus manufacturing, including low carbon innovation which improves bus performance further.

By 2016, the 4,000 green, low emission buses in operation had saved over 55,000 tonnes of greenhouse gas emissions per annum (compared to the equivalent number of conventional buses) and saved around £8 million in air quality damage costs³⁸.

SAFEGUARDING THE CONTRIBUTION OF THE BUS

How funding for bus services has been affected by public spending cuts

The contribution of the bus to policy goals across sectors has been put at risk as a result of three key trends affecting bus services:

1. A general preference from Government for capital funding (e.g. for large infrastructure projects) rather than for revenue funding, which bus services rely on.
2. Cuts to MHCLG funding for local government (where LTA funding for bus services comes from).
3. Spending on national rail and roads being given greater priority than spending on local transport.

These trends have led to reductions in funding for all of the six main sources of public support for buses.

The impacts of these cuts are being felt on the ground in the form of bus service reductions and fare increases. For example, according to research by Campaign for Better Transport, during 2016/17 some 64% of local authorities either reduced their budget or spent nothing on socially necessary, supported bus services³⁹. The same research found that in just three years £42 million has been cut overall from supported bus budgets across England. DfT statistics show that between 2015/16 and 2017/18, the number of local authority supported bus miles outside London fell by 22%⁴⁰.

If these cuts continue and if the bus is seen as a low priority when decisions are taken in Whitehall on local government and transport funding, the wide-ranging, cross-sector benefits of bus services are placed at risk. In turn, individual Government departments will find it more difficult to achieve their priorities.

Reforming bus funding to safeguard cross-sector benefits

The central proposition of this report is that a new 'Connectivity Fund' should be established to safeguard the contribution bus services make to the economy, social mobility, communities, health and the environment.

The Connectivity Fund would bring together the existing BSOG fund with top slicing from other Government departments into a ring-fenced pot for local government to support bus services. Such an approach recognises and captures the important role of bus services in the achievement of policy goals across Government and as such, the Fund would be significantly greater than the current cumulative total of public support for bus services.

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The Connectivity Fund would need to provide local transport authorities with the flexibility to allocate spending in the most effective way, depending on local needs.

This could include, for example, removing bottlenecks, improving network coverage or developing passenger incentives. As described above, such investments in bus can be expected to deliver significant returns for the economy, social mobility, communities, health and the environment.

Further details of the Connectivity Fund and how it might work can be found on page 91.

STRUCTURE OF THE REPORT

The remainder of this report sets out the benefits of investing in the bus-department-by-department - relating these to the objectives that each department works to. This is followed by an analysis of current bus funding arrangements and our proposals for reforming bus funding to safeguard the cross-sector benefits that the bus brings.

The departmental objectives are drawn from each department's Single Departmental Plan (SDP). We note that not all SDPs use the term 'objectives'. The Department for Education uses the term 'priorities' and the Home Office uses the term 'goals'. An SDP for the Department for International Trade was unavailable and no priorities or objectives were listed online. In this case, the Department's listed responsibilities were used as the basis for analysis. Whilst recognising this variation in terminology, in this section, the term 'objectives' is used for simplicity.

Analysis of the policy objectives of each Government department (excluding the Department for Transport) revealed that investing in bus services contributes to the policy goals of 11 out of 25 Ministerial Departments; covering 23 policy objectives in total. The analysis did not include the Department for Transport (DfT) as the aim of this report is to highlight the benefits that the bus brings to other policy areas.

However, if DfT is factored in, this results in the bus contributing to the policy objectives of almost half of all Government departments - 29 policy objectives in total.

Each departmental chapter is intended to function as a standalone briefing on how the bus meets each of that department's relevant policy objectives. Some policy objectives are similar across departments meaning that there is some duplication between the chapters. The duplication is necessary to ensure that each chapter can be read in isolation from the others. This format allows the reader to either look at each departmental chapter in turn or to select only those that are of interest to them. The chapters are arranged alphabetically to enable readers to rapidly locate the sections of interest. The policy objectives covered in each departmental chapter are summarised below for quick reference.

Having read one, some, or all of the departmental chapters, the reader can then turn to the final chapter of this report for details of our proposed reforms to bus funding aimed at safeguarding the contribution of the bus to policy objectives across Government.



DEPARTMENTAL CHAPTERS



HOW THE BUS CAN HELP EACH DEPARTMENT: AT A GLANCE



CABINET OFFICE

Support the design and implementation of HM Government's policies and the Prime Minister's priorities.

The bus is a unique policy tool which brings positive impacts across Government departments, delivering on economic, environmental and social goals, representing excellent value for money.



DEPARTMENT FOR BUSINESS, ENERGY AND INDUSTRIAL STRATEGY

Deliver an ambitious industrial strategy

The bus can contribute to all five foundations of productivity which form the basis of the Government's Industrial Strategy – Ideas, People, Infrastructure, Business Environment and Places.

Maximise investment opportunities and bolster UK interests as we leave the EU

The UK bus industry has an impressive track record in securing large orders outside of the EU.

Promote competitive markets and responsible business practices

The bus sector is an important local employer and individual organisations have the potential to act as 'anchor institutions'.

Ensure the UK has a reliable, low cost and clean energy system

With growing numbers of electric buses coming into service, there are opportunities for vehicles to transfer energy back to the grid as part of a smart and connected network.



DEPARTMENT FOR DIGITAL, CULTURE, MEDIA AND SPORT

Grow an economy that is creative, innovative and works for everyone

The creative economy demands vibrant urban locations with great public transport connectivity over bland, car-based locations. By cutting congestion, buses facilitate agglomeration economies which promote the sharing of ideas and innovation.

Continually drive the UK's connectivity, telecommunications and digital sectors

The bus fleet is increasingly smart and connected. The bus industry is a strong supporter of the digital sector, offering opportunities for innovative start-ups to develop tools to enhance the experience of passengers.

Maximise social action, and participation in culture, sport and physical activity

Affordable bus services widen access to volunteering. The bus connects people to art, culture, sport and physical activity. Walking to and from the bus is also one of the easiest ways to incorporate regular exercise into everyday routines.

DEPARTMENT FOR EDUCATION

Promote the educational outcomes of disadvantaged children and young people

For most young people, the bus *is* public transport and is vital for connecting them to valuable opportunities both in and out of school. The experience of independent bus travel in itself develops life skills.

Continue our ground-breaking reforms to apprenticeships, with quality at the core

High travel costs can reduce the number of people willing – or able – to take up apprenticeship opportunities. Reducing the cost of bus travel for apprentices removes this common barrier to entry.



DEPARTMENT FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS

Pass on to the next generation a natural environment protected and enhanced for the future

Improvements in vehicle technology, together with the bus's ability to cut congestion, help to protect the environment by improving air quality and mitigating climate change. Buses also offer a means to access the natural environment whilst reducing congestion around beauty spots.

Lead the world in food and farming, with a thriving rural economy

The bus is vitally important in stimulating economic growth in rural areas, connecting local businesses to customers and employees and supporting tourism.



DEPARTMENT FOR INTERNATIONAL TRADE

Building the global appetite for British goods and services

The British bus industry has a strong international reputation and an impressive export track record. Poor quality local transport connections are considered more of a barrier to export than poor international connections. By cutting congestion, buses facilitate the flow of goods and services.



DEPARTMENT FOR WORK AND PENSIONS

Build a more prosperous society by supporting people into work and helping them to realise their potential

The bus acts as a conduit to enable people to reach their potential, particularly those most at risk of exclusion. The majority of jobseekers in British cities outside London do not have regular access to their own vehicle and primarily rely on the bus to access job opportunities.

Improve outcomes and ensure financial security for disabled people and people with health conditions

The bus is the most commonly used form of public transport among disabled people and is vital in expanding access to employment. To ensure the financial security of this group, bus services must be affordable, accessible and acceptable to use.

Ensure financial security for current and future pensioners

Free off peak bus travel for older people gives this group the freedom to continue contributing to the economy and to society.



DEPARTMENT OF HEALTH AND SOCIAL CARE

Keep people healthy and support economic productivity and sustainable public services

Walking to and from the bus stop provides the chance for easy, everyday physical activity. The bus also brings other health benefits, including better air quality, improved mental wellbeing and access to healthcare facilities and health promoting activities.

Transform primary, community and social care to keep people living more independent, healthier lives for longer in their community

Accessible bus services and free off-peak travel for older and disabled people help to support independence and reduce the need for care. The bus also has an important role to play in tackling loneliness and isolation.

Create value (reduced costs and growing income) by promoting better awareness and adoption of good commercial practice across the Department and its arm's length bodies

Making better use of wider public sector bus fleets could save the NHS money by improving the efficiency of Non-Emergency Patient Transport.



HM TREASURY

Place the public finances on a sustainable footing, ensuring value for money and improved outcomes in public services

In the city regions alone, bus networks are estimated to generate over £2.5bn in economic benefits against public funding of £0.5bn⁴¹.

Increase employment and productivity, ensuring strong growth and competitiveness across all regions of the UK through a comprehensive package of structural reforms, taking advantage of the opportunities provided by leaving the EU

Bus services help people to find, and stay, in employment. The bus sector is also a major employer itself. By cutting congestion the bus facilitates agglomeration economies, boosting growth and competitiveness.



HOME OFFICE

Cut crime and the harm it causes, including cyber-crime and serious and organised crime

Transport authorities and bus operators work to ensure that the bus network is a safe place for all.



MINISTRY OF HOUSING, COMMUNITIES AND LOCAL GOVERNMENT

Deliver the homes the country needs

The bus plays a key role in expanding the supply of accessible land for housing and other developments, as well as in raising the value of existing real estate. Transit orientated development helps to reduce negative impacts of new housing schemes.

**Create socially and economically stronger
and more confident communities**

By cutting congestion and providing access to jobs, education and leisure, the bus builds the social and economic capacity of communities.

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CABINET OFFICE

The Cabinet Office (CO) supports the Prime Minister and works to ensure the effective running of government. It is also the corporate headquarters for Government, in partnership with HM Treasury, and takes the lead in certain key policy areas.

At the time of writing, Cabinet Office activity is guided by five objectives. Investing in the bus can contribute to the achievement of one of these objectives.

How the bus can help the Cabinet Office – at a glance

Support the design and implementation of HM Government's policies and the Prime Minister's priorities

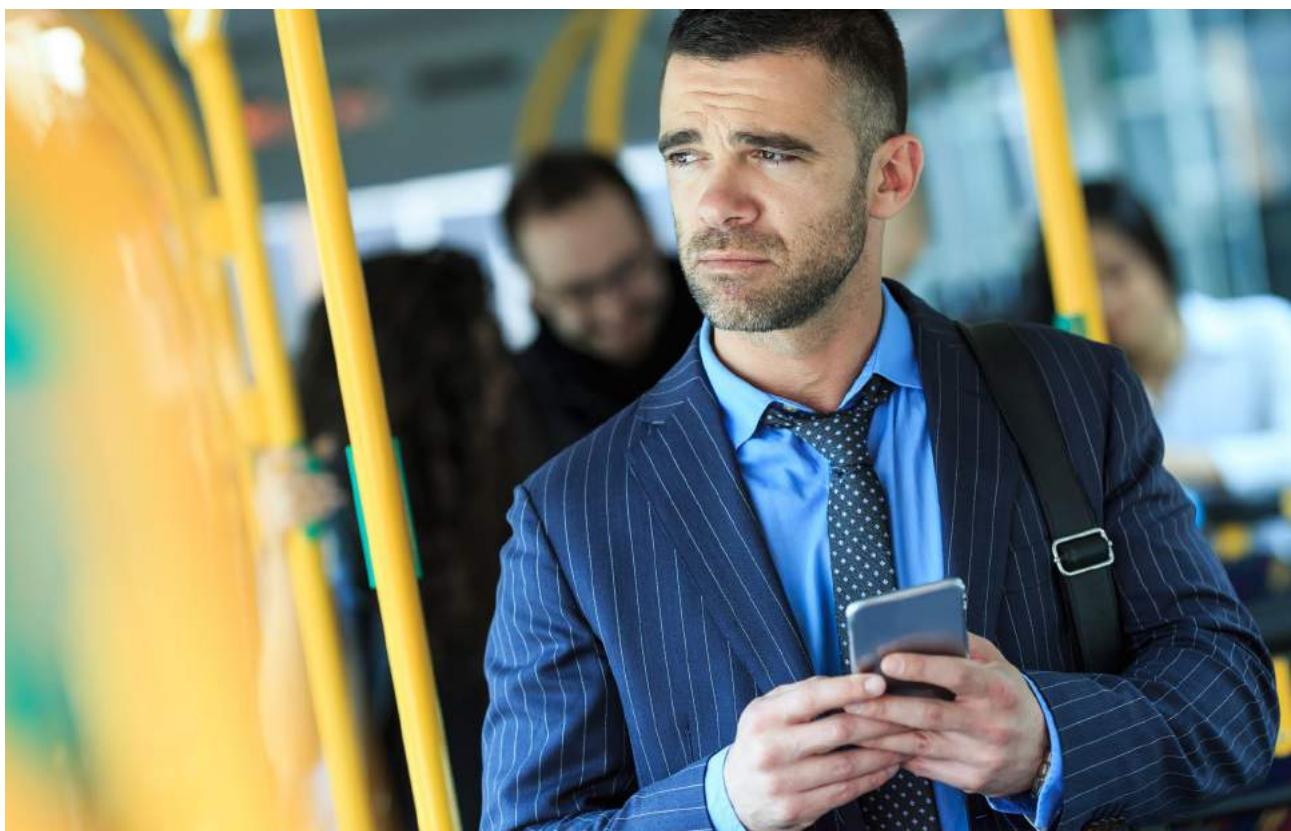
The bus is a unique policy tool which brings positive impacts across Government departments, delivering on economic, environmental and social goals, representing excellent value for money.

More detail on how the bus can help in the achievement of this priority is now provided.

Support the design and implementation of HM Government's policies and the Prime Minister's priorities

The bus is a unique policy tool which brings positive impacts across Government departments, delivering on economic, environmental and social goals, representing excellent value for money.

Compared to car trips, a greater proportion of bus trips are linked to productive activities. For example, 44% of bus trips are for work or education purposes⁴², compared to 31% of car/van driver trips⁴³. Bus commuters generate £64 billion in economic output every year⁴⁴.



AS WELL AS HELPING TO MEET ECONOMIC AND SOCIAL GOALS ACROSS GOVERNMENT, THE BUS HAS A KEY ROLE TO PLAY IN REDUCING CARBON AND IMPROVING AIR QUALITY. JUST ONE DOUBLE DECKER BUS CAN TAKE 75 CARS OFF THE ROAD.

In the city regions alone, bus networks are estimated to generate over £2.5bn in economic benefits against public funding of £0.5bn⁴⁵. Around £1.3bn reflects user benefits from access to jobs, training, shopping and leisure opportunities. The remaining benefits accrue to other transport users and society at large, through decongestion, reduced pollution, lower accident rates, improved productivity and the stand-by value of bus networks.

The bus industry itself has a turnover in excess of £5bn nationally. Much of this is ploughed back into regional and local economies through the supply chain and consumption expenditure by staff⁴⁶.

Furthermore, the bus is a unique and effective tool of social policy. Vulnerable and socially disadvantaged groups in society are most reliant on bus networks. This includes low income households; young people in education, or trying to enter the job market; older people; disabled people; and jobseekers.

Bus services are key to providing access to opportunity for these groups, including connecting jobseekers to work; young people to education and training; and providing a way out of social isolation.

Unlike for most other forms of government funding for measures which have a social dimension, public support for buses generates a significant proportion of benefits which accrue to other road users and society at large, rather than just the users themselves. Buses also have low marginal costs and are disproportionately used by the most vulnerable groups in society.

Key forms of local government support for bus services have been found to generate significant benefits⁴⁷:

- The national travel concession for older and disabled people generates £1.48 of benefits for every £1 of public money spent in Metropolitan areas alone⁴⁸. A proportion of these benefits accrue to other transport users and society at large rather than to those who benefit directly from the concession.
- Local government expenditure to support non-commercial bus services can generate benefits in excess of £3 for every £1 of public money spent⁴⁹. Most of these benefits accrue to bus users who would not otherwise have been able to access opportunities or who would have seen a steep increase in their transport expenditure.

As well as helping to meet economic and social goals across Government, the bus has a key role to play in reducing carbon and improving air quality. Just one double decker bus can take 75 cars off the road⁵⁰. If drivers switched one car journey a month to bus or coach, it would mean one billion fewer car journeys and a saving of two million tonnes of CO₂ each year⁵¹. Furthermore, a modern diesel bus emits 10 times fewer NO_x emissions per passenger than a modern diesel car⁵² whilst advancements in green technology can deliver yet more air quality improvements.

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DEPARTMENT FOR BUSINESS, ENERGY AND INDUSTRIAL STRATEGY

The Department for Business, Energy and Industrial Strategy (BEIS) aims to build an economy that works for everyone, so that there are great places in every part of the UK for people to work and for businesses to invest, innovate and grow.

At the time of writing, BEIS is guided by five objectives. Investing in the bus can contribute to the achievement of four of these objectives.

How the bus can help the Department for Business, Energy and Industrial Strategy – at a glance

Deliver an ambitious industrial strategy

The bus can contribute to all five foundations of productivity which form the basis of the Government's Industrial Strategy – Ideas, People, Infrastructure, Business Environment and Places.

Maximise investment opportunities and bolster UK interests as we leave the EU

The UK bus manufacturing industry has a strong international reputation and an impressive track record in securing large orders outside of the EU.

Promote competitive markets and responsible business practices

The bus sector and the transport sector more widely is an important local employer and individual organisations have the potential to act as 'anchor institutions' using their purchasing power to procure goods and services from local suppliers.

Ensure the UK has a reliable, low cost and clean energy system

With growing numbers of electric buses coming into service, there are opportunities for vehicles to transfer energy back to the grid as part of a smart and connected network.

More detail on how the bus can help in the achievement of these priorities is now provided.

Deliver an ambitious industrial strategy

The Government's Industrial Strategy is built around five foundations of productivity:

- 1. Ideas – the world's most innovative economy**
- 2. People – good jobs, greater earning power**
- 3. Infrastructure – a major upgrade to the UK's infrastructure**
- 4. Business environment – the best place to start and grow a business**
- 5. Places – prosperous communities across the UK**

The bus can contribute to each of these foundations, as set out below.

1. Ideas – the world's most innovative economy

The UK bus fleet is an ideal testbed for innovative technology and is increasingly smart, connected and electric. Some 99% of buses in the English Metropolitan areas alone are fitted with automatic vehicle location (up from 51% ten years ago), 98% have live smartcard readers (up from 33% in 2010/11) and 43% have free Wi-Fi on board⁵³.

Case study: State-of-the art connected bus shelter⁵⁴

In a UK first, Transport for Greater Manchester installed a high-tech, state of the art bus shelter on Piccadilly, central Manchester. The shelter includes USB and wireless phone charging points, free Wi-Fi as well as news, travel and city information via digital touchscreens. Featuring an attractive design which makes use of intricate patterns and natural materials, the shelter also has a green roof to absorb pollution.



Many developers and start-ups are creating apps and technology to improve bus services and the journey experience, as the examples below show.

Case study: Reading Buses Tech Lab⁵⁵

Owned by Reading Borough Council, Reading Buses launched their Tech Lab in 2018 – a creative space for the development of new apps, technology and ideas to improve transport in Reading.

Accessible 24/7 for development partners, it gives working space and a meeting room for developers, technologists and young companies to nurture their ideas to make journeys better. It also allows access to the company's Open Data server.

The space features areas to represent a bus stop (with real-time information display), a bus arriving (with the front of a bus, a ticket machine and a destination display), and the interior of a bus (with seating, flooring and screens for audio visual announcements).

Six successful 'early projects' are already underway including a tree branch strike detector for double decker buses, seat sensors and using big data to shape future services.

Case study: Manchester transport hackathon⁵⁶

Transport for Greater Manchester, BT and Manchester Science Partnerships ran an Open Innovation Transportation Hackathon, which included a challenge to developers to develop smart functionality for bus stops. Amongst the ideas generated was 'Buzz Alert' which would integrate Amazon Alexa and TfGM data at bus stops to enable passengers to access live travel information via a Voice User Interface.

```

    mod.use_x = True
    mod.use_y = False
    mod.use_z = False
    action = "MIRROR_Y"
    mod.use_x = False
    mod.use_y = False
    mod.use_z = True
    mod.use_x = True
    mod.use_y = True
    mod.use_z = False
    action = "MIRROR_Z"
    mod.use_x = False
    mod.use_y = False
    mod.use_z = True

    action at the end - add back the deselected
    .select=1
    .select=1
    .scene.objects.active = modifier_obj
    .selected" + str(modifier_obj) # modifier
    .ob.select = 0
    .context.selected_objects[e]
    objects[one.name].select = 1
    ("please select exactly two objects")
    OPERATOR CLASSES

    .operator):
    mirror to the selected object"""
    mirror_x"

```

Case study: West Midlands Remix trial⁵⁷

Transport for West Midlands has begun the first UK trial of Remix, a computer programme to improve bus services and routes. The programme can be used to design, test, evaluate, refine and communicate changes to the network. For example, for the planning of socially necessary bus services not provided commercially, Remix allows transport planners to quickly visualise the gaps in the commercial market, test scenarios and understand cost and demographic impacts.



In the region's preparations for hosting the Commonwealth Games, Remix will be used to test scenarios for transporting athletes and spectators between the athlete's village and sporting venues.

The UK bus sector has been at the forefront of the roll-out of electric vehicle technologies for many years. By Summer 2019, London is set to have Europe's biggest electric bus fleet⁵⁸. Transport for London's latest order of 68 electric double decker buses will be built in the UK by British bus manufacturers Alexander Dennis and Optare⁵⁹. Other UK cities have also pioneered electric technology on their bus networks. Nottingham Community Transport on behalf of Nottingham City Council, for example, operate the UK's first all-electric Park and Ride service⁶⁰.

Having spearheaded electric vehicle technology, the bus is increasingly recognised as the ideal form of transport to test innovative autonomous technology. The vehicles travel more slowly and their routes are – for the most part – predictable and potentially able to be programmed in advance. Buses are well suited to running along segregated lanes, therefore avoiding problems associated with mixing with conventional vehicles and reducing the chance of conflict with pedestrians and cyclists. Buses with fully autonomous capabilities (driverless) can be used to boost bus service frequencies or offer services outside of 'traditional' hours which would otherwise be expensive to run due to staff costs.

This potential has been recognised in recent funding allocations from Innovate UK, for example:

- UK bus company Alexander Dennis will manufacture the vehicles for the forthcoming trial of level 4 autonomous technology on public transport using full size single deck buses, which has so far not been achieved anywhere else in the world⁶¹.
- In Cambridgeshire, autonomous bus shuttles are to be trialled on the southern end of the Cambridgeshire guided busway during hours when scheduled bus services do not run. It will pave the way for an autonomous shuttle service that will run in the early mornings, late evenings and during the weekend, filling the void for shift workers, revellers and weekend shoppers. Without the need for a driver, these services outside of normal hours become more viable.

THE UK BUS SECTOR HAS BEEN AT THE FOREFRONT OF THE ROLL-OUT OF ELECTRIC VEHICLE TECHNOLOGIES FOR MANY YEARS. BY SUMMER 2019, LONDON IS SET TO HAVE EUROPE'S BIGGEST ELECTRIC BUS FLEET.



2. People – good jobs, greater earning power

Buses get Britain working. Buses carry a greater proportion of trips for commuting than cars⁶² and more people commute to work by bus than by all other forms of public transport combined⁶³.

Some 400,000 workers are in better, more productive jobs as a direct result of the bus, and the economic output they produce is £400 million per annum⁶⁴. One in ten bus commuters would be forced to look for another job, or give up work altogether, if they could no longer travel to work by bus⁶⁵. Over 50% of businesses considered the bus to have a role in employee recruitment and retention⁶⁶.

Buses are critical to ensure city centres (where the most productive jobs tend to cluster)⁶⁷ remain accessible and are able to grow. Buses carry more than a quarter of all motorised trips into the largest city centres⁶⁸. If half of these trips transferred to the car, city centres would literally grind to a halt, discouraging private sector investment and expansion.

In the worst case scenario (assuming road networks are operating roughly at capacity), if bus networks were to collapse this would lead to a 12.4% reduction in city centre jobs⁶⁹.

Across the six Metropolitan areas, this would equate to a loss of over 100,000 jobs, equivalent to £4.6bn per year in lost GDP⁷⁰. To put this into perspective, this is roughly 23 times the amount of operating subsidy which metropolitan bus networks receive as a whole⁷¹.

Furthermore, supporting the bus industry leads directly to private sector job creation. The sector directly employs 119,000 people across Great Britain⁷². Unlike many other parts of the economy, the bus industry is largely local in nature. Drivers and maintenance staff tend to live near their place of work and their jobs cannot easily be moved to a different region, let alone a different country.

The UK has also developed considerable expertise in bus manufacturing and there are several companies with a strong international reputation, such as Optare and WrightBus. Buses need to be replaced every 10-15 years, generating a steady stream of orders of around three to five thousand new buses every year⁷³. Assuming two thirds of new buses are manufactured in the UK, then bus manufacturing is likely to employ around 2,000 people⁷⁴. A 10% increase in bus kilometres, for example, could be expected to create 200 new full time jobs in manufacturing alone.

3. Infrastructure – a major upgrade to the UK's infrastructure

Although perhaps not as glamourous as new railway stations or tramlines, investment in bus infrastructure, such as bus priority schemes, delivers major benefits at a fraction of the cost of alternatives, with impressive benefit cost ratios. Analysis by KPMG found that under the right circumstances, bus priority measures can deliver £4.90 per £1 of government spending⁷⁵ comprising:

- £2.72 in wider economic and social benefits;
- £1.90 user benefits as a result of journey time savings;
- £0.37 in benefits from reduced externalities due to modal shift from car to bus;
- £0.09 change in operator margin for reinvestment.

Some schemes achieve even greater returns on investment⁷⁶:

- Crawley Fastway: a series of bus priority measures along two core routes combined with frequent services delivered £6.10 in benefits for every £1 spent. The scheme has exceeded passenger growth targets, cut journey times, improved reliability and achieved passenger satisfaction of over 90%.
- South East Hampshire Bus Rapid Transit: this scheme provided an off-road busway on a disused railway line, a new high quality fleet, new bus shelters, real time information and a range of other infrastructure measures. The scheme has delivered a wider economic return on investment of up to £8.10 for every £1 spent.

Highway upgrades, particularly when combined with investment in vehicles, have been found to result in strong patronage growth on bus services. Transport for the West Midlands and the Bus Alliance worked with local highway authorities to combine measures on a key corridor to support growth.

BUS PRIORITY LEADS TO FASTER AND MORE RELIABLE JOURNEY TIMES FOR PASSENGERS. THIS LEADS TO BUS SERVICES BECOMING MORE ATTRACTIVE, IN TURN LEADING TO MORE PASSENGERS – INCLUDING PEOPLE SWITCHING FROM PRIVATE CARS.

Where there was investment in vehicles and highways as a package, the result was a 16% growth in passenger numbers⁷⁷.

Bus priority is not just about bus lanes – although they are often a key feature. Other measures include traffic light priority or dedicated spurs at junctions. Furthermore, as the examples above demonstrate, bus priority schemes are often part of a coordinated package of improvements which could also involve enhancements to streetscapes or investment in new vehicles.

Giving buses greater priority on our roads matters because when road space is at a premium, it makes sense to give priority to those vehicles that can move the most people in the most efficient way. Just one double decker bus can take 75 cars off the road⁷⁸.

Bus priority leads to faster and more reliable journey times for passengers. This leads to bus services becoming more attractive, in turn leading to more passengers - including people switching from private cars. The economics of running the services improves, meaning that more can be provided for less⁷⁹.



**ANALYSIS BY KPMG FOUND THAT UNDER THE RIGHT CIRCUMSTANCES,
BUS PRIORITY MEASURES CAN DELIVER £4.90 PER £1 OF GOVERNMENT
SPENDING.**

Case study: Vantage busway cutting congestion on city streets

The Vantage busway links Leigh/Atherton, Tyldesley, Salford, Manchester City Centre, Oxford Road and Manchester Royal Infirmary. It includes a four and a half-mile traffic-free guided busway section, bus lanes along the route and up to eight state-of-the-art buses every hour⁸⁰.

The service has resulted in an estimated 12,500 fewer cars making the journey into Manchester city centre per week⁸¹.



4. Business environment – the best place to start and grow a business

By efficiently transporting large numbers of people in far less road space than the equivalent number of cars, the bus has a key role in reducing congestion and therefore supporting and stimulating business growth.

The delays and unreliability caused by congestion add to the end cost of consumer products, reduce the productivity of businesses and employees and therefore stymie the ability to innovate and access new markets and resources. A survey of businesses put the cost of congestion at around £17,000 per business, per year, with 90% of businesses reporting congestion to be a problem for them⁸². Buses were singled out in the Eddington Transport Study as offering ‘a very cost-effective way to reduce congestion and support productive labour markets.⁸³

Lower congestion stimulates agglomeration economies which bring workers, businesses and customers closer together and generate significant productivity benefits. It is estimated that bus networks in Metropolitan areas alone generate in excess of £400m per year in agglomeration benefits⁸⁴.

As urban areas grow, so does the pull of agglomeration, in turn making them more productive and increasingly attractive to businesses.

Beyond a certain point, this can lead to congestion creeping up again, driving firms away. The bus widens the catchment area of economic centres, making more land available for development and unlocking space to expand.

The bus, together with other public transport, also provides easy access to markets, customers and qualified staff. Over 50% of businesses consider the bus to have a role in employee recruitment and retention⁸⁵.

BUSES WERE SINGLED OUT IN THE EDDINGTON TRANSPORT STUDY AS OFFERING ‘A VERY COST-EFFECTIVE WAY TO REDUCE CONGESTION AND SUPPORT PRODUCTIVE LABOUR MARKETS.’

5. Places – prosperous communities across the UK

The bus is a key tool that can support economic growth locally, in turn contributing to a healthy national economy.

Compared to car trips, a greater proportion of bus trips are linked to the most economically productive activities. For example, 44% of bus trips are for work or education purposes⁸⁶, compared to 31% of car/van driver trips⁸⁷. Bus commuters generate £64 billion in economic output every year⁸⁸.

More people access their local high street by bus than by any other mode – 40% of shoppers access the high street by bus, compared with 30% by car⁸⁹. Bus users in Great Britain make 1.4 billion shopping trips per year, spending an average of £30 for every return trip. This gives a total estimated retail spend of £21 billion⁹⁰.

The same research found that bus users make 471 million leisure trips per year, spending an average of £26 per trip giving a total estimated spend of £6.2 billion⁹¹. By enabling these activities to take place, buses support local commerce as well as the wider functioning of the economy.

Metropolitan bus networks alone generate over £2.5 billion of economic benefits every year⁹², which is around five times the level of public funding they receive⁹³.

MORE PEOPLE ACCESS THEIR LOCAL HIGH STREET BY BUS THAN BY ANY OTHER MODE – 40% OF SHOPPERS ACCESS THE HIGH STREET BY BUS, COMPARED WITH 30% BY CAR

Just over £1.3bn of total benefits accrue to passengers, who would otherwise have been unable to reach work, education and other opportunities, or who would have been faced with a steep increase in travel costs.

The remaining £1.2bn of benefits accrue to other road users and society at large, essentially through decongestion (which supports private sector growth), reduced accidents and pollution, the stand-by value of bus networks and increased economic productivity.

The bus industry also generates a considerable amount of economic activity in its own right. Overall, the bus industry directly contributes £2.86bn to UK output through the farebox and has a turnover in excess of £5bn, the majority of which is ploughed back into local economies through the supply chain and consumption expenditure by staff⁹⁴.



Maximise investment opportunities and bolster UK interests as we leave the EU

The quality of local transport connections does not only affect domestic trade and investment. Poor quality local transport connections are a barrier to export for one in four businesses – greater than the proportion of businesses who felt poor international connections create a barrier to export (one in five)⁹⁵.

The bus manufacturing industry itself has a role to play in bolstering UK interests. The UK has developed considerable expertise in bus manufacturing with a strong international reputation. is an area where the UK could develop its exporting potential – the global demand for buses is rapidly growing, projected to reach 664,000 units in 2018 with growth expected to be twice as fast as the 2008-2013 rate of increase⁹⁶. As we leave the EU, the examples below demonstrate the industry's ability to export further afield.



THE GLOBAL DEMAND FOR BUSES IS RAPIDLY GROWING, PROJECTED TO REACH 664,000 UNITS IN 2018 WITH GROWTH EXPECTED TO BE TWICE AS FAST AS THE 2008-2013 RATE OF INCREASE

Case study: A UK manufacturing success story

Wrightbus

Northern Ireland-based Wrightbus was the first manufacturer to produce a genuine zero-emission battery-electric bus and also recently introduced the world's first fuel cell double decker bus, using hydrogen and air to generate emission-free electric power for the bus⁹⁷.

Wrightbus recently became the first bus manufacturer ever to supply Micro-Hybrid Euro 6 double decker buses to Latin America as part of a wider plan to supply cities in Mexico and Chile. The clean vehicle technology is expected to have a significant impact on air quality⁹⁸.

The manufacturer has also recently won orders for more than 200 buses from customers in Hong Kong⁹⁹.

Optare

Yorkshire-based bus manufacturer Optare export vehicles across the world, recently securing orders for 114 buses for New Zealand and 94 buses for Dubai¹⁰⁰. The two deals have a combined value of almost £40 million.

Alexander Dennis

Based in Falkirk, with additional manufacturing bases in Guildford and Scarborough, Alexander Dennis buses carry 25,000 passengers around the globe every minute¹⁰¹.

Promote competitive markets and responsible business practices

The bus sector and the transport sector more widely is an important local employer and have the potential to act as ‘anchor institutions’ using their purchasing power to procure goods and services from local suppliers.

The bus sector directly employs 119,000 people across Great Britain. As a large component of the UK economy, the transport sector could play an important role as an exemplary employer, with decent pay and working conditions. This would translate into enhanced productivity and more money to spend locally.

Unlike many other parts of the economy, the bus industry is largely local in nature. Drivers and maintenance staff tend to live near their place of work and their jobs cannot easily be moved to a different region, let alone a different country. This helps to retain benefits locally, boost the competitiveness of regions across the UK and provide ‘anchor institutions’ for local communities.

Ensure the UK has a reliable, low cost and clean energy system

The bus has the potential to be a major contributor towards a clean energy system for the UK. As an increasing proportion of electric buses come into service, possibilities are opened up for vehicle-to-grid transfer of energy. The technology enables energy stored in vehicle batteries to be fed back into the national grid at times of peak demand. Electric buses are ideally positioned being equipped with large stores of batteries, parked for long periods (outside of operating hours) and running on predictable schedules¹⁰³.

THE BUS SECTOR DIRECTLY EMPLOYS 119,000 PEOPLE ACROSS GREAT BRITAIN

Case study: ‘Bus2Grid’ project¹⁰⁴

The first of its kind in the UK, the ‘Bus2Grid’ project will turn a 30 bus garage into a vehicle-to-grid garage. Buses will use smart technology to access two-way charging that enables the bus batteries to give back – as well as take – from the energy grid. The project hopes to pave the way for a mass roll-out of bus vehicle-to-grid technology.

The project is being delivered by a consortium led by SSE and includes the University of Leeds, UK Power Networks and bus manufacturer BYD. It is one of 21 vehicle-to-grid projects being funded by Innovate UK, and the only one to focus on the potential of bus technology¹⁰⁵.



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DEPARTMENT FOR DIGITAL, CULTURE, MEDIA AND SPORT

The Department for Digital, Culture, Media & Sport (DCMS) aims to help drive growth, enrich lives and promote Britain abroad. DCMS work to protect and promote the UK's cultural and artistic heritage and help businesses and communities to grow by investing in innovation and highlighting Britain as a fantastic place to visit. They seek to give the UK a unique advantage on the global stage, striving for economic success.

At the time of writing, DCMS activity is guided by six objectives. Investing in the bus can contribute to the achievement of three of these policy objectives.

How the bus can help the Department for Digital, Culture, Media and Sport – at a glance

Grow an economy that is creative, innovative and works for everyone

The creative economy demands vibrant urban locations with great public transport connectivity over bland, car-based locations. Good bus services can form part of a package to attract businesses from this sector. By cutting congestion, buses facilitate agglomeration economies which promote the sharing of ideas and innovation.

Continually drive the UK's connectivity, telecommunications and digital sectors

The UK's bus fleet and infrastructure is increasingly smart and connected, benefiting from a growing suite of apps and offering free wi-fi for passengers. The bus industry is a strong supporter of the digital sector, offering opportunities for innovative start-ups to develop tools to enhance the experience of passengers.

**BY CUTTING CONGESTION,
BUSES FACILITATE
AGGLOMERATION ECONOMIES
WHICH PROMOTE THE SHARING
OF IDEAS AND INNOVATION.**

Maximise social action, and participation in culture, sport and physical activity

Affordable bus services widen access to volunteering and offer numerous opportunities to perform small acts of kindness and consideration to others. The bus connects people to art, culture, sport and physical activity, regardless of their social or economic background. Walking to and from the bus stop is also one of the easiest ways to incorporate regular exercise into everyday routines.

More detail on how the bus can help in the achievement of each of these priorities is provided below.

Grow an economy that is creative, innovative and works for everyone

Our economy is changing. Traditional city centre based financial and legal service sectors are now being joined by a growing, and increasingly important, creative sector focused on communication, digital, media and information (referred to as the 'flat white economy'¹⁰⁶).

These kinds of businesses prefer creative urban enclaves with good public transport and active travel access over bland, dispersed car based locations. Working in harmony with walking and cycling, the bus is ideally placed to support and serve the flat white economy.

Case study: Amazon invest in bus infrastructure¹⁰⁷

Public transport was one of the key priorities for Amazon in selecting a location for its second headquarters in the United States and the company has a track record of investing in bus infrastructure.

In Seattle (its first HQ), Amazon invested \$1.5 million to increase bus frequency on some routes that its employees use to get to work. The investment will add 22 extra weekday bus trips for two years on some of the city's busiest routes – room for 1,700 more passengers. More than half of Amazon employees in the city commute in ways other than a single occupant vehicle and 20 per cent take the bus to work.



SOME 99% OF BUSES IN THE ENGLISH METROPOLITAN AREAS ALONE ARE FITTED WITH AUTOMATIC VEHICLE LOCATION (UP FROM 51% TEN YEARS AGO), 98% HAVE LIVE SMARTCARD READERS (UP FROM 33% IN 2010/11) AND 43% HAVE FREE WI-FI ON BOARD .

The bus also stimulates creative, innovative economies by cutting congestion. The delays and unreliability caused by congestion add to the end cost of products, reduce productivity and stymie the ability to innovate and access new markets.

Lower congestion stimulates agglomeration economies which bring workers, businesses and customers closer together, promoting the sharing of ideas and innovation and generating productivity benefits. It is estimated that bus networks in Metropolitan areas alone generate in excess of £400m per year in agglomeration benefits¹⁰⁸.

Continually drive the UK's connectivity, telecommunications and digital sectors

Transport authorities and bus operators are proactive supporters of the UK's digital sector. The bus fleet and its infrastructure are increasingly smart and connected and make an ideal testbed for innovative technology.

Some 99% of buses in the English Metropolitan areas alone are fitted with automatic vehicle location (up from 51% ten years ago), 98% have live smartcard readers (up from 33% in 2010/11) and 43% have free Wi-Fi on board¹⁰⁹. The latest vehicles come complete with USB ports in seat backs to enable passengers to stay connected on the go.



Case study: State-of-the art connected bus shelter¹¹⁰

In a UK first, Transport for Greater Manchester installed a high-tech, state of the art bus shelter on Piccadilly, central Manchester. The shelter includes USB and wireless phone charging points, free Wi-Fi as well as news, travel and city information via digital touchscreens. Featuring an attractive design which makes use of intricate patterns and natural materials, the shelter also has a green roof to absorb pollution.



Many developers and start-ups are creating apps and technology to improve bus services and the journey experience, as the examples below show.

Case study: Reading Buses Tech Lab¹¹¹

Owned by Reading Borough Council, Reading Buses launched their Tech Lab in 2018 – a creative space for the development of new apps, technology and ideas to improve transport in Reading.

Accessible 24/7 for development partners, it gives working space and a meeting room for developers, technologists and young companies to nurture their ideas to make journeys better. It also allows access to the company's Open Data server.

The space features areas in the room to represent a bus stop (with real-time information display), a bus arriving (with the front of a bus, a ticket machine and a destination display), and the interior of a bus (with seating, flooring and screens for audio visual announcements).

Six successful 'early projects' are already underway including a tree branch strike detector for double decker buses, seat sensors and using big data to shape future services.

Case study: Manchester transport hackathon¹¹²

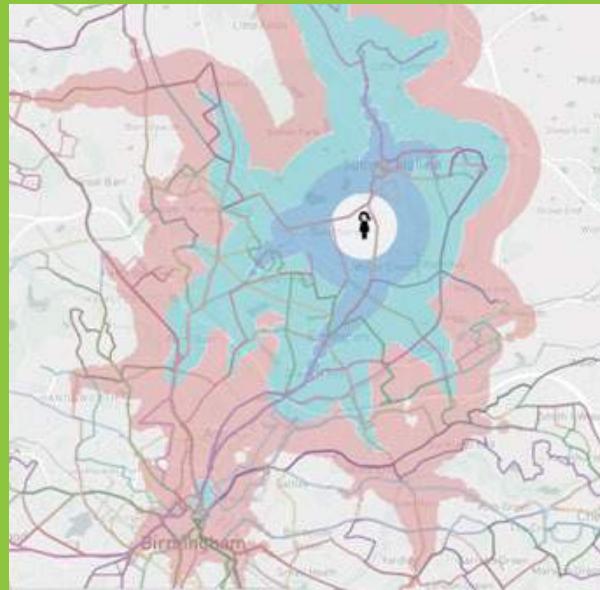
Transport for Greater Manchester, BT and Manchester Science Partnerships ran an Open Innovation Transportation Hackathon, which included a challenge to developers to develop smart functionality for bus stops. Amongst the ideas generated was 'Buzz Alert' which would integrate Amazon Alexa and TfGM data at bus stops to enable passengers to access live travel information via a Voice User Interface.



Case study: West Midlands Remix trial¹¹³

Transport for West Midlands has begun the first UK trial of Remix, a computer programme to improve bus services and routes. The programme can be used to design, test, evaluate, refine and communicate changes to the network. For example, for the planning of socially necessary bus services not provided commercially, Remix allows transport planners to quickly visualise the gaps in the commercial market, test scenarios and understand cost and demographic impacts.

In the region's preparations for hosting the Commonwealth Games, Remix will be used to test scenarios for transporting athletes and spectators between the athlete's village and sporting venues.



Maximise social action, and participation in culture, sport and physical activity

Social action

The bus can help connect people to volunteering opportunities, regardless of their economic or social background. Almost 25% of all households do not have access to a car or van, rising to 44% of families on the lowest real income levels¹¹⁴. The bus is vital in enabling these households to give their time and skills to the community.

Affordable and available bus services encourage volunteering. Older people, for example, contribute £176bn to the economy in the form of consumer spending but also unpaid childcare, adult social care and volunteering¹¹⁵.

The easier we can make it for this group to travel, the more contribution they can make. The national concessionary bus travel scheme for older people undoubtedly assists with this.

Whilst the national concessionary scheme for older people facilitates volunteering, other groups still find the cost of travel to be a significant barrier to giving their time.

According to young people's volunteering groups¹¹⁶ '*one of the biggest barriers young people face to volunteering is transport.*' They further note that '*Young people may have limited access to funds or may be living on a low income and so aren't able to pay for travel to their volunteering opportunity.*' Measures to improve the affordability of travel for young people could help break down these barriers and open up more volunteering opportunities.

Case study: Young Scot volunteer extension

The Scottish Government supported Young Scot National Entitlement Card offers savings on bus and rail tickets for 16-18 year olds. For full-time volunteers, the card is valid up until the holder's 26th birthday¹¹⁷.



At a more micro level, and unlike car travel, the communal experience of bus travel enables people to play a more active part in society through the opportunities it presents for connecting with other people. Travelling on a bus facilitates chances to do things for other people – such as giving up a seat for someone else or helping someone with a buggy get off the bus.

Even simply talking to people at the bus stop or on the bus can make a big difference to people who might otherwise be lonely or isolated. A third of people in Great Britain have deliberately caught the bus to have some human contact¹¹⁸. A recent study of young people's use of buses in London found that '*Buses provide a key site for sociability and public engagement in the city*'¹¹⁹.

Case study: Please offer me a seat badge^{120,121}

April 2018 marked the one year anniversary of the launch of Transport for London's 'Please Offer Me a Seat' badge to make journeys easier for people with conditions whose needs may not be immediately obvious and to give other passengers the confidence to offer a seat. More than 30,000 badges have been issued to disabled customers and people with invisible conditions in the first year of the scheme. The small acts of kindness that the badge encourages can make a real difference to people's confidence to travel and to the wellbeing of passengers more broadly. Following the success of the scheme, Transport for Greater Manchester has launched its own version of the badge (pictured, right).



Culture

Affordable and available bus services help to connect people to arts and culture activities, regardless of their social or economic background.

Without bus services, people without access to a car can find themselves cut off from opportunities to experience and participate in arts and culture. The quotes and examples below from people living in areas experiencing severe cuts to bus services help to illustrate this point and show how people at the younger and older ends of the age spectrum can be particularly vulnerable to exclusion.

"There's been quite a few times where my friends have said do you want to go to the cinema and I can't get there and back so I can't go. It doesn't sound like a big deal but if all your friends are going, you want to go, especially when you're 17¹⁸ – you want to go out and do things."

Anna, 17 years old, Southampton¹²²

"I desperately want to join a choir but I can't because there's no way of getting to one – I don't feel like I could justify spending money on taxi journeys to get to choir practice, when there are other, more vital journeys I am having to find money for, like visiting the doctor. It takes up quite a lot of my pension."

Cy, 68 years old¹²³

City Region transport authorities provide impartial information to help people to access arts and cultural attractions using public transport. Transport authorities also commission pieces to increase people's exposure to the arts and enhance their journey experience. Installing artworks within public transport infrastructure, such as bus stations, is an effective way to reach large numbers of people and incorporate arts and culture into everyday life.

Case study: Art Stop at Fish Quay¹²⁴

A bus shelter at North Shields Fish Quay now doubles as an art gallery with exhibitions that change every few months, giving passengers the chance to enjoy art as they wait for their bus. The idea for an 'art stop' was developed by the North Shields Fish Quay Coastal Communities Team, FISH (Folk Interested in

Shields Harbour) and Studio Above the Fish Shop, in partnership with transport authority Nexus, and North Tyneside Council.

2018 marked 40 years of Nexus's programme of public art on the Tyne and Wear transport network.



Sport and physical activity

The bus can assist in enabling people to incorporate physical activity into their daily lives.

Transport is among the key issues determining whether a person leads a healthy lifestyle. Walking, cycling and public transport offer an alternative to the sedentary lifestyles that cars encourage. They are also among the cheapest, most accessible ways of encouraging physical activity.

It is something that people are easily able to incorporate into their daily routines, meaning they are more likely to keep up the habit.

The role of the bus in particular in promoting physical activity can often go unrecognised, however, walking to the bus stop gets people moving in a way that taking two steps to the car in the drive cannot. The bus does not usually provide a door-to-door service, meaning that a walking or cycling trip at either end will normally be required.

Case Study: Active 10 and Short Hop tickets¹²⁵

Transport for West Midlands and Public Health England (PHE) have worked in partnership to promote the 'Active 10' app in conjunction with 'Short hop' fares. The app aims to help adults build in a 10 minute brisk walk into their day as a simple way to improve health.

Some 42% of adults aged 40-60 in the West Midlands do not achieve 10 minutes of continuous brisk walking over the course of an entire month. According to PHE, a daily brisk walk of 10 minutes can reduce the risk of early death by 15%.



Developed by PHE, the Active 10 app shows how much brisk walking a person is doing each day and how to incorporate more. One suggestion is to walk briskly for an extra one to three stops and then save money on their usual bus fare by only needing to purchase a Short Hop ticket.

An American study¹²⁶ found that people who use public transport spend a median of 19 minutes daily walking to and from public transport. Some 29% of people achieved the required 30 minutes or more daily physical activity solely by walking to and from public transport. People in low income households, minority groups and high-density urban areas were particularly likely to spend 30 minutes or more walking to and from public transport.

Similar results have been observed in the UK. A study by Mindlab¹²⁷ found that walking as part of a return trip by bus provided up to half the recommended daily level of exercise. Study participants walked an average of 1.3km (taking around 15 minutes) when taking a return journey by bus, 2.5 times more than when taking the same journey by car.

Research has also been conducted into the impact free bus travel has on levels of physical activity with the results showing that it results in more trips and more active travel:

- Research by Imperial College London¹²⁸ found that people with a bus pass are more likely to walk frequently and take more 'active travel' journeys.

- A longitudinal study¹²⁹ of 9,000 people in England found that free bus passes for older people had increased their public transport use and that older people who used public transport had reduced odds of being obese compared with those who did not. It found that those who used public transport, or took advantage of free bus travel, were 25% less likely to be obese than those who did not.
- Research into the health impacts of free bus travel for young people in London found that it generated extra walking journeys that either would not have otherwise been undertaken, or would have been carried out as a car passenger¹³⁰.

As well as encouraging physical activity as part of the journey, the bus is also important in enabling people to access sporting activities and facilities, regardless of their economic or social background.



RESEARCH BY IMPERIAL COLLEGE LONDON FOUND THAT PEOPLE WITH A BUS PASS ARE MORE LIKELY TO WALK FREQUENTLY AND TAKE MORE 'ACTIVE TRAVEL' JOURNEYS

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DEPARTMENT FOR EDUCATION

The Department for Education (DfE) is responsible for children's services and education, including early years, schools, higher and further education policy, apprenticeships and wider skills in England.

The areas guiding DfE activity are organised differently than the other departments covered in this report. DfE has numerous priorities organised under its main delivery areas (children's services, early years and wellbeing; schools; post 16 and skills; building our department together). Of these priorities, investing in the bus is best placed to contribute to two in particular.

How the bus can help the Department for Education – at a glance

Promote the educational outcomes of disadvantaged children and young people

For most young people, the bus *is* public transport and is vital for connecting them to valuable opportunities both in and out of school. The experience of independent bus travel in itself develops life skills.

Continue our ground-breaking reforms to apprenticeships, with quality at the core

High travel costs can reduce the number of people willing – or able – to take up apprenticeship opportunities. Reducing the cost of bus travel for apprentices removes this common barrier to entry. More detail on how the bus can help in the achievement of these priorities is now provided.

Promote the educational outcomes of disadvantaged children and young people

The bus is vital for connecting young people to the opportunities that help them to achieve their potential. For most young people, the bus *is* public transport, as the chart below illustrates.

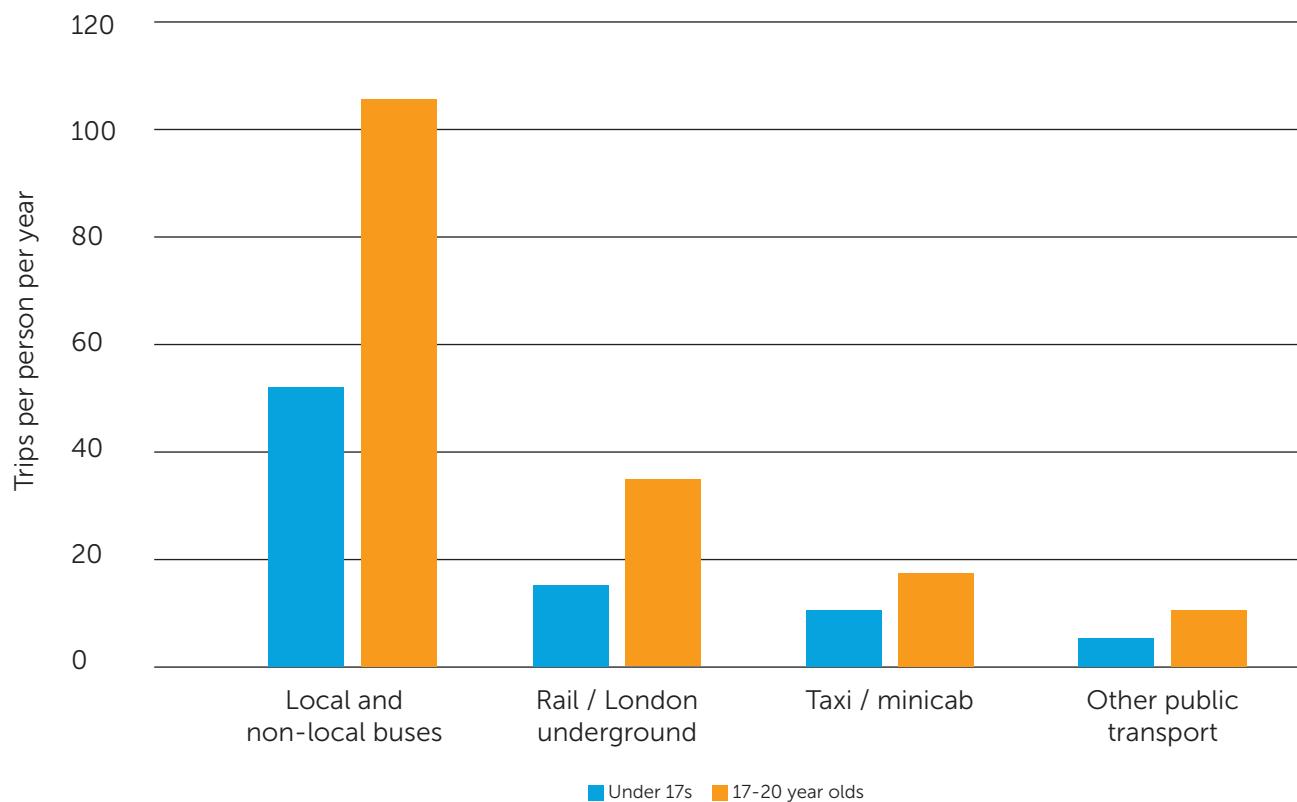
The bus is likely to assume particular importance for children and young people from low income families – 44% of families on the lowest real income levels¹³¹ do not have access to a car or van.

Analysis of the National Travel Survey¹³² indicates that, for under 17s and for 17-20 year olds, the bus is likely to be most important in enabling access to education. Around 16% of trips to and from school by 5-16 year olds are made by bus¹³³.

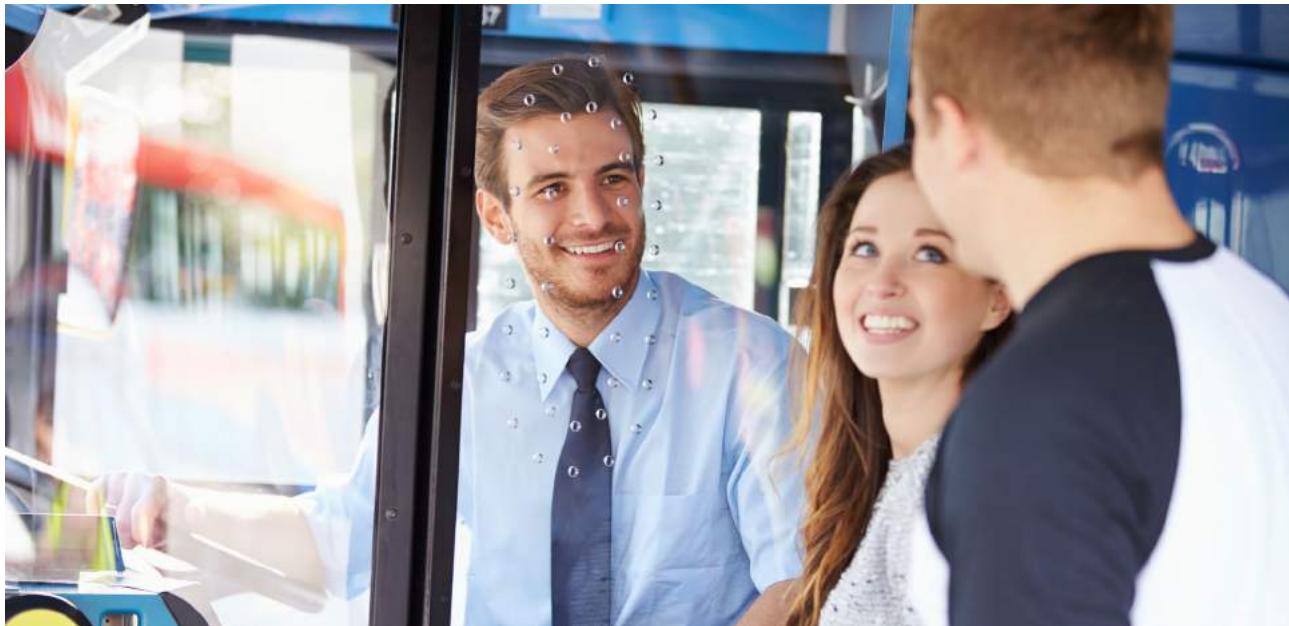
THE BUS IS VITAL FOR CONNECTING YOUNG PEOPLE TO THE OPPORTUNITIES THAT HELP THEM TO ACHIEVE THEIR POTENTIAL. FOR MOST YOUNG PEOPLE, THE BUS *IS* PUBLIC TRANSPORT, AS THE CHART BELOW ILLUSTRATES.



Young people's public transport trips 2017



Source: DfT National Travel Survey table NTS0601



In the vast majority of cases, these trips are made on mainstream, local buses rather than on buses running exclusively for school pupils¹³⁴. For 17-20 year olds, many of whom have yet to pass their driving test or cannot afford to drive, the bus offers an important independent means to access college, university, work, friends and social life.

A survey by the Association of Colleges estimates that some 72% of students take the bus to college¹³⁵. However, the ACEVO Commission on Youth Unemployment found that '*for a great many young people, the costs of transport remain a major barrier to engaging in education or work*' and highlights that '*high transport costs can eat significant chunks out of the earnings of a young person on the minimum wage, and be a major disincentive to staying in training for a prolonged period, or to undertaking unpaid work experience.*'¹³⁶

Available and affordable bus services allow young people and their families – particularly those on lower incomes – a broader choice of learning establishments and pathways, and ensure these options benefit from a diverse intake.

Affordable bus services also enable young people of all ages and backgrounds to access positive activities before and after school, such as breakfast clubs, football practice, drama clubs, homework clubs and volunteering. Such activities are key in building the self-esteem, skills, interests and contacts necessary for social mobility.

A report by the All Party Parliamentary Group on Social Mobility found that participation in out of school activities was a key factor in breaking the cycle of social immobility¹³⁷. It recommended that policy makers should explore ways of levelling the playing field on access to, and participation in, out of school activities.

Available and affordable bus services have the potential to help equalise access to these positive activities. Evidence suggests that high bus fares, or a lack of available bus services can prevent parents from allowing their children to participate in such activities.

Seemingly small hikes in bus fares (for example, an increase of 20p) can make a big difference to low income families, causing parents to restrict the number of journeys their children make, particularly those activities falling outside of school hours¹³⁸.

Transport Focus carried out 1,000 interviews with 14-19 year olds across the country and eight in-depth focus groups¹³⁹ and found that young people value simple, consistent fares above all. Simple, affordable, capped, daily fares (available in some transport authorities) are helpful in giving young people the freedom to make more journeys to the places they want to go, without worrying about additional transport costs.

Case study: My Ticket

The number of bus journeys taken by young people in the Liverpool City Region rose by 142% between 2014 and 2017/18¹⁴⁰ as a result of MyTicket¹⁴¹ – a day ticket for 5-18 year olds priced at £2.20 and offering unlimited bus travel across Merseyside with no time restrictions. The product was developed by the Liverpool City Region Bus Alliance – a partnership between Merseytravel, Arriva, Stagecoach and other Merseyside bus operators.

THE NUMBER OF BUS JOURNEYS TAKEN BY YOUNG PEOPLE IN THE LIVERPOOL CITY REGION ROSE BY 142% BETWEEN 2014 AND 2017/18 AS A RESULT OF MYTICKET

Travelling by bus independently can also be a valuable educational experience in itself, offering the opportunity to develop important life skills such as planning a journey, understanding timetables and handling money. Furthermore, independent travel builds confidence, brings young people into contact with a wide range of people, helps in the development of social skills and expands horizons.

Continue our ground-breaking reforms to apprenticeships, with quality at the core

The Government's 'Essential guide to apprenticeship support' advises that apprentices must ensure they are able to travel to and from their place of work and training provider, and cover the associated costs¹⁴².

However, a 2018 inquiry by the Commons Education Committee¹⁴³ found that this expectation was problematic. It found that travel costs '*can make pursuing an apprenticeship difficult, reducing the opportunities available to the young and disadvantaged*'. The Committee called upon the Government to set out its plans for how to reduce apprentice travel costs across the country.

In some areas, transport authorities have stepped in to support apprentices to travel affordably by bus, in recognition of its importance in enabling more people to access a wider range of apprenticeship opportunities.

Case study: Apprentice Travelcard

In November 2018, the Liverpool City Region Bus Alliance (Merseytravel, Stagecoach, Arriva and other Merseyside bus operators) launched a new Apprentice Travelcard¹⁴⁴. The Travelcard gives apprentices aged 19-24 half-price bus travel across Merseyside. It has been billed as removing one of the main barriers to entry for young people wanting to start apprenticeships – access to affordable transport. It is estimated that the discount could save users more than £400 a year.



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DEPARTMENT FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS

The Department for Environment, Food and Rural Affairs (Defra) is responsible for safeguarding the natural environment, supporting the food and farming industry, and sustaining a thriving rural economy.

At the time of writing, Defra activity is guided by four objectives. Investing in the bus can contribute to the achievement of two of these objectives.

How the bus can help the Department for Environment, Food and Rural Affairs – at a glance

Pass on to the next generation a natural environment protected and enhanced for the future

Improvements in vehicle technology, together with the bus's ability to cut congestion help to protect the environment by improving air quality and mitigating climate change. Buses also offer a means to access the natural environment whilst reducing congestion around beauty spots.

Drive a rural economy that works for everyone

The bus is vitally important in stimulating economic growth in rural areas, connecting local businesses to customers and employees and supporting tourism.

More detail on how the bus can help in the achievement of these priorities is now provided.

Pass on to the next generation a natural environment protected and enhanced for the future

Under this priority, Defra highlights a number of specific areas where the bus has a role to play – ensure clean air; enhance beauty, heritage and engagement with the natural environment; and mitigate and adapt to climate change.

Ensure clean air

Just one double decker bus can take 75 cars off the road . If drivers switched one car journey a month to bus or coach, it would mean one billion fewer car journeys . A modern diesel bus emits 10 times fewer NO_x emissions per passenger than a modern diesel car¹⁴⁷ whilst advancements in green technology can deliver yet more air quality improvements.

The newest diesel buses deliver dramatic reductions in air pollution compared to their predecessors. The latest Euro VI bus emits 95% less NO_x than the previous Euro V standard¹⁴⁸. By way of comparison, a 1980 Routemaster emits 22g of NO_x per kilometre, a 2009 Euro V bus emits 10g per kilometre whilst a 2014 Euro VI bus emits just 0.5g per kilometre¹⁴⁹.

THE NEWEST DIESEL BUSES DELIVER DRAMATIC REDUCTIONS IN AIR POLLUTION COMPARED TO THEIR PREDECESSORS. THE LATEST EURO VI BUS EMITS 95% LESS NO_x THAN THE PREVIOUS EURO V STANDARD

Case study: Cutting congestion and improving air quality in Leeds City Centre^{150,151}

Two park and ride sites on the outskirts of Leeds are removing around 9,000 cars from city centre roads each week as passengers switch to ultra-low emission buses to complete their journeys. Bus journeys and cars parked have risen by 48% year on year with over two million journeys made across the sites at Elland Road (open since 2014) and Temple Green (open since 2017). Both are served by ultra-low emission buses delivering significant air quality benefits both in themselves and as a result of car journeys removed. The buses serving the site are made by UK manufacturer WrightBus and use hybrid electric technology.



A survey of customers using the services found that more than 65% previously travelled to work by car¹⁵². The two park and ride sites were developed by West Yorkshire Combined Authority and Leeds City Council.

Case study: ECO Stars¹⁵³

ECO Stars is a free-to-join fleet recognition scheme that encourages and helps operators of buses (as well as coaches, HGVs, vans and taxis) to function in the most efficient and green way.

The scheme provides recognition for best operational practices and guidance for making improvements. The ultimate aim is to reduce fuel consumption which naturally leads to fewer vehicle emissions.

Members are awarded a star rating upon joining the scheme and work with the ECO Stars team to improve their performance. A typical commercial vehicle operator could expect to cut fuel consumption by at least 5% in the first year and see its annual output of carbon dioxide fall by six tonnes per year. In total, ECO Stars schemes across the UK and Europe have more than 500 members with over 14,000 vehicles.

Air pollution can be cut still further as bus technology continues to evolve. In 2016 there were around 4,000 green, low emission buses in operation¹⁵⁴, saving around £8 million in air quality damage costs¹⁵⁵.

Switching to low or zero emission bus operations has the potential to substantially improve air quality, particularly in urban areas. City of York Council undertook an electric vehicle feasibility study which identified that 80% of the city's bus routes could go electric, a move which would reduce road transport NO_x emissions by 70%¹⁵⁶.

Bus infrastructure can also be designed to filter pollution and particulates from transport.

AIR POLLUTION CAN BE CUT STILL FURTHER AS BUS TECHNOLOGY CONTINUES TO EVOLVE. IN 2016 THERE WERE AROUND 4,000 GREEN, LOW EMISSION BUSES IN OPERATION, SAVING AROUND £8 MILLION IN AIR QUALITY DAMAGE COSTS.

Case study: Green bus shelters¹⁵⁷

Bus shelters in Sheffield City Centre have been planted with green roofs. The living vegetation is in a prime position to absorb and filter pollution from transport exhausts, helping to protect the health of waiting passengers. The bus shelters were developed by Groundwork Sheffield, South Yorkshire PTE and Sheffield City Council.



Enhance beauty, heritage and engagement with the natural environment

A quarter of all households in Great Britain do not have access to a car or van¹⁵⁸. Many rural areas will lack a rail connection and will often be more than a walk or cycle ride away from the people who want to access them. People without a motorised vehicle therefore rely on bus services to open up access to the countryside.

Even for those who do have access to a vehicle, travelling to the countryside by bus represents a more sustainable travel option which helps to protect and improve people's enjoyment of the countryside.

The bus is able to transport large numbers of people using less road space than the equivalent number of cars. In doing so, it helps to reduce congestion around key rural tourist areas and beauty spots, enhancing people's enjoyment of these places. It also reduces pressure on rural village and town centres, where cars can rapidly fill up streets and parking facilities.

According to National Parks England (NPE), up to 96% of visitors visiting England's National Parks arrive by car¹⁵⁹. NPE state that *'This level of private car usage can detract from the special qualities of national parks, and the very experience which visitors are seeking'* and that it *'can also cause localised congestion and impacts on air quality.'*¹⁶⁰

Many rural residents also use the car to get around – just 9% of rural households are without a car, compared to 25% across the country¹⁶¹. According to research in the Lake District National Park¹⁶², car travel by local residents generates 165,000 tonnes of CO₂ annually. Meanwhile, 87% of visitors make their journey to the Lakes by car, generating 322,000 tonnes of CO₂ each year.

There is scope to transfer more resident and visitor journeys to alternative modes, including bus. From the point of view of visitor travel, this could also generate knock on effects for the way people travel when they get home. NPE notes that: *'Enjoyable leisure experiences of public transport are also likely to encourage more utility travel by public transport'*¹⁶³ with all the economic, environmental and social benefits this brings.

ACCORDING TO RESEARCH IN THE LAKE DISTRICT NATIONAL PARK¹⁶², CAR TRAVEL BY LOCAL RESIDENTS GENERATES 165,000 TONNES OF CO₂ ANNUALLY. MEANWHILE, 87% OF VISITORS MAKE THEIR JOURNEY TO THE LAKES BY CAR, GENERATING 322,000 TONNES OF CO₂ EACH YEAR.



Mitigate and adapt to climate change

The bus has a key role to play in the mitigation of, and adaptation to, climate change. If drivers switched one car journey a month to bus or coach, it would mean one billion fewer car journeys and a saving of two million tonnes of CO₂¹⁶⁴.

Congestion dramatically increases CO₂ emissions from road vehicles. Under heavily congested conditions, tail pipe emissions can be increased by as much as three or four times¹⁶⁵. Buses cut congestion by taking car journeys off the road and making better use of limited space. Just thirteen buses are needed to carry the same number of people as 300 cars¹⁶⁶ and take up considerably less space on the road, helping to alleviate congestion.

Research for Greener Journeys¹⁶⁷ found that the potential of the bus to contribute towards CO₂ reduction is greatest in urban areas where passengers per bus are likely to be higher and where congestion, parking problems and other disadvantages of the car are most acute.

Around 910 million bus trips are made each year in the Metropolitan areas¹⁶⁸ and investing in a coordinated programme to reduce emissions from these could achieve a significant impact on carbon emissions and urban air quality.

The latest Euro VI diesel buses are 95% cleaner than previous models and emit fewer emissions overall than the average Euro VI car, despite having 15-20 times the capacity¹⁶⁹.

The green credentials of the bus are enhanced still further by the application of new technologies and innovative fuels. In 2016, almost 4,000 low carbon emission buses were in operation across the UK. These buses have saved over 55,000 tonnes of greenhouse gas emissions per annum compared to the equivalent number of conventional buses¹⁷⁰. More than 40% of new buses sold in 2017 were low carbon emission buses¹⁷¹.

Case study: London's timetable for cleaning the bus fleet¹⁷²

The Mayor of London, through Transport for London, has set ambitious targets for cleaning the capital's bus fleet with the ultimate aim being a public transport fleet which produces zero exhaust emissions.

Work is currently underway to retrofit existing double decks to Euro VI standards and TfL is committed to only buying hybrid double decks. From 2020, TfL aim to buy only electric or hydrogen single decks and from 2025 all double decks purchased will also be electric or hydrogen only.

Case study: Investing in bio-gas^{173, 174}

Owned by Nottingham City Council, Nottingham City Transport is the biggest transport operator in the city. The operator already has one of the youngest, most environmentally friendly bus fleets in the country and is now running the largest fleet of bio-gas double deck buses in the world.

Launched in 2017, the buses reduce CO₂ emissions by up to 84% compared to equivalent brand new diesel buses. Based on well-to-wheel greenhouse gas savings compared to Euro V equivalents, the vehicles are the greenest on the road and are close to carbon neutral.

Bio-gas is produced naturally through anaerobic digestion using food waste, farm waste and sewage. The methane is captured, treated and turned into fuel. The fuel itself emits hardly any particulates or hydrocarbons.



Use of bio-gas reduces the amount of food, farm and sewage waste going to landfill or not being reused. This waste would release high volumes of methane (one of the most potent greenhouse gases) into the atmosphere if left to decompose naturally.

Bus infrastructure can also be designed with climate change mitigation in mind.

Case study: Wigan Bus Station

In common with bus interchanges at Bolton, Rochdale and Altrincham, Wigan's new bus station includes a roof made of Ethylene Tetra Fluoro Ethylene (ETFE), a lightweight alternative to glass. The material allows natural light to enter the building and reduces the need for artificial lighting.

Solar panels on the roof provide around 15% of the bus station's power and the central bus island has been filled with wild flower meadow seeds to provide a habitat for wildlife and attract bees. A cherry tree grove has also been planted. The project was developed by Transport for Greater Manchester and Wigan Council.

Lead the world in food and farming, with a thriving rural economy

The bus is vitally important in stimulating economic growth in rural areas, connecting local businesses to customers and employees and supporting tourism.

Overall, 10% of rural households have no access to a car or van and 39% have one car or van meaning that some members of the household may be restricted in their mobility if somebody else is using the vehicle¹⁷⁵.

The Campaign to Protect Rural England estimates that around half of rural residents do not have access to a car during the day¹⁷⁶. This issue is particularly acute for young people in rural areas who are less likely to drive or have access to a vehicle. This group may find it difficult to reach education, training and employment as well as leisure opportunities.

Case study: Connecting Saddleworth¹⁷⁷

In response to residents' feedback, Transport for Greater Manchester is funding a new bus service to improve connectivity between Saddleworth villages and boost access to rail services and leisure.

The new bus will operate hourly, connecting with morning peak and evening rail services to and from Manchester.

During the daytime, the bus will serve Saddleworth Pool and Leisure Centre.

The need for the bus, and the development of the service, was identified and informed by a survey of residents funded by DfT's Total Transport Pilot Fund.

Almost half of all rural trips are made to other rural areas¹⁷⁸. The second largest proportion (just over one fifth) are made to medium-sized urban areas. Bus connections between these area types are important to keep people connected to jobs and opportunities.

The bus is especially important in supporting the tourist industry that many rural areas rely upon. Research among over 1,000 bus passengers visiting nine rural areas of England and Wales found that two thirds would not have visited the area if the bus service was not available and that 62% of their spending would have been lost¹⁷⁹. Bus users make 471 million leisure trips per year, spending an average of £26 per trip and giving a total estimated spend of £6.2 billion¹⁸⁰.

The majority of spending by visitors arriving by bus is on shopping, food and drink¹⁸¹. Much of this would be spent in local businesses, which in turn use local suppliers and employees, increasing the value of spending to rural communities.

The benefits rural bus services bring are at risk. Rural buses are often not commercially viable due to low passenger numbers and are frequently subsidised by local authorities as 'socially necessary' services. However, cuts to public spending have left transport authorities less able to fill gaps in the commercial network. Socially necessary bus services are a non-statutory area of spend, making them vulnerable as transport authorities seek to ensure they can continue to meet their core legal responsibilities from diminishing revenue budgets. As a result, council supported bus services in rural areas have reduced by approximately 40% in the last decade¹⁸². This will undoubtedly have had a severe impact on the rural economy and the opportunities available to these communities.

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DEPARTMENT FOR INTERNATIONAL TRADE

The Department for International Trade (DIT) seeks to secure UK and global prosperity by promoting and financing international trade and investment, and championing free trade.

At the time of writing, DIT activity is guided by four responsibilities. Investing in the bus can contribute to the achievement of one of these responsibilities.

How the bus can help the Department for International Trade – at a glance

Building the global appetite for British goods and services

The British bus industry has a strong international reputation and an impressive export track record. Poor quality local transport connections are considered more of a barrier to export than poor international connections. By cutting congestion, buses facilitate the flow of goods and services.

More detail on how the bus can help in the achievement of this priority is now provided.

Building the global appetite for British goods and services

The bus manufacturing industry is actively building the global appetite for British goods and services. The UK has developed considerable expertise in bus manufacturing with a strong international reputation. This is an area where the UK could develop its exporting potential – the global demand for buses is rapidly growing, projected to reach 664,000 units in 2018 with growth expected to be twice as fast as the 2008-2013 rate of increase¹⁸³.

Case study: Buses – a UK manufacturing success story

Wrightbus

Northern Ireland-based Wrightbus was the first manufacturer to produce a genuine zero-emission battery-electric bus and also recently introduced the world's first fuel cell double decker bus, using hydrogen and air to generate emission-free electric power for the bus¹⁸⁴.

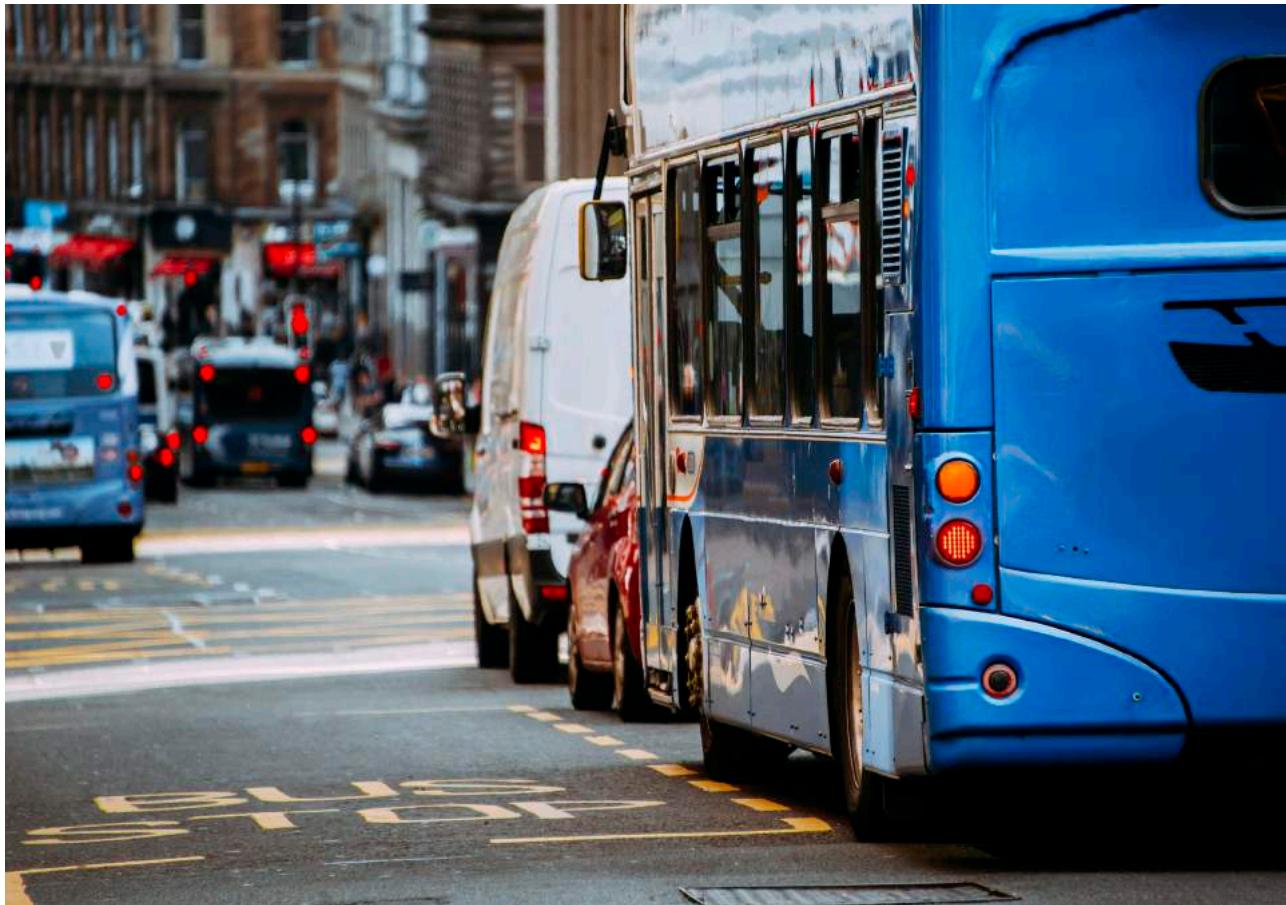
Wrightbus recently became the first bus manufacturer ever to supply Micro-Hybrid Euro 6 double decker buses to Latin America as part of a wider plan to supply cities in Mexico and Chile. The clean vehicle technology is expected to have a significant impact on air quality¹⁸⁵. The manufacturer has also recently won orders for more than 200 buses from customers in Hong Kong¹⁸⁶.

Optare

Yorkshire-based bus manufacturer Optare export vehicles across the world, recently securing orders for 114 buses for New Zealand and 94 buses for Dubai¹⁸⁷. The two deals have a combined value of almost £40 million.

Alexander Dennis

Based in Falkirk, with additional manufacturing bases in Guildford and Scarborough, Alexander Dennis buses carry 25,000 passengers around the globe every minute¹⁸⁸.



The bus also has a role in building exporting potential in the UK economy more widely. Poor quality local transport connections are a barrier to export for one in four businesses – greater than the proportion of businesses who felt poor international connections create a barrier to export (one in five)¹⁸⁹.

The delays and unreliability caused by congestion add to the end cost of consumer products, reduce the productivity of businesses and employees and therefore stymie the ability to innovate and access new markets and resources.

A survey of businesses put the cost of congestion at around £17,000 per business, per year, with 90% of businesses reporting congestion to be a problem for them¹⁹⁰. Buses were singled out in the Eddington Transport Study as offering ‘a very cost-effective way to reduce congestion and support productive labour markets.’¹⁹¹ Just one double decker bus can take 75 cars off the road¹⁹², making space for British goods and services to move around more freely.

A SURVEY OF BUSINESSES PUT THE COST OF CONGESTION AT AROUND £17,000 PER BUSINESS, PER YEAR, WITH 90% OF BUSINESSES REPORTING CONGESTION TO BE A PROBLEM FOR THEM . BUSES WERE SINGLED OUT IN THE EDDINGTON TRANSPORT STUDY AS OFFERING ‘A VERY COST-EFFECTIVE WAY TO REDUCE CONGESTION AND SUPPORT PRODUCTIVE LABOUR MARKETS.’

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DEPARTMENT FOR WORK AND PENSIONS

The Department for Work and Pensions (DWP) is responsible for welfare, pensions and child maintenance policy. As the UK's biggest public service department it administers the State Pension and a range of working age, disability and ill health benefits.

At the time of writing, DWP activity is guided by five objectives. Investing in the bus can contribute to the achievement of three of these objectives.

How the bus can help the Department for Work and Pensions – at a glance

Build a more prosperous society by supporting people into work and helping them to realise their potential

The bus acts as a conduit to enable people to reach their potential, particularly those most at risk of exclusion. The majority of jobseekers in British cities outside London do not have regular access to their own vehicle and primarily rely on the bus to access job opportunities.

Improve outcomes and ensure financial security for disabled people and people with health conditions

The bus is the most commonly used form of public transport among disabled people and is vital in expanding access to employment. To ensure the financial security of this group, bus services must be affordable, accessible and acceptable to use.

Ensure financial security for current and future pensioners

Free off peak bus travel for older people gives this group the freedom to continue contributing to the economy and to society.

More detail on how the bus can help in the achievement of each of these priorities is now provided.

Build a more prosperous society by supporting people into work and helping them to realise their potential

Supporting people into work

Research has shown that some 77% of jobseekers in British cities outside London do not have regular access to a car, van or motorbike, rising to 83% for those unemployed for more than six months¹⁹³. Over half do not have a full car or motorbike driving licence, rising to 63% amongst those unemployed for more than six months¹⁹⁴.

Compared to all individuals aged 16 or over, people who have never worked or are long-term unemployed¹⁹⁵:

- Are more likely to make trips on foot: walking accounts for the biggest proportion of trips made by this group (36%). 25% of trips for all aged 16 or over are made on foot and car driver journeys account for the biggest proportion of trips (48%).
- Are less likely to make trips as a car driver: Just over a fifth of all trips made annually by this group are as a car driver, compared to almost half for all aged 16 or over.
- Are more likely to make trips as a car passenger: 23% of all trips made each year by this group are as a car passenger, compared to 14% for all aged 16 or over. Relying on lifts can make it difficult to get to interviews and work independently.

A STUDY BY THE JOSEPH ROWNTREE FOUNDATION ANALYSED THREE CONTRASTING URBAN LABOUR MARKETS AND POTENTIAL CANDIDATES FOR LOW SKILLED VACANCIES. IT FOUND THAT WHILST 70 TO 90% OF UNFILLED VACANCIES WERE EASILY ACCESSIBLE BY CAR, ONLY 35 TO 55% COULD BE REACHED WITHIN 30 MINUTES BY PUBLIC TRANSPORT.

- **Are more likely to use buses:** Bus journeys account for 11% of all trips made annually by this group, compared to 6% for all aged 16 or over.
- **Are less likely to use rail:** 2% of trips made annually by this group are by rail compared to 4% for all aged 16 or over.

Research by Citizens Advice asked Job Seekers Allowance claimants to complete the sentence '*It would help me get back to work if...*' One of the top two answers was '*...I could find work near where I live.*'¹⁹⁶ Most job opportunities are likely to be further than walking distance away, especially as jobseekers are required to apply for and take up job opportunities that involve up to a 90 minute journey.

As the statistics above illustrate, jobseekers are more likely to rely on public transport, and the bus in particular, to reach these opportunities independently. Research among unemployed people has shown that women, those without access to a car, young people and people with lower skill levels are particularly dependent on bus services¹⁹⁷.

Around 40% of jobseekers say that lack of personal transport or poor public transport is a key barrier preventing them from getting a job¹⁹⁸. If bus connections are lacking, or perceived to be so, jobseekers can find themselves extremely limited in their choice of vacancies.

Employment opportunities can often be located in isolated out-of-town industrial or trading estates that can be difficult to access without a car. This is particularly true for lower skilled jobs - research by Centre for Cities has shown that these tend to be more dispersed and often remote from communities who may wish to access them¹⁹⁹.

A study by the Joseph Rowntree Foundation analysed three contrasting urban labour markets and potential candidates for low skilled vacancies. It found that whilst 70 to 90% of unfilled vacancies were easily accessible by car, only 35 to 55% could be reached within 30 minutes by public transport²⁰⁰.

Research among a sample of 912 jobseekers in British cities outside of London found that over 60% felt they would have less chance of finding a job without bus services. Over a third felt that they would have a better chance of finding work if bus services were improved²⁰¹.

In a deregulated bus market, transport authorities have no direct control over where commercial bus services run. Bus operators need to make a profit and are unlikely to run services that lose money, even if there is a need for them. Instead, they tend to focus on profitable major corridors and commuter routes into city centres. As described above, lower skilled vacancies are often found outside of these key corridors. Transport authorities may step in to fund extra 'socially necessary' (known as subsidised or supported) bus services, but cuts to revenue funding mean that they are becoming less able to do this.

Case study: Flexible bus services to get people to work²⁰²

Transport for Greater Manchester provides Local Link, a flexible transport service for local journeys where public transport coverage is limited. Using shared minibuses, Local Link gets people door-to-door to and from anywhere within each local service area.

Work trips make up almost half of journey requests, with Local Link serving several outlying industrial estates and business parks in Greater Manchester.

The service is available at times which correspond to shift patterns when commercial public transport services would not be running. The services run seven days a week and can be booked online.

Case study: Bus driver training for jobseekers²⁰³

In partnership with First Manchester, Transport for Greater Manchester launched a Sector Based Work Academy (SWBA) giving jobseekers the chance to train and then work as a bus driver for the operator. Participants have the chance of a guaranteed job subject to successful completion of an interview, pre-employment training, license acquisition and work experience.

To tackle any barriers to entry, participants benefit from free travel to and from the training and the course does not affect their ability to claim any current benefits. The SWBA is an evolution of the Train, Learn, Drive and Earn model and has helped 99 participants secure employment between 2003 and 2017.



Simply providing a bus service is not enough in itself. Many jobseekers and newly employed people will encounter additional barriers, such as the cost of travelling to an interview or a new job; lack of awareness of public transport options; or limited travel horizons.

The actual and perceived cost of travelling by bus can be particularly limiting to travel horizons. In the deregulated bus market outside London, bus operators are free to decide the fares they will charge. Bus fares in the Metropolitan areas continue to rise above the rate of inflation, increasing by almost 16% in the last ten years²⁰⁴.

One in four people say their job search is inhibited by the cost of travel to interviews²⁰⁵.

In some cases, the expense of bus travel can make the difference between being better off on benefits or being better off in work. Furthermore, with most wages now paid monthly, having found a job it can be difficult to make ends meet between starting work and the first wage packet.

With support from Jobcentre Plus offices, many city region transport authorities have led schemes to assist people to overcome these barriers to employment.

Case study: Job Access schemes

Job Access schemes combine personalised journey planning, often via Jobcentre Plus, to enable people to get to interviews or new jobs with free or discounted tickets, including during the first weeks of a new job when money might be particularly tight.

The schemes help to broaden travel horizons, giving people the information and personalised advice they need to understand how to get to places using public transport, be reassured that they will arrive where they need to be on time and have the confidence to look for work beyond their immediate local area.

Through participating in Job Access, people are also guided through the maze of tickets and passes that are available and are provided with free or discounted tickets and passes to get to interviews and for use during those 'make or break' weeks of a new job. This support is also crucial in ensuring that new employees stay in work.

Job Access schemes are a tried and tested approach. In the West Midlands, for example, Job Access scheme 'WorkWise' helped nearly 14,000 jobseekers back to work. An evaluation of one such scheme in the area found that more than 80% of customers said that they would have struggled to access employment opportunities without the travel passes provided²⁰⁶. In another survey of WorkWise customers, when asked why they valued the monthly pass provided by the scheme, 76% of respondents said it '*Saves me a lot of money/takes away the worry about money*'²⁰⁷.

Unfortunately, in recent years many Job Access schemes have been cut back due to funding cuts to transport authorities. The flagship West Midlands scheme, for example, is now restricted to former jobseekers entering the first three months of a new job and the discount offered is now 50% off travel rather than a free pass. Previously the scheme offered free travel for jobseekers to get to interviews and to help with the first three months of employment.

Jobcentre Plus now has more flexibility and choice over what support to offer to claimants. Job Access schemes have been proven to work but transport authorities increasingly lack the budget to support them. Schemes like these should be a key component of the toolkit available to Jobcentre Plus managers to help claimants overcome transport barriers to work and DWP funding should be used to support them.

Helping people reach their potential

As well as supporting people into work, DWP is concerned with helping people to realise their potential. The bus can act as a conduit for this and provide a passport out of poverty. If bus services are (and are perceived to be) available, accessible, affordable and acceptable to users, they can connect people to the jobs, education and activities that help them to move 'onwards and upwards' in life and to improve their long-term prospects.

Bus networks tend to be of greatest service to those groups in society who are most vulnerable to exclusion:

- **Young people** for whom public transport is a prime means of getting around independently, particularly where a journey is not suitable for walking or cycling. Young people are among the biggest users of bus services²⁰⁸.
- **Older people** – who may no longer be fit, or feel able, to drive or to afford to run a car. Bus use declines after the age of around 20 but increases again as people enter their 60s²⁰⁹.
- **People from non-White ethnic groups** who are more likely to live in households without access to a car or van. For example, 17% of White adults live in households without a car or van, compared to 24% of Asian/Asian British adults and 44% of Black/African/Caribbean/Black British adults²¹⁰.

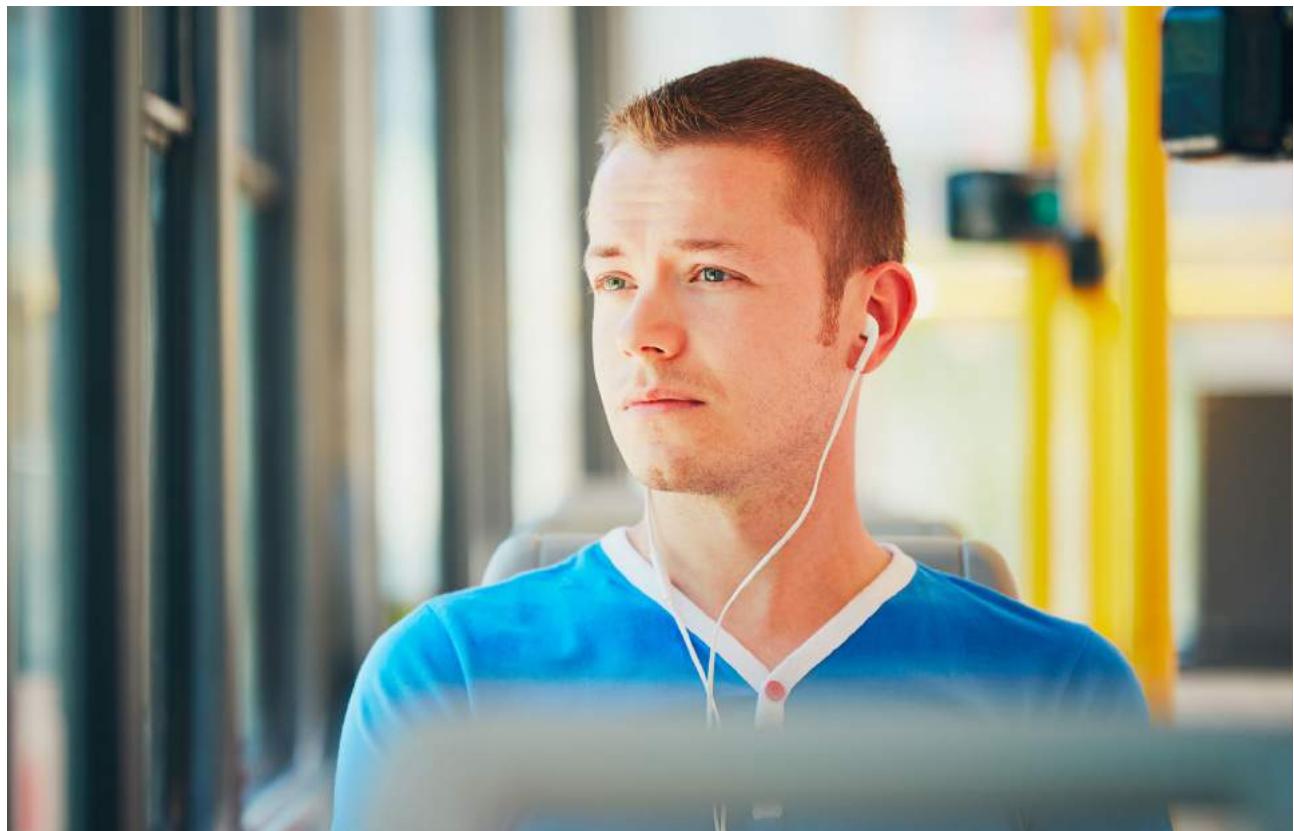
- **Disabled people** who are less likely to have access to a car, and more likely to use bus services than non-disabled people²¹¹.
- **Women** who are less likely hold a full driving licence²¹² and more likely to use the bus than men²¹³.
- **Low income households** – around half of households on the lowest real income quintile do not have access to a car²¹⁴.
- **Jobseekers** – 77% of jobseekers in British cities outside London do not have regular access to a car, van or motorbike²¹⁵.

The bus is a unique and effective tool of social policy because it is automatically targeted at those groups who are most in need of support without resort to complicated means-testing arrangements.

The increased access to opportunities which bus networks provide can make a powerful contribution to greater social mobility and fairness. Of the £2.5 billion in economic benefits generated by bus networks, around £1.3 billion reflect user benefits from access to jobs, education, shopping and leisure opportunities²¹⁶.

Some 400,000 workers are in better, more productive jobs as a direct result of the bus, and the economic output they produce is £400 million per annum²¹⁷. One in ten bus commuters would be forced to look for another job, or give up work altogether, if they could no longer travel to work by bus²¹⁸.

OF THE £2.5 BILLION IN ECONOMIC BENEFITS GENERATED BY BUS NETWORKS, AROUND £1.3 BILLION REFLECT USER BENEFITS FROM ACCESS TO JOBS, EDUCATION, SHOPPING AND LEISURE OPPORTUNITIES





Improve outcomes and ensure financial security for disabled people and people with health conditions

Disabled people are less likely to drive and more likely to use buses, community transport or lifts from friends and family than the general population²¹⁹. According to research by the Disabled Persons Transport Advisory Committee (DPTAC)²²⁰, 60% of disabled people had no car in the household, compared to 27% of the general population.

The same DPTAC research revealed that disabled people were most likely to travel as a car passenger (67% had done so in the last month when surveyed), followed by the bus (43%).

Since the DPTAC research was carried out, it is likely that more disabled people now rely on the bus. Thousands of disabled peoples' needs have been reassessed as they are transferred from Disability Living Allowance onto new Personal Independence Payments. As a result, many are no longer eligible for the Motability Scheme which enables disabled people to lease a car, scooter or electrically powered wheelchair in exchange for their mobility allowance²²¹.

The number of disabled motorists is reported to have fallen by 80,000 between 2015 and 2017²²².

Responses to the Office for Disability Issues (ODI) Life Opportunities survey²²³ reveal that 18% of disabled adults use buses less than they would like and 34% experienced difficulty using local buses. A lack of accessible public transport services can severely restrict access to opportunity.

A survey among disabled people found that²²⁴ 23% of respondents actively seeking employment had to turn down a job offer and a further 23% a job interview, because of inaccessible transport. This is considerably higher than figures found among jobseekers overall where 5% had turned down a job offer in the last year because of transport problems and 12% had turned down interviews²²⁵. In the same survey, 48% said that inaccessible transport had restricted their choice of jobs, rising to 62% of wheelchair users and 86% of people with a visual impairment.

Given that the bus is the most commonly used form of public transport among disabled people, it is pivotal in deciding whether or not people can access opportunities for work, education, health and leisure.

Case study: Extending the English National Concessionary Travel Scheme (ENCTS)

The standard ENCTS allows disabled people to travel for free on the bus after 9:30am. This can restrict the mobility of disabled people who are working or seeking to enter employment, particularly those taking on low paid or voluntary positions.

Transport for Greater Manchester, Merseytravel and South Yorkshire Passenger Transport Executive have all extended the ENCTS to enable disabled people to travel for free at any time on local buses.

Improvements to bus services have the potential to open up a wealth of opportunities for disabled people. Much progress has been made already.

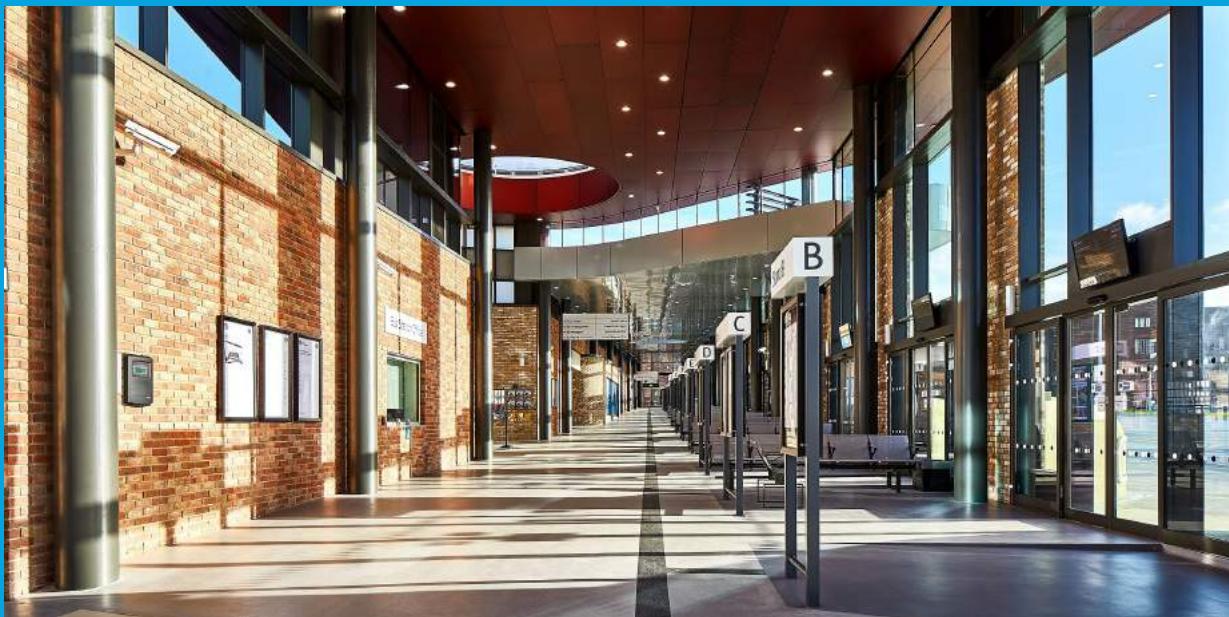
There is now a legal framework for accessibility, free off-peak travel on local buses as well as on-going investment in measures such as low floor buses, training for drivers and accessible information.

Despite these improvements, disabled people continue to face challenges in using the bus. Commonly cited issues include the attitude of drivers or other passengers and problems with deployment of ramps²²⁶. Fixing these issues could make a dramatic difference to the ability of disabled people to access opportunity and achieve financial security, particularly in terms of employment.

Case study: Greater Manchester Disability Design Reference Group

Established in 2008 and managed by Breakthrough UK on behalf of Transport for Greater Manchester (TfGM), the Greater Manchester Disability Design Reference Group works with TfGM to embed accessibility into every aspect of its work²²⁷. The group tests and advises on all new transport infrastructure.

For example, together with the Wigan Access Committee, the group were closely consulted throughout the design and construction of the new Wigan Bus Station to ensure its accessibility to all. The new bus station includes a 'Changing Places' toilet, tactile signage and bus stand identifiers, as well as colour contrasting wayfinding lines across the site.



Case study: 'Welcome aboard' bus driver training DVD

Transport for West Midlands, in partnership with National Express and the Bus Alliance, has produced a training DVD for bus drivers. The DVD aims to improve their awareness and confidence and enable them to better assist passengers with visible and non-visible disabilities. The DVD includes input from people with a wide range of disabilities who talk about their experiences of using the bus and what would be helpful to them. Sections of the video can be viewed here: <https://www.networkwestmidlands.com/information-for/transport-accessibility/disability-awareness-dvd/>.

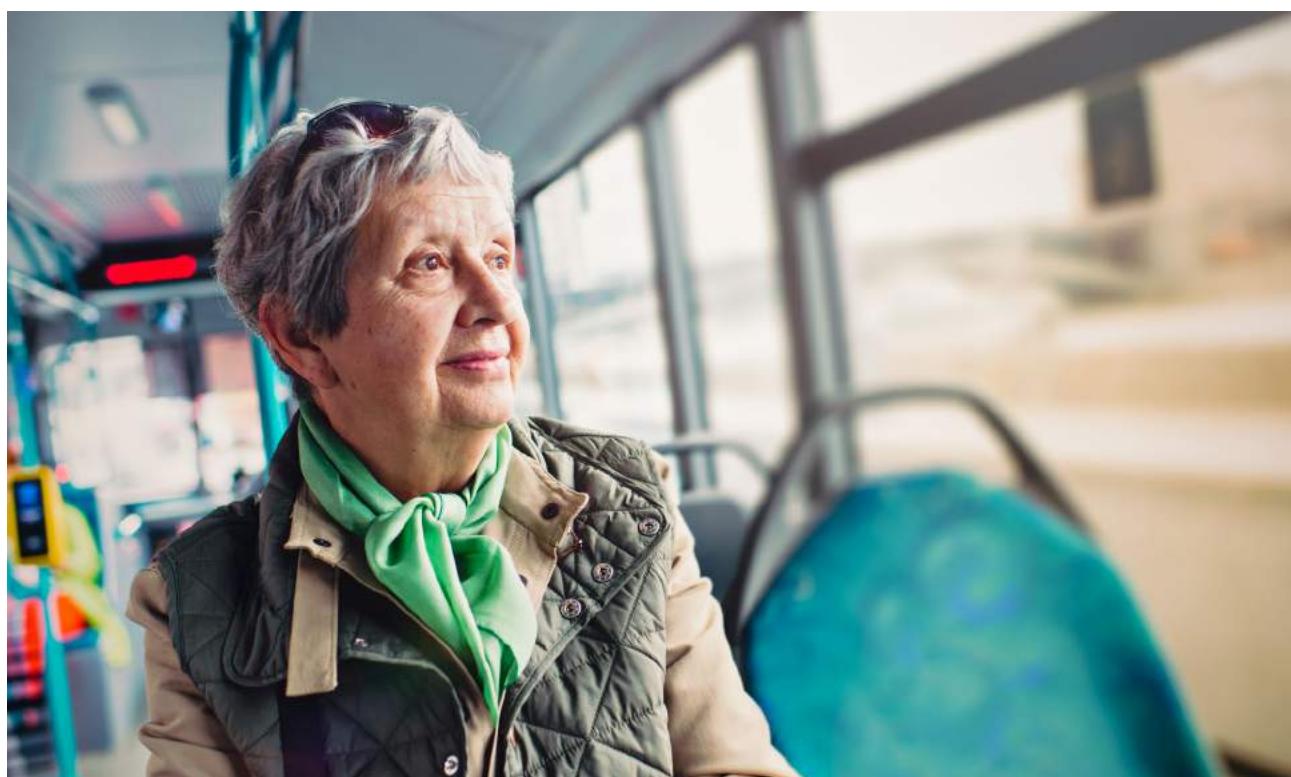


Ensure financial security for current and future pensioners

The English National Concessionary Travel Scheme (ENCTS), which provides older people with free off-peak bus travel, contributes to the financial security of this group. The scheme leaves older people with more money in their pockets and gives them the freedom to continue contributing to the economy and to society, in turn supporting their own financial security.

The ENCTS generates £1.48 of benefits for every £1 of public money spent in Metropolitan areas alone²²⁸.

WRVS²²⁹ estimate that older people contribute £175bn per annum to the economy and society through taxes, consumer spending, provision of social care, volunteering and charitable donations.



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HEALTH AND SOCIAL CARE

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DEPARTMENT OF HEALTH AND SOCIAL CARE

The Department of Health and Social Care (DHSC) supports ministers in leading the nation's health and social care to help people live more independent, healthier lives for longer.

At the time of writing, DHSC activity is guided by six objectives. Investing in the bus can contribute to the achievement of three of these objectives.

How the bus can help the Department of Health and Social Care – at a glance

Keep people healthy and support economic productivity and sustainable public services

Walking to and from the bus stop provides the chance for easy, everyday physical activity. The bus also brings other health benefits, including better air quality, improved mental wellbeing and access to healthcare facilities and health promoting activities.

Transform primary, community and social care to keep people living more independent, healthier lives for longer in their community

Accessible bus services and free off-peak travel for older and disabled people help to support independence and reduce the need for care. The bus also has an important role to play in tackling loneliness and isolation.

Create value (reduced costs and growing income) by promoting better awareness and adoption of good commercial practice across the Department and its arm's length bodies

Making better use of wider public sector bus fleets could save the NHS money by improving the efficiency of Non-Emergency Patient Transport.

More detail on how the bus can help in the achievement of each of these priorities is now provided.

THE ROLE OF THE BUS IN PROMOTING PHYSICAL ACTIVITY CAN OFTEN GO UNRECOGNISED. HOWEVER, WALKING TO AND FROM THE BUS STOP GETS PEOPLE MOVING IN A WAY THAT TAKING TWO STEPS TO THE CAR IN THE DRIVE CANNOT.

Keep people healthy and support economic productivity and sustainable public services

Transport is among the key issues determining whether a person leads a healthy lifestyle and is fundamental to achieving the Department's 'Prevention is better than cure' vision²³⁰. Walking, cycling and public transport offer an alternative to the sedentary lifestyles that cars encourage. They are also among the cheapest, most accessible ways of encouraging physical activity. It is something that people are easily able to incorporate into their daily routines, meaning they are more likely to keep up the habit.

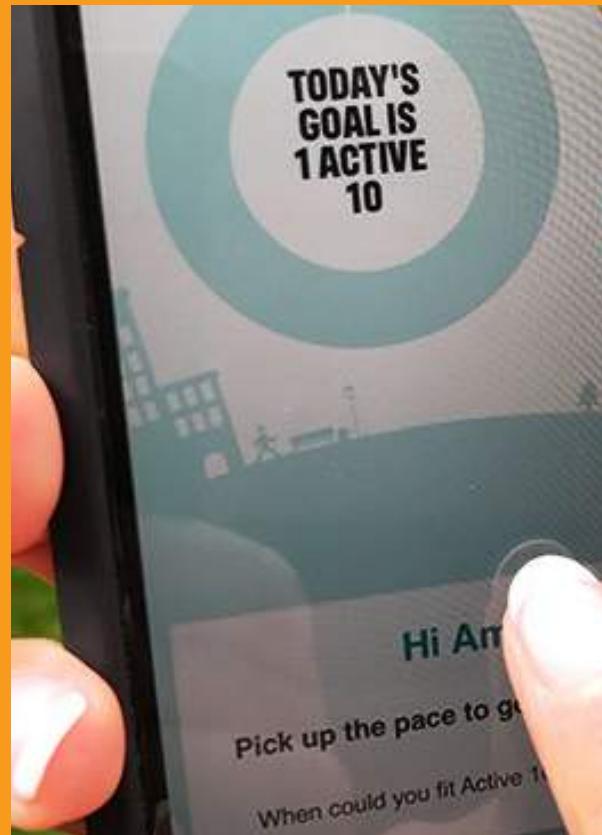
The role of the bus in promoting physical activity can often go unrecognised. However, walking to and from the bus stop gets people moving in a way that taking two steps to the car in the drive cannot. The bus does not usually provide a door-to-door service, meaning that a walking or cycling trip at either end will normally be required.

Case study: Active 10 and Short Hop tickets²³¹

Transport for West Midlands and Public Health England (PHE) have worked in partnership to promote the 'Active 10' app in conjunction with 'Short hop' fares. The app aims to help adults build in a 10 minute brisk walk into their day as a simple way to improve health.

Some 42% of adults aged 40-60 in the West Midlands do not achieve 10 minutes of continuous brisk walking over the course of an entire month. According to PHE, a daily brisk walk of 10 minutes can reduce the risk of early death by 15%.

Developed by PHE, the Active 10 app shows how much brisk walking a person is doing each day and how to incorporate more. One suggestion is to walk briskly for an extra one to three stops and then save money on their usual bus fare by only needing to purchase a Short Hop ticket.



An American study²³² found that people who use public transport spend a median of 19 minutes daily walking to and from public transport. Some 29% of people achieved the required 30 minutes or more daily physical activity solely by walking to and from public transport. People in low income households, minority groups and high-density urban areas were particularly likely to spend 30 minutes or more walking to and from public transport.

Similar results have been observed in the UK. A study by Mindlab²³³ found that walking as part of a return trip by bus provided up to half the recommended daily level of exercise. Study participants walked an average of 1.3km (taking around 15 minutes) when taking a return journey by bus, 2.5 times more than when taking the same journey by car.

Research has also been conducted into the impact free bus travel has on levels of physical activity with the findings showing that it results in more trips and more active travel:

- Research by Imperial College London²³⁴ found that people with a bus pass are more likely to walk frequently and take more 'active travel' journeys.
- A longitudinal study²³⁵ of 9,000 people in England found that free bus passes for older people had increased their public transport use and that older people who used public transport had reduced odds of being obese compared with those who did not. It found that those who used public transport, or took advantage of free bus travel, were 25% less likely to be obese than those who did not.
- Research into the health impacts of free bus travel for young people in London found that it generated extra walking journeys that either would not have otherwise been undertaken, or would have been carried out as a car passenger²³⁶.

The role of the bus in preventing poor health extends far beyond generating active travel trips – the bus can, for example, improve air quality; improve mental wellbeing; and enable access to healthcare facilities, healthy activities and healthy food.

Improve air quality

Just one double decker bus can take 75 cars off the road²³⁷. If drivers switched one car journey a month to bus or coach, it would mean one billion fewer car journeys²³⁸. A modern diesel bus emits 10 times fewer NO_x emissions per passenger than a modern diesel car²³⁹.

A MODERN DIESEL BUS EMITS 10 TIMES FEWER NO_x EMISSIONS PER PASSENGER THAN A MODERN DIESEL CAR .

Case study: ECO Stars²⁴⁰

ECO Stars is a free-to-join fleet recognition scheme that encourages and helps operators of buses (as well as coaches, HGVs, vans and taxis) to function in the most efficient and green way.

The scheme provides recognition for best operational practices and guidance for making improvements. The ultimate aim is to reduce fuel consumption which naturally leads to fewer vehicle emissions.

Members are awarded a star rating upon joining the scheme and work with the ECO Stars team to improve their performance. A typical commercial vehicle operator could expect to cut fuel consumption by at least 5% in the first year and see its annual output of carbon dioxide fall by six tonnes per year. In total, ECO Stars schemes across the UK and Europe have more than 500 members with over 14,000 vehicles.

Air pollution can be cut still further as bus technology continues to evolve. In 2016 there were around 4,000 green, low emission buses in operation²⁴¹, saving around £8 million in air quality damage costs²⁴².

Switching to low or zero emission bus operations has the potential to substantially improve air quality, particularly in urban areas.

City of York Council undertook an electric vehicle feasibility study which identified that 80% of the city's bus routes could go electric, a move which would reduce road transport NO_x emissions by 70%²⁴³.

Bus infrastructure can also be designed to filter pollution and particulates from transport.

Case study: Green bus shelters²⁴⁴

Bus shelters in Sheffield City Centre have been planted with green roofs. The living vegetation is in a prime position to absorb and filter pollution from transport exhausts, helping to protect the health of waiting passengers. The bus shelters were developed by Groundwork Sheffield, South Yorkshire PTE and Sheffield City Council.



Improve mental wellbeing

The New Economics Foundation (NEF) has described transport as one of the most important levers for improving wellbeing²⁴⁵. Drawing on NEF research²⁴⁶, the NHS website sets out 'Five steps to mental wellbeing'²⁴⁷. The bus has the potential to contribute to all five of these:

- 1. Connect with people around you:** buses connect people to family and friends, whether on the bus itself or at the places buses link people to.

A study of young people's use of buses in London found that '*Buses provide a key site for sociability and public engagement in the city.*'²⁴⁸. The same can be true for other groups.

Even simply talking to people at the bus stop or on the bus can make a big difference to people who might otherwise be lonely or isolated. Indeed, a survey commissioned by Greener Journeys found that a third of people deliberately catch the bus to have some human contact²⁴⁹. The bus therefore has an important role to play in supporting the cross-government strategy for tackling loneliness²⁵⁰.

The bus also provides an environment for encountering and interacting with a broad range of people, who may not meet under ordinary circumstances.

Furthermore, by reducing traffic congestion (each double decker bus can take 75 cars off the road²⁵¹) we can create environments where it is easier for people to interact socially and which promote outdoor play²⁵².

- 2. Be active:** walking to and from the bus stop can help meet recommended daily levels of physical activity. Buses can also connect people to sports and leisure facilities. For more on this topic, see the beginning of this section.
- 3. Keep learning:** the bus can enable people to access school, college, university and other formal and informal learning activities. Time spent on the bus can also be used to read or do work.
- 4. Give to others:** as well as helping people get to volunteering activities, the communal experience of travelling on a bus presents opportunities to do positive things for other people – such as giving up a seat for someone else or helping someone with a buggy get off the bus.
- 5. Take notice:** travelling on the bus allows time to think, look out of the window and notice the world around us.

Case study: Please offer me a seat badge^{253,254}

April 2018 marked the one year anniversary of the launch of Transport for London's 'Please Offer Me a Seat' badge to make journeys easier for people with conditions whose needs may not be immediately obvious and to give other passengers the confidence to offer a seat. More than 30,000 badges have been issued to disabled customers and people with invisible conditions in the first year of the scheme. The small acts of kindness that the badge encourages can make a real difference to people's confidence to travel and to the wellbeing of passengers more broadly. Following the success of the scheme, Transport for Greater Manchester has launched its own version of the badge.



Research by Mindlab found that taking the bus rather than the car can reduce mental stress by a third²⁵⁵. The study measured the heart rate and Electro-Dermal Response (an indicator of mental stress) of 30 commuters taking similar journeys by car and by bus. In addition to biophysical data, participants were asked to rank their stress levels for each trip. Despite not being regular bus users, 93% said that they found driving more stressful than the same journey by bus.

RESEARCH BY MINDLAB FOUND THAT TAKING THE BUS RATHER THAN THE CAR CAN REDUCE MENTAL STRESS BY A THIRD.

Case study: A safe haven for people with dementia

For people with dementia, bus services often provide a foothold of normality in an uncertain world. Transport authorities work to ensure the bus continues to provide a safe haven for this group.

West Yorkshire Combined Authority works closely with the Dementia Action Alliance and has run dementia awareness sessions for staff in its bus stations²⁵⁶.

Transport authorities including Nexus and South Yorkshire PTE (SYPTE) donate bus stop flags and bus shelters to hospital wards and care homes catering for people with the condition to offer a reassuring sense of routine and familiarity. Bus stops donated by SYPTE include the phone number of the Traveline service and all call centre staff have undergone Safer Places training which includes supporting callers with dementia²⁵⁷.

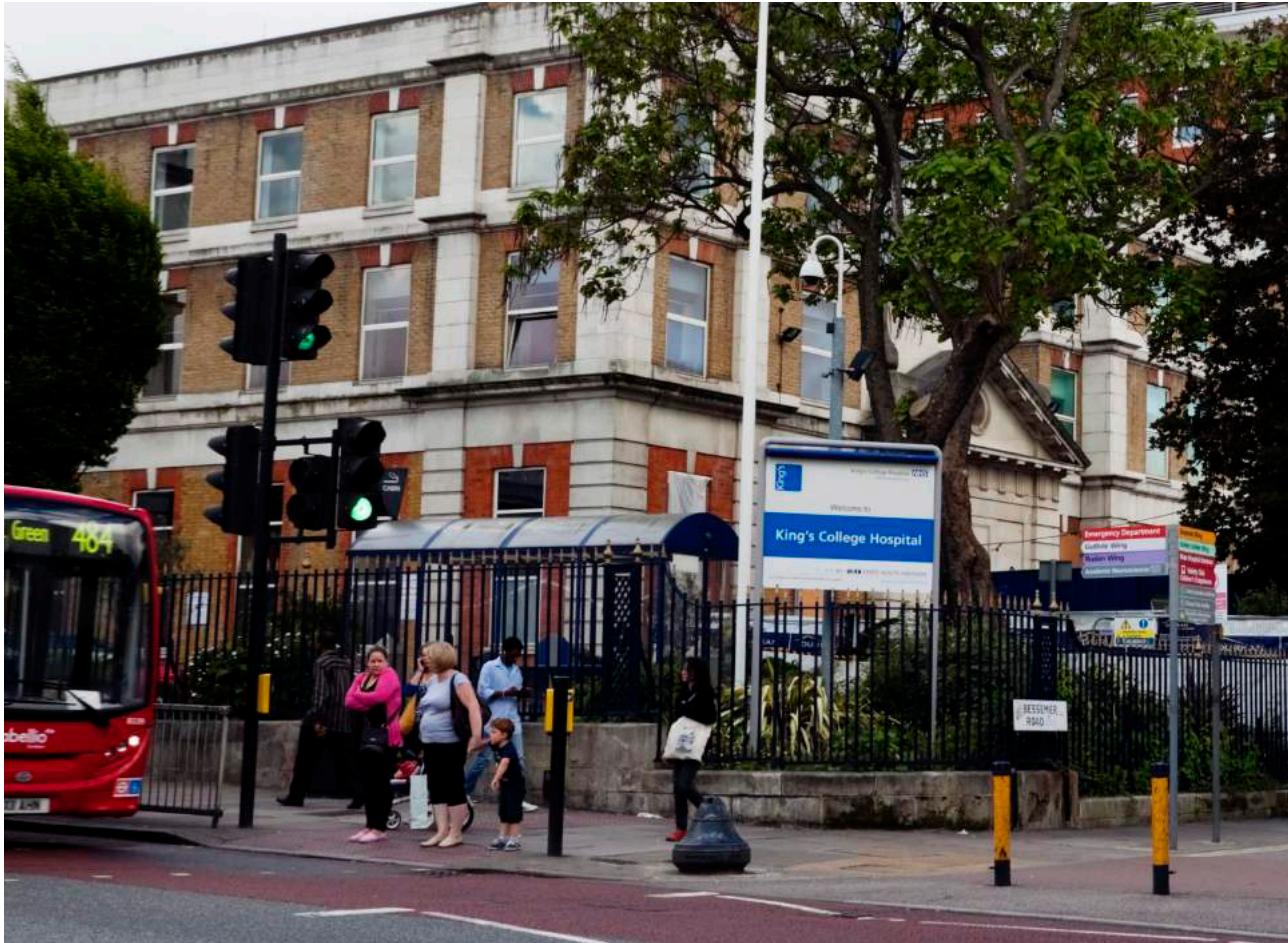
Enable access to healthcare facilities, healthy activities and healthy food

Almost 25% of all households do not have access to a car or van, rising to 44% of families on the lowest real income levels²⁵⁸. Some 44% of people without access to a car find it difficult to get to the doctors or to hospital²⁵⁹.

Missed outpatient appointments alone cost hospitals £600m a year (£100 in lost revenue per missed appointment)²⁶⁰. Research has shown that the likelihood of missing an appointment rises with increasing levels of deprivation and is also more common among the younger and older extremes of the age spectrum²⁶¹. Whilst other facts are likely to be at play, it is surely no coincidence that these are also the groups who are least likely to have access to a car. Transport, distance needed to travel and prohibitive cost of travel have been cited by the Royal College of Physicians as among the most commonly reported reasons for patient 'did not attend'²⁶².

The location of healthcare settings – and their level of accessibility by non-car modes – therefore has significant implications, not only for patients but also visitors, staff and local residents. Enabling easy access to healthcare using sustainable modes like walking, cycling and public transport improves the health of communities, reduces costs to the NHS and opens up access to all.

To ensure this is the case, the NHS should consult with transport bodies when deciding upon locations for healthcare facilities. However, evidence gathered from our members suggests that consultation by the health sector with transport bodies about decisions to open, close, merge or re-locate healthcare settings is patchy. When transport bodies are consulted, too often location decisions have already been made resulting in patients without a car being cut off from services or facing lengthy or costly journeys to reach them. Meanwhile, those with a car contribute to congestion and pollution around hospital sites and surrounding communities.



Too frequently there is the expectation that bus services will naturally appear or can easily be introduced/diverted to serve these sites. However, most services are operated commercially and serve only those routes that make financial sense to the company. Transport authorities can step in to provide 'socially necessary' services, but funding is limited and retrofitting a bus service after a location decision has already been made can be very costly, and sometimes impossible.

These issues can be avoided if transport authorities are consulted at the earliest possible stage in the decision making process regarding the location of healthcare facilities. Transport authorities can provide expert advice about which sites would be most accessible to patients, minimise traffic and support non-car access enabling these factors to be designed in to the scheme from the outset.

Ensuring healthcare settings are well connected to public transport (as well as to walking and cycling networks) gives patients, visitors and staff alike the opportunity to travel in a way that promotes their own health, and the health of others.

TRANSPORT, DISTANCE NEEDED TO TRAVEL AND PROHIBITIVE COST OF TRAVEL HAVE BEEN CITED BY THE ROYAL COLLEGE OF PHYSICIANS AS AMONG THE MOST COMMONLY REPORTED REASONS FOR PATIENT 'DID NOT ATTEND' .

In addition to enabling access to healthcare facilities, the bus also plays an important role in connecting people to health promoting activities and places, from sports and leisure clubs to supermarkets stocking cheap, healthy food. Affordable and available bus services help to equalise access to these services, activities and places.

Buses also play a role in people's exposure to advertising of healthy or unhealthy choices.



Case study: ban on junk food advertising²⁶³

Transport for London has moved to ban junk food advertising across its network (including buses) from February 2019 to help tackle child obesity. Food and drink brands, restaurants, takeaways and delivery services will only be able to place adverts which promote their healthier products, rather than simply publicising brands.

TfL cite evidence from Cancer Research UK which found that young people who recalled seeing junk food adverts every day were more than twice as likely to be obese. The same study revealed 87% of young people found these adverts appealing and three quarters were tempted to eat a product after seeing such an advert.

With 30 million journeys made every day on TfL's network, its advertising sites offer a key opportunity to promote good food and a healthy lifestyle.

TFL CITE EVIDENCE FROM CANCER RESEARCH UK WHICH FOUND THAT YOUNG PEOPLE WHO RECALLED SEEING JUNK FOOD ADVERTS EVERY DAY WERE MORE THAN TWICE AS LIKELY TO BE OBESE.

Transform primary, community and social care to keep people living more independent, healthier lives for longer in their community

The bus enables older and disabled people to maintain their independence, making it more likely that they will keep active and in good health for longer. Transport authorities fund free off-peak bus travel for older and disabled people, support the development of accessible vehicles and pay for door-to-door or Ring and Ride bus services.

These services enable people to independently access shops, services and activities, helping them to stay active and mobile. West Yorkshire Combined Authority, for example, provide 33 access buses to help older and disabled people live independent lives, providing over 445,000 journeys in 2018²⁶⁴.

Just one Ring and Ride bus service in the West Midlands, serving 31,000 active registered blind and disabled users was estimated by accountants Grant Thornton to save the health sector between £13.4m and £58.5m.

The savings are due to the reduced need for care, home help and meals; reduced use of costly taxi, district, Community or NHS transport; reduced need for escorts; and improved access to employment²⁶⁵.

The bus is a key tool in supporting the cross-government drive to tackle loneliness. Buses mean that vulnerable people can simply get out of the house and see other people, something that can make a big difference to a person's wellbeing and likelihood of keeping healthy. The relationships built in this way can also act as a valuable support network.

**JUST ONE RING AND RIDE
BUS SERVICE IN THE WEST
MIDLANDS, SERVING 31,000
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£13.4M AND £58.5M.**



Create value (reduced costs and growing income) by promoting better awareness and adoption of good commercial practice across the Department and its arm's length bodies.

A key opportunity to create value through better awareness and adoption of good commercial practice lies in re-thinking Non-Emergency Patient Transport (NEPT). The NHS could save money and improve efficiency by making better use of wider public sector bus fleets and expertise to deliver this service.

The cost to the NHS of NEPT is at least £150 million per year²⁶⁶ whilst the cost of missed hospital appointments stands at £750 million²⁶⁷. A significant proportion of these missed appointments are likely to be due to transport problems.

A survey of patient transport users in London found that 37% had missed an appointment due to patient transport in the last two years²⁶⁸. Evidence suggests that there is considerable scope for improvement in terms of efficiency, value for money and passenger experience.

A Department for Transport report suggested that: '*Most NHS staff with a commissioning remit have no transport expertise, and do not have the time, budget or energy to go looking for it – hence, for example, they tend to hand the running of PTS over to the Ambulance Service, which has little interest in or incentive to change, given that the performance indicators they are challenged to meet are almost exclusively focused on urgent or emergency services*'²⁶⁹.

Furthermore, evidence suggests that NEPT can be over-specified compared to what the patient actually needs, resulting in unnecessary costs to the sector²⁷⁰.

In 2017, we worked with the Community Transport Association and the Association of Transport Coordinating Officers to explore alternative approaches to commissioning non-emergency patient transport²⁷¹ and found that taking a Total Transport approach to NEPT has the potential to generate significant savings for the NHS as well as better outcomes for patients.

The wider public sector provides and funds collective transport in a variety of forms, including conventional bus services, school transport and social services transport. In addition, there are services provided by community transport and the voluntary sector. Often, buses used by the wider public and voluntary sectors (e.g. social services) have similar specifications to NEPT.

Using Total Transport to bring these fleets together into a shared pool (and potentially a shared budget) could open up them up as an asset for the health sector to use and enable it to meet growing demand for NEPT. Vehicle downtime could be maximised and even coordinated with health appointment times, matching unmet needs with unused capacity in the system.

As part of a Total Transport approach, or as a separate initiative, the health sector could also draw upon the expertise and systems of the transport sector to improve the efficiency of its operations. The transport sector is experienced in procuring and managing cost-effective, accessible transport, including that requiring a care component.

As far back as 2009, a DfT guide to providing transport in partnership²⁷² stated: *'The integrated organisation of local authority and NHS transport provision of non-emergency transport services offers efficiency for a number of reasons: the overlap in clients; the difference in times of peak demands; the similarity in needs in terms of vehicle design and escort provision.'*

If – through the efficient provision of patient transport - we could prevent just 10% of the 5.6 million hospital appointments missed annually²⁷³, the NHS could save £74.5 million per year^{274,275}. This saving would be enough to pay for:

- 83 new MRI scanners (£895,000 each)²⁷⁶ or...
- 8,793 heart bypass treatments (£8,470 each)²⁷⁷ or...
- 13,252 hip replacement treatments (£5,620 each)²⁷⁸.

For more on the potential to improve the efficiency of NEPT see our 2017 report 'Total Transport: a better approach to commissioning non-emergency patient transport?' produced with the Community Transport Association and the Association of Transport Coordinating Officers²⁷⁹.



A SURVEY OF PATIENT TRANSPORT USERS IN LONDON FOUND THAT 37% HAD MISSED AN APPOINTMENT DUE TO PATIENT TRANSPORT IN THE LAST TWO YEARS. EVIDENCE SUGGESTS THAT THERE IS CONSIDERABLE SCOPE FOR IMPROVEMENT IN TERMS OF EFFICIENCY, VALUE FOR MONEY AND PASSENGER EXPERIENCE.

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HM TREASURY

HM Treasury (HMT) is the government's economic and finance ministry, maintaining control over public spending, setting the direction of the UK's economic policy and working to achieve strong and sustainable economic growth.

At the time of writing, HMT activity is guided by three objectives. Investing in the bus can contribute to the achievement of two of these objectives.

How the bus can help HM Treasury – at a glance

Place the public finances on a sustainable footing, ensuring value for money and improved outcomes in public services

In the city regions alone, bus networks are estimated to generate over £2.5bn in economic benefits against public funding of £0.5bn²⁸⁰.

Increase employment and productivity, ensuring strong growth and competitiveness across all regions of the UK through a comprehensive package of structural reforms, taking advantage of the opportunities provided by leaving the EU

Bus services help people to find, and stay, in employment. The bus sector is also a major employer itself. By cutting congestion the bus facilitates agglomeration economies, boosting growth and competitiveness.

More detail on how the bus can help in the achievement of these priorities is now provided.

Place the public finances on a sustainable footing, ensuring value for money and improved outcomes in public services

All local transport authorities are funded by a combination of local council tax and grants from national Government. In the City Regions, a significant proportion of transport spending is invested in bus services, including: planning and funding socially necessary bus routes; working with bus operators to improve services; running concessionary travel schemes; investing in, managing and maintaining bus interchanges, stops and shelters; promoting bus use; and providing impartial and comprehensive travel information to passengers.

As this report demonstrates, the bus is a unique policy tool which brings positive impacts across Government Departments, delivering on economic, environmental and social goals simultaneously, representing excellent value for money for the public purse.

Around 4.4 billion bus trips are made in England each year²⁸¹, around 2.5 times the number of trips on national rail²⁸². In the city regions alone, bus networks are estimated to generate over £2.5bn in economic benefits against public funding of £0.5bn²⁸³. Around £1.3bn reflects user benefits from access to jobs, training, shopping and leisure opportunities. The remaining benefits accrue to other transport users and society at large, through decongestion, reduced pollution, lower accident rates, improved productivity and the stand-by value of bus networks.

AROUND 4.4 BILLION BUS TRIPS ARE MADE IN ENGLAND EACH YEAR , AROUND 2.5 TIMES THE NUMBER OF TRIPS ON NATIONAL RAIL . IN THE CITY REGIONS ALONE, BUS NETWORKS ARE ESTIMATED TO GENERATE OVER £2.5BN IN ECONOMIC BENEFITS AGAINST PUBLIC FUNDING OF £0.5BN.

THE BUS INDUSTRY DIRECTLY CONTRIBUTES £2.86BN TO UK OUTPUT THROUGH THE FAREBOX AND HAS A TURNOVER IN EXCESS OF £5BN NATIONALLY.

The bus industry directly contributes £2.86bn to UK output through the farebox and has a turnover in excess of £5bn nationally. Much of this is ploughed back into regional and local economies through the supply chain and consumption expenditure by staff²⁸⁴.

Furthermore, the bus is a unique and effective tool of social policy. Vulnerable and socially disadvantaged groups in society are most reliant on bus networks, this includes low income households; young people in education, or trying to enter the job market; older people; disabled people; and jobseekers.

Bus services are key to providing access to opportunity including providing jobseekers with access to work; young people to education and training; and providing a way out of social isolation.

Compared to car trips, a greater proportion of bus trips are linked to the most economically productive activities. For example, 44% of bus trips are for work or education purposes²⁸⁵, compared to 31% of car/van driver trips²⁸⁶. Bus commuters generate £64 billion in economic output every year²⁸⁷.

Unlike for most other forms of government funding for measures which have a social dimension, public support for buses generates a significant proportion of benefits which accrue to other road users and society at large, rather than just the users themselves. Buses also have low marginal costs and are disproportionately used by the most vulnerable groups in society.

Key forms of local government support for bus services have been found to generate significant benefits²⁸⁸:

- The national travel concession for older and disabled people generates £1.48 of benefits for every £1 of public money spent in Metropolitan areas²⁸⁹. A proportion of these benefits accrue to other transport users and society at large rather than to those who benefit directly from the concession.
- Local government expenditure to support non-commercial bus services can generate benefits in excess of £3 for every £1 of public money spent²⁹⁰. Most of these benefits accrue to bus users who would not otherwise have been able to access opportunities or who would have seen a steep increase in their transport expenditure.

As well as helping to meet economic and social goals across Government, the bus has a key role to play in reducing carbon and improving air quality. Just one double decker bus can take 75 cars off the road²⁹¹. If drivers switched one car journey a month to bus or coach, it would mean one billion fewer car journeys and a saving of two million tonnes of CO₂ each year²⁹². Furthermore, a modern diesel bus emits 10 times fewer NO_x emissions per passenger than a modern diesel car²⁹³ whilst advancements in green technology can deliver yet more air quality improvements.

Increase employment and productivity, ensuring strong growth and competitiveness across all regions of the UK through a comprehensive package of structural reforms, taking advantage of the opportunities provided by leaving the EU

Looking at the elements of this HM Treasury priority in more detail, the bus has a key role to play in each - 'increasing employment, productivity, competitiveness and ensuring strong growth.'

Increase employment

Research has shown that some 77% of jobseekers in British cities outside London do not have regular access to a car, van or motorbike, rising to 83% for those unemployed for more than six months²⁹⁴. Over half do not have a full car or motorbike driving licence, rising to 63% amongst those unemployed for more than six months²⁹⁵.

Compared to all individuals aged 16 or over, people who have never worked or are long-term unemployed²⁹⁶:

- **Are more likely to make trips on foot:** walking accounts for the biggest proportion of trips made by this group (36%). 25% of trips for all aged 16 or over are made on foot and car driver journeys account for the biggest proportion of trips (48%).
- **Are less likely to make trips as a car driver:** Just over a fifth of all trips made annually by this group are as a car driver, compared to almost half for all aged 16 or over.
- **Are more likely to make trips as a car passenger:** 23% of all trips made each year by this group are as a car passenger, compared to 14% for all aged 16 or over. Relying on lifts can make it difficult to get to interviews and work independently.
- **Are more likely to use buses:** Bus journeys account for 11% of all trips made annually by this group, compared to 6% for all aged 16 or over.
- **Are less likely to use rail:** 2% of trips made annually by this group are by rail compared to 4% for all aged 16 or over.

Research by Citizens Advice asked Job Seekers Allowance claimants to complete the sentence 'It would help me get back to work if...' One of the top two answers was '*...I could find work near where I live.*'²⁹⁷ Most job opportunities are likely to be further than walking distance away, especially as jobseekers are required to apply for and take up job opportunities that involve up to a 90 minute journey.

As the statistics above illustrate, jobseekers are more likely to rely on public transport, and the bus in particular, to reach these opportunities independently. Research among unemployed people has shown that women, those without access to a car, young people and people with lower skill levels are particularly dependent on bus services²⁹⁸.

Around 40% of jobseekers say that lack of personal transport or poor public transport is a key barrier preventing them from getting a job²⁹⁹. If bus connections are lacking, or perceived to be so, jobseekers can find themselves extremely limited in their choice of vacancies.

Employment opportunities can often be located in isolated out-of-town industrial or trading estates that can be difficult to access without a car. This is particularly true for lower skilled jobs - research by Centre for Cities has shown that these tend to be more dispersed and often remote from deprived communities who may wish to access them³⁰⁰.

A study by the Joseph Rowntree Foundation analysed three contrasting urban labour markets and potential candidates for low skilled vacancies. It found that whilst 70 to 90% of unfilled vacancies were easily accessible by car, only 35 to 55% could be reached within 30 minutes by public transport³⁰¹.

Research among a sample of 912 jobseekers in British cities outside of London found that over 60% felt they would have less chance of finding a job without bus services. Over a third felt that they would have a better chance of finding work if bus services were improved³⁰².



A STUDY BY THE JOSEPH ROWNTREE FOUNDATION ANALYSED THREE CONTRASTING URBAN LABOUR MARKETS AND POTENTIAL CANDIDATES FOR LOW SKILLED VACANCIES. IT FOUND THAT WHILST 70 TO 90% OF UNFILLED VACANCIES WERE EASILY ACCESSIBLE BY CAR, ONLY 35 TO 55% COULD BE REACHED WITHIN 30 MINUTES BY PUBLIC TRANSPORT.

In a deregulated bus market, transport authorities have no direct control over where commercial bus services run. Bus operators need to make a profit and are unlikely to run services that lose money, even if there is a need for them. Instead, they tend to focus on profitable major corridors and commuter routes into city centres.

As described above, lower skilled vacancies are often found outside of these key corridors. Transport authorities may step in to fund extra 'socially necessary' (known as subsidised or supported) bus services, but cuts to revenue funding mean that they are becoming less able to do this.

Case study: Flexible bus services to get people to work³⁰³

Transport for Greater Manchester provides Local Link, a flexible transport service for local journeys where public transport coverage is limited. Using shared minibuses, Local Link gets people door-to-door to and from anywhere within each local service area.

Work trips make up almost half of trip requests, with Local Link serving several outlying industrial estates and business parks in Greater Manchester.

The service is available at times which correspond to shift patterns when commercial public transport services would not be running. The services run seven days a week and can be booked online.

Case study: Bus driver training for jobseekers³⁰⁴

In partnership with First Manchester, Transport for Greater Manchester launched a Sector Based Work Academy (SWBA) giving jobseekers the chance to train and then work as a bus driver for the operator. Participants have the chance of a guaranteed job subject to successful completion of an interview, pre-employment training, license acquisition and work experience.

To tackle any barriers to entry, participants benefit from free travel to and from the training and the course does not affect their ability to claim any current benefits. The SWBA is an evolution of the Train, Learn, Drive and Earn model and has helped 99 participants secure employment between 2003 and 2017.

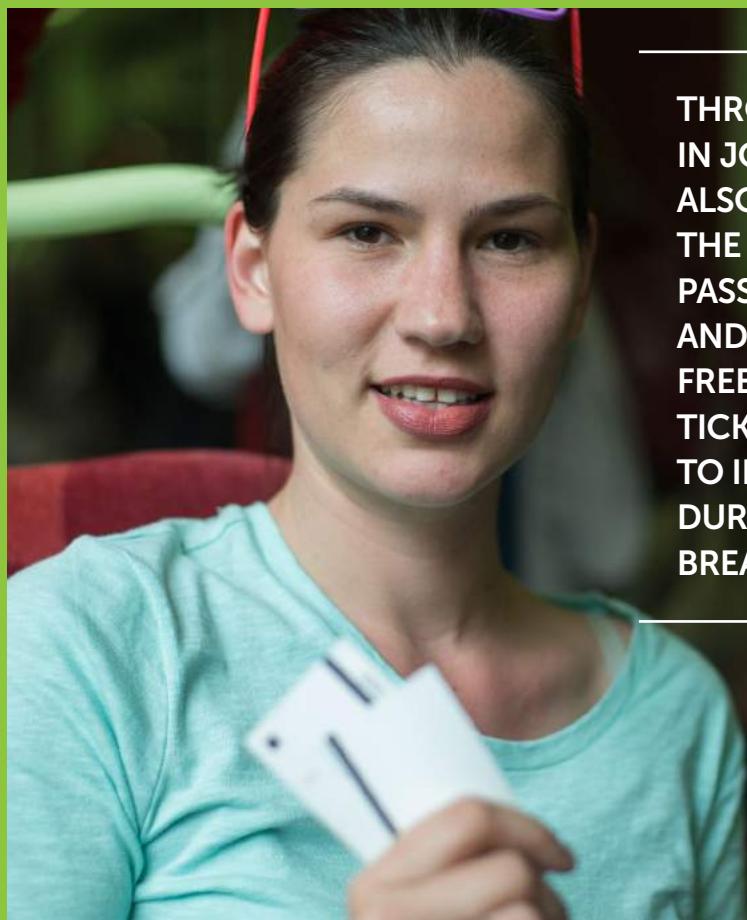


Simply providing a bus service is not enough in itself. Many jobseekers and newly employed people will encounter additional barriers, such as the cost of travelling to an interview or a new job; lack of awareness of public transport options; or limited travel horizons.

The actual and perceived cost of travelling by bus can be particularly limiting to travel horizons. In the deregulated bus market outside London, bus operators are free to decide the fares they will charge. Bus fares in the Metropolitan areas continue to rise above the rate of inflation, increasing by almost 16% in the last ten years³⁰⁵. One in four people say their job search is inhibited by the cost of travel to interviews³⁰⁶.

In some cases, the expense of bus travel can make the difference between being better off on benefits or being better off in work. Furthermore, with most wages now paid monthly, having found a job it can be difficult to make ends meet between starting work and the first wage packet.

With support from Jobcentre Plus offices, many city region transport authorities have led 'Job Access' schemes to assist people to overcome these barriers to employment.



THROUGH PARTICIPATING IN JOB ACCESS, PEOPLE ARE ALSO GUIDED THROUGH THE MAZE OF TICKETS AND PASSES THAT ARE AVAILABLE AND ARE PROVIDED WITH FREE OR DISCOUNTED TICKETS AND PASSES TO GET TO INTERVIEWS AND FOR USE DURING THOSE 'MAKE OR BREAK' WEEKS OF A NEW JOB.

Case study: Job Access schemes

Job Access schemes combine personalised journey planning, often via Jobcentre Plus, to enable people to get to interviews or new jobs with free or discounted tickets, including during the first weeks of a new job when money might be particularly tight.

The schemes help to broaden travel horizons, giving people the information and personalised advice they need to understand how to get to places using public transport, be reassured that they will arrive where they need to be on time and have the confidence to look for work beyond their immediate local area.

Through participating in Job Access, people are also guided through the maze of tickets and passes that are available and are provided with free or discounted tickets and passes to get to interviews and for use during those 'make or break' weeks of a new job. This support is also crucial in ensuring that new employees stay in work.

Job Access is a tried and tested approach. In the West Midlands, for example, Job Access scheme 'Workwise' helped nearly 14,000 jobseekers back to work. An evaluation of one such scheme in the area found that more than 80% of customers said that they would have struggled to access employment opportunities without the travel passes provided³⁰⁷. In another survey of WorkWise customers, when asked why they valued the monthly pass provided by the scheme, 76% of respondents said it '*Saves me a lot of money/takes away the worry about money*'³⁰⁸.

Unfortunately, in recent years many WorkWise schemes have been cut back due to funding cuts to transport authorities. The flagship West Midlands scheme, for example, is now restricted to former jobseekers entering the first three months of a new job and the discount offered is now 50% off travel rather than a free pass. Previously the scheme offered free travel for jobseekers to get to interviews and to help with the first three months of employment.



ASSUMING TWO THIRDS OF NEW BUSES ARE MANUFACTURED IN THE UK, THEN BUS MANUFACTURING IS LIKELY TO EMPLOY AROUND 2,000 PEOPLE. A 10% INCREASE IN BUS KILOMETRES, FOR EXAMPLE, COULD BE EXPECTED TO CREATE 200 NEW FULL TIME JOBS IN MANUFACTURING ALONE.

Jobcentre Plus now has more flexibility and choice over what support to offer to claimants. Job Access approaches have been proven to work but transport authorities increasingly lack the budget to support them. These schemes should be a key component of the toolkit available to Jobcentre Plus managers to help claimants overcome transport barriers to work and DWP funding should be used to support them.

The bus also has an important role to play in protecting existing jobs. Buses carry a greater proportion of trips for commuting than cars³⁰⁹ and more people commute to work by bus than by all other forms of public transport combined³¹⁰.

One in ten bus commuters would be forced to look for another job, or give up work altogether, if they could no longer travel to work by bus³¹¹. Over 50% of businesses consider the bus to have a role in employee recruitment and retention³¹².

In the worst case scenario (assuming road networks are operating roughly at capacity), if bus networks were to collapse this would lead to a 12.4% reduction in city centre jobs³¹³.

Across the six Metropolitan areas, this would equate to a loss of over 100,000 jobs, equivalent to £4.6bn per year in lost GDP³¹⁴. To put this into perspective, this is roughly 23 times the amount of operating subsidy which metropolitan bus networks receive as a whole³¹⁵.

Furthermore, supporting the bus industry leads directly to private sector job creation. The sector directly employs 119,000 people across Great Britain³¹⁶. The UK has a strong bus manufacturing base in particular, with Optare, Alexander Dennis and Wrightbus among those making vehicles from factories based in this country.

Assuming two thirds of new buses are manufactured in the UK, then bus manufacturing is likely to employ around 2,000 people³¹⁷. A 10% increase in bus kilometres, for example, could be expected to create 200 new full time jobs in manufacturing alone.

Unlike many other parts of the economy, the bus industry is largely local in nature. Drivers and maintenance staff tend to live near their place of work and their jobs cannot easily be moved to a different region, let alone a different country.

Increase productivity and ensure strong growth and competitiveness

Some 400,000 workers are in better, more productive jobs as a direct result of the bus, and the economic output they produce is £400 million per annum³¹⁸. Compared to car trips, a greater proportion of bus trips are linked to the most economically productive activities. For example, 44% of bus trips are for work or education purposes³¹⁹, compared to 31% of car/van driver trips³²⁰.

Buses are critical to ensure city centres (where the most productive jobs tend to cluster)³²¹ remain accessible and are able to grow. Buses carry more than a quarter of all motorised trips into the largest city centres³²². If half of these trips transferred to the car, city centres would literally grind to a halt, discouraging private sector investment and expansion.

A survey of businesses put the cost of congestion at around £17,000 per business, per year, with 90% of businesses reporting congestion to be a problem for them³²³. The delays and unreliability caused by congestion add to the end cost of consumer products, reduce the productivity of businesses and employees and therefore stymie the ability to innovate and access new markets and resources.

Good bus services can form part of a package to help attract inward investment to our towns and cities. By efficiently transporting large numbers of people in far less road space than the equivalent number of cars, the bus has a key role in reducing congestion and therefore support and stimulate growth and productivity. Buses were singled out in the Eddington Transport Study as offering '*a very cost-effective way to reduce congestion and support productive labour markets*'.³²⁴

Case study: Vantage busway cutting congestion on city streets

The Vantage busway links Leigh/Atherton, Tyldesley, Salford, Manchester City Centre, Oxford Road and Manchester Royal Infirmary. It includes a four and a half-mile traffic-free guided busway section, bus lanes along the route and up to eight state-of-the art buses every hour³²⁵.

The service has resulted in an estimated 12,500 fewer cars making the journey into Manchester city centre per week³²⁶.



Lower congestion encourages agglomeration economies which bring workers, businesses and customers closer together and generates significant productivity benefits. It is estimated that bus networks in Metropolitan areas alone generate in excess of £400m per year in agglomeration benefits³²⁷.

As urban areas grow, so does the pull of agglomeration, in turn making them more productive and increasingly attractive to businesses. Beyond a certain point, this can lead to congestion creeping up again, driving firms away.

The bus widens the catchment area of economic centres, making more land available for development and unlocking space to grow.

The quality of local transport connections does not only affect domestic trade and investment. Poor quality local transport connections are a barrier to export for one in four businesses - greater than the proportion of businesses who felt poor international connections create a barrier to export (one in five)³²⁸.

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HOME OFFICE

The role of the Home Office (HO) is to keep citizens safe and the country secure.

At the time of writing, HO activity is guided by seven goals. Investing in the bus can contribute to the achievement of one of these goals.

How the bus can help the Home Office – at a glance

Cut crime and the harm it causes, including cyber-crime and serious and organised crime

Transport authorities and bus operators work to ensure that the bus network is a safe place for all.

More detail on how the bus can help in the achievement of this priority is now provided.

Cut crime and the harm it causes, including cyber-crime and serious and organised crime

Transport authorities and bus operators work to improve the perception of safety and security on their networks as well as seeking to prevent crime and anti-social behaviour, protect the places where people travel, and protect vulnerable people, including by addressing hate crime.



National Express West Midlands CCTV³²⁹

National Express has installed up to 12 CCTV cameras on each of its 1,600 buses operating in the area, all producing clear pictures to help identify and target offenders and collect evidence. Thanks to the cameras and close working with the police, there is a 75% success rate in identifying offenders responsible for anti-social behaviour and crime on board National Express buses.

The West Midlands Safer Travel Partnership has also installed 4G Vemotion CCTV units to National Express buses, helping police officers to target anti-social behaviour on buses in real time. Footage is sent live over the 4G network to officers working in the Safer Travel team giving them the information they need to act quickly and take steps to stop the bus if necessary.

Reducing re-offending through restorative justice³³⁰

The Restorative Justice programme run by the West Midlands Safer Travel Partnership aims to tackle anti-social behaviour, such as vandalism, by young people on public transport. The programme encourages young people to recognise, understand and pay back for what they have done rather than prosecuting them.

This could include, for example, cleaning buses or talking to staff. At just 5%, the programme has achieved very low rates of re-offending, compared with the national average for young people of around 32%. The programme saves the criminal justice system an estimated £9 for every £1 spent.



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HOUSING, COMMUNITIES AND LOCAL GOVERNMENT



UTG

MINISTRY OF HOUSING, COMMUNITIES AND LOCAL GOVERNMENT

The Ministry of Housing, Communities and Local Government (MHCLG) aims to create great places to live and work, and to give more power to local people to shape what happens in their area.

At the time of writing MHCLG activity is guided by seven objectives. Investing in the bus can contribute to the achievement of two of these objectives.

How the bus can help the Ministry of Housing, Communities and Local Government – at a glance

Deliver the homes the country needs

The bus plays a key role in expanding the supply of accessible land for housing and other developments, as well as in raising the value of existing real estate. Transit orientated development helps to reduce negative impacts of new housing schemes.

Create socially and economically stronger and more confident communities

By cutting congestion and providing access to jobs, education and leisure, the bus builds the social and economic capacity of communities.

More detail on how the bus can help in the achievement of these priorities is provided below.

Deliver the homes the country needs

The bus plays a key role in expanding the supply of accessible land for housing and other developments, as well as in raising the value of existing real estate.

Households want to be within reach of a large variety of job opportunities, but also close enough to environmental amenities. It is also likely that the demand for environmental amenities and desired house size will increase over time as income grows. Under these conditions, it is easy to see that there is a finite amount of housing growth which a given area can sustain.

This is where bus services can help. Buses widen the catchment area of economic centres, making more land available for house building and making those developments attractive to potential residents by keeping them within easy reach of jobs and amenities.

Case study: Connecting a new town

Northstowe is a new town being developed by Gallagher Estates and Homes England, in close partnership with local authorities. When completed it will provide 10,000 new homes as well as community facilities. The area is a brownfield site, using a former RAF base. It is served by the Cambridge Guided Busway. This provides frequent, rapid connections to the city of Cambridge and to the new Cambridge North Railway Station³³¹.





Research by Transport for New Homes³³² suggests that currently, the bus is not being used to its full potential to support housing development. Their research of over 100 urban extensions and greenfield estates revealed that transport infrastructure investment was dominated by added road capacity and that bus infrastructure was rarely given significant funding. Where bus services were provided in these kinds of sites, often the sites themselves remained designed around the car, with roads too narrow for buses and stops relegated to the outskirts of the development.

Poorly connected developments contribute to congestion and mean that those without access to a private vehicle are cut off from key facilities or forced into car ownership that they cannot afford.

Research conducted by Transport for Quality of Life into integrated transport and land use planning found that '*the evidence leads to one compelling conclusion: where sustainability of transport is an integral consideration in the land use planning process, non-car modes of travel become dominant, but where development proceeds without due regard to transport considerations then car dependence is the outcome.*'³³³

RESEARCH BY TRANSPORT FOR NEW HOMES SUGGESTS THAT CURRENTLY, THE BUS IS NOT BEING USED TO ITS FULL POTENTIAL TO SUPPORT HOUSING DEVELOPMENT.

The report recommends three 'golden rules' for planning policy³³⁴:

- All major developments should be public transport centred;
- All major developments should aim to achieve a design where car journeys are a minority of mode share;
- Development should primarily occur as infill, or at least adjacent to major centres.

Cities around the world are increasingly favouring transit orientated developments. These place good public transport access at the heart of dense, high quality residential and commercial developments, combined with attractive urban realm that supports walking and cycling³³⁵.

Locating new homes near existing public transport infrastructure helps to make it more likely that residents travel sustainably and efficiently by public transport, rather than individually and expensively by car, adding to congestion and other traffic related problems, such as poor air quality. Transport bodies should be engaged early on in the planning process to advise on the connectivity of proposed developments.

Once bus (or other public transport) networks are in place, local transport authorities work to ensure that those living in new developments are aware of the services that exist and are incentivised to use them.

Case study: Residential MetroCard³³⁶

West Yorkshire Combined Authority offers the Residential MetroCard scheme to help property developers mitigate the extra traffic generated by new residential developments.

The scheme offers new home buyers a Residential MetroCard, allowing free bus and rail travel within West Yorkshire for their first year in their new home, followed by a 25% discount on a bus and rail MetroCard in the second year and 10% in the third year.

Participation in the scheme is included as part of the planning consent for selected new developments.

Developer contributions are used to pay for the tickets in the first year and to cover the administration and marketing of the scheme.

The potential to influence travel behaviour when people move house is known to be large. One study, for example, found that 28% of people moving house changed their mode of travel to work, rising to 45% for those changing workplaces at the same time³³⁷. Ensuring bus services are in place and promoted at these times of transition helps to minimise the negative impacts of new developments on congestion and the environment.

Create socially and economically stronger and more confident communities

The bus has a key role to play in creating communities with strong social and economic foundations.

Socially, by cutting congestion the bus promotes liveable streets which foster a sense of community and enable people to interact with one another.

Streets with high volumes of traffic and/or high traffic speeds discourage interaction and can result in community severance – where communities cannot get to the goods, services or people they want to reach. Notably, it reduces the number of people that local residents meet in their everyday lives.

This phenomenon was demonstrated in a seminal study by Appleyard and Lintell of residents of three urban streets in San Francisco which found that the more traffic there was on a street, the fewer social contacts existed between residents³³⁸.

Each double decker bus can take 75 cars off the road and out of communities³³⁹. Greater use of public transport, walking and cycling can reduce traffic on our streets and promote greater opportunities for people to encounter one another, build relationships and foster a greater sense of community.

Economically, the bus connects communities to opportunity. Of the £2.5 billion in economic benefits generated by bus networks, around £1.3 billion reflect user benefits from access to jobs, education, shopping and leisure opportunities³⁴⁰. Compared to car trips, a greater proportion of bus trips are linked to the most economically productive activities. For example, 44% of bus trips are for work or education purposes³⁴¹, compared to 31% of car/van driver trips³⁴². Bus commuters generate £64 billion in economic output every year³⁴³. One in ten bus commuters would be forced to look for another job, or give up work altogether, if they could no longer travel to work by bus³⁴⁴.

BUS COMMUTERS GENERATE £64 BILLION IN ECONOMIC OUTPUT EVERY YEAR . ONE IN TEN BUS COMMUTERS WOULD BE FORCED TO LOOK FOR ANOTHER JOB, OR GIVE UP WORK ALTOGETHER, IF THEY COULD NO LONGER TRAVEL TO WORK BY BUS.

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REFORMING BUS FUNDING TO SAFEGUARD CROSS-SECTOR BENEFITS

The previous chapters have illustrated, department-by-department, the significant contribution bus services make to the achievement of policy objectives across Government. Highlighting this contribution is vital given that the cross-sector benefits of the bus frequently go unrecognised in the complex way in which bus services are funded.

As a result, changes to these funding streams are often made without consideration of the cumulative impact on bus services and the knock-on effects on the ability of other departments to achieve their goals. This chapter sets out the six main sources of public support for bus services and how these have been affected by public spending cuts before looking at funding reforms that could help safeguard the cross-sector benefits of bus services.

How funding for bus services has been affected by public spending cuts

The contribution of the bus to policy goals across sectors has been put at risk as a result of three key trends affecting bus services outside London:

1. A general preference from Government for capital funding (e.g. for large infrastructure projects) rather than for revenue funding, which bus services rely on.
2. Cuts to Ministry of Housing, Communities and Local Government (MHCLG) funding for local government (where Local Transport Authority funding for bus services comes from).
3. Local transport spending losing out to spending on national rail and roads.

These trends have led to reductions in funding for each of the six main sources of public support for bus services outside London.

These six sources are described in the following section along with details of how each has been affected by public spending cuts.

1. Local Transport Authority (LTA) funding of non-commercial, socially necessary bus services ('tendered' or 'supported' services).

LTAs are permitted to step in to support bus services where no commercial service has been provided but where a need exists (for example, unprofitable off-peak services or services to rural areas and isolated housing estates). These 'socially necessary' services (also known as 'tendered' or 'supported' services) make up around 15% of the network.

Support for these services cost around £370 million in 2017/18 outside of London³⁴⁵ but can generate benefits in excess of £3 for every £1 of public money spent³⁴⁶. Most of these benefits accrue to bus users who would otherwise not have been able to access opportunities or who would have seen a steep increase in their transport expenditure.

Impact of public spending cuts

Because of cuts in wider local government funding from MHCLG, many LTAs have been reducing their budgets for supported bus services.

The impact is being felt on the ground. According to research by Campaign for Better Transport, during 2016/17 some 64% of local authorities made such cuts to their supported bus service budgets³⁴⁷.

Since 2010/11, across England supported bus service budgets have reduced by £172 million, representing a 46% drop and resulting in around 3,000 bus services being reduced, altered or withdrawn³⁴⁸. DfT statistics show that between 2015/16 and 2017/18, the number of local authority supported bus miles outside London fell by 22%³⁴⁹.

2. LTA funding of concessionary fare schemes

This includes the Government's English National Concessionary Travel Scheme (ENCTS) for older and disabled people, as well as discretionary spending on enhancements to that scheme and on concessions for other groups like children, young people and jobseekers.

The annual cost of the ENCTS (outside London) is estimated at around £670 million³⁵⁰. Across the Metropolitan areas alone, the ENCTS delivers £1.48 of benefits for every £1 of public money spent³⁵¹. These benefits accrue to other transport users and society at large as well as to those receiving the concession.

Impact of public spending cuts

Although it is LTAs who have the statutory responsibility for reimbursing bus operators for the cost of ENCTS, this is a national policy which is meant to be funded through MHCLG's general purpose grant to Local Authorities.

Unfortunately, MHCLG funding has not kept pace with the rising costs of the ENCTS. Whilst funding previously met the costs of the scheme, it has now been reduced to the extent that it covers less than half of total expenditure, with the remaining costs having to be covered by Local Authorities³⁵².

This shortfall is being made up by cuts to other transport services, such as supported bus routes, accessible transport or concessions available to other groups. In some areas, the shortfall in concessionary funding is credited with wiping out the whole of the supported network leaving many elderly and disabled people with a free bus pass but no services to use it on.

3. Government funding of the Bus Service Operators Grant (BSOG)

BSOG is a rebate on fuel duty for bus operators. BSOG funding for England outside of London amounted to £249 million in 2016/17³⁵³.

Support for BSOG in Metropolitan areas generates £3.35 of benefits for every £1 of public money spent³⁵⁴. Over a quarter of these benefits accrue to other road users through decongestion.

Impact of public spending cuts

The Government reduced the BSOG funding pot by 20% in 2012/13 compared to the previous year and then a further 15% in 2013/14³⁵⁵. Since then, BSOG funding has remained broadly stable but funding is around £15 million lower in 2017/18 than it was in 2014/15³⁵⁶.

This is likely to have put pressure on the commercial viability of services, resulting in service reductions and higher fares.

4. Ad hoc national funding programmes (such as green bus funds) and LTA capital investment (such as in interchanges, stops, shelters and bus priority schemes).

The value of national funding programmes varies but LTA capital investment alone is estimated to amount to between £150 million and £200 million per year, on average³⁵⁷.

Impact of public spending cuts

Capital spending comes from a variety of national and local sources, some of which support more than bus schemes.

It is therefore difficult to make a precise estimate of the extent to which capital spending on bus services has changed.

5. Local Education Authority (LEA) funding for home to school transport (including bus).

Expenditure on home to school transport in England is around £1.1 billion per year³⁵⁸.

Impact of public spending cuts

Research indicates³⁵⁹ that LEAs are cutting back on discretionary areas of school transport spending and post-16 transport, raising charges and tightening entitlement criteria. What is provided is often confined to the statutory minimum and transport services for pupils with severe or complex special needs.

The cuts mean that fewer children and young people will receive free home to school transport and more will be travelling on mainstream supported or commercial buses, putting pressure on concessionary travel budgets. High transport costs could also restrict the ability of children and young people to attend the educational establishment that best meets their needs.

Despite fewer pupils being eligible for school transport (and increases in charges), local authority spending on school transport continues to rise³⁶⁰. This is attributed to various factors after including the increasing costs of providing transport (particularly the growing cost of providing transport for pupils with Special Educational Needs) and shortage of school places resulting in pupils having to travel out of their local area³⁶¹.

Cuts to local authority funding, combined with the rising costs of providing even the bare minimum of home to school transport means that many LEAs are planning further action to manage their budgets – often involving introducing or increasing charges and cutting post-16 transport provision³⁶².

6. LTA financial support for bus service information, staffing and other services.

LTA support for bus services in these areas could take the form of providing travel information to the public via call centres, websites, mobile apps and printed information.

It could also include the staffing of bus stations, monitoring of service use and the implementation of security measures. The extent to which these services are provided varies between LTAs.

Impact of public spending cuts

It is hard to quantify the precise impact on information provision, staff and other support for bus services. However, it is fair to say that some LTAs have already reduced funding for information and staffing and that these trends are highly likely to continue if further spending cuts are imposed.

For the purpose of this paper, we estimate the cut in funding to be of the order of the tens of millions of pounds.

The cumulative impact of public spending cuts

As the section above illustrates, the six main sources of public support for bus services come from a range of different government departments (principally DfT, DfE and MHCLG), working largely in isolation from each other and with restricted understanding of the cumulative effects their decisions on funding have on bus services. Indeed, given that LTA funding for bus comes from wider local government budgets, MHCLG (rather than DfT) is perhaps the department with the most impact on funding for buses but for whom buses are less than a central consideration in their wider decision making.

The cumulative impact is a significant reduction in public support for bus services.

What will happen if the bus continues to be seen as a low priority?

If cuts continue, and if the bus is seen as a low priority when decisions are taken in Whitehall on local government and transport funding, the wide-ranging, cross-sector benefits of bus services that this report has highlighted are placed at risk. In turn, individual Government departments will find it more difficult to meet their key policy goals. Current trends in terms of service reductions, fare increases and resulting patronage decline, will continue.

In practice this will mean:

- Labour markets will shrink and the Government's ambitions to get more unemployed people into work will be hit because fewer people will be able to access areas of employment, especially in outlying areas.
- Skills and apprenticeships will be hit because of reduced access to further education.
- High street regeneration plans will be damaged because of reduced access to town centres.
- There will be increased pressure on congested road networks as some bus users transfer to the car. This will increase business costs (as vans, lorries and business travellers are held up by congestion) and major employment and retail centres will be undermined as congested roads will make them harder to access.

- There will be public health impacts as more people use a car for more trips (forgoing the exercise that bus use provides in getting to and from stops) and as more people are isolated in their own homes through lack of alternative transport (with the consequent impacts on physical and mental health).
- Many of these impacts will be particularly felt by young people as they are especially reliant on the bus to provide them with access to jobs, education, training and leisure.

How can funding be reformed to safeguard the cross-sector benefits of public support for bus services?

Firstly it is helpful to consider some principles on which any reforms should be based:

1. That Government as a whole needs to have coherent oversight of the totality of funding for bus services and thus the implications for bus services of any changes to individual funding streams that directly or indirectly support bus services. As we have noted in this report this is not the case at present.
2. At the same time, bus services are by definition local and therefore support for bus services can be targeted most effectively at the local level.
3. In a deregulated environment operators are unlikely to do more for less i.e. changing the rules to seek to achieve more for a given level of subsidy implies a reduction in income for operators that may result in compensating fares increases or service reductions.
4. The benefits to other Government departments of MHCLG / DfT support for bus services should be recognised and captured.

With these principles in mind we propose that bus funding is both enhanced and reformed.

Key proposal: a Connectivity Fund

Our proposal is that a new 'Connectivity Fund' should be established which brings together the existing BSOG fund (which we estimate will amount to around £249m by 2017/18³⁶³) with additional top slicing from other Government Departments into a ring-fenced pot for local government to support bus services.

How it would work

Government would set criteria for the fund to reflect key government priorities and the specific purpose of the grant (e.g.: 'Connectivity', 'Access to employment', 'Increase in bus patronage', 'Reductions in bus fares', 'Improved environmental performance'). There could also be a requirement for monitoring and evaluation by individual LTAs, and for an annual knowledge-sharing event. The key would be to set criteria which were specific enough to satisfy Government that the theoretical benefits of devolution would be realised in practice, without going so far as to it becoming an exercise in micro-management from Whitehall.

LTAs also need a degree of flexibility in order to spend available funding in the most effective way according to local needs.

This proposed approach would be in line with the four key principles for funding reform set out above. It would have further advantages in that:

- It benefits from the low central administration and bureaucracy costs of a block grant but would also include assurances for central government on outcomes and process;
- There is potential to dovetail the Connectivity Fund with other locally allocated funding streams to maximise the benefits;
- Ring fencing ensures the Connectivity Fund is spent only on bus;
- Bus operators would also have a strong incentive to hold LTAs to account for effective use of the funding.

How much should the Fund be worth?

In order to put funding levels on a sustainable long term footing, and to stem the vicious circle of decline which has taken over local bus networks, the Connectivity Fund should be significantly higher than present funding for bus services. Further work would need to be undertaken to establish what the optimum level should be.

However, if the increase in funding was of the order of £500 million a year then to put this into perspective:

- £500m is less than 2% of the annual revenue to Treasury from fuel duty³⁶⁴.
- £500m is around 12% of the DfT's annual grant to Network Rail or the annual spend on HS2 from 2019 onwards.
- £500m is around 15% of the Highways England annual budget in 2020³⁶⁵

What will the Connectivity Fund deliver?

We believe that if bus funding were to be increased in line with the many benefits it brings then:

- Lifeline bus services lost in recent year could be reinstated and rural bus networks protected;
- Bus services could be made more affordable to more people;
- Public transport accessibility to high growth areas could be increased thereby minimising the impact of growth on road congestion;
- Services to new developments could be kick started;
- The quality of bus networks could be improved helping to stem the long-standing decline in bus patronage.

Over time, we believe that the Connectivity Fund will pay for itself by reducing the cost of other public services and by supporting economic growth. It could also improve the financial sustainability of bus networks themselves, for example by removing bottlenecks on the road network and therefore allowing buses to operate at higher speeds, more reliably, and thereby covering more mileage with the same resources.

More generally, the Connectivity Fund will contribute to key national objectives:

- **Flexible and productive labour markets:** by enhancing accessibility to key employment, education and population centres, including to new development areas.
- **Economic growth:** by enabling and promoting growth in the most productive employment centres outside London by reducing congestion and linking more workers to jobs.
- **Full Employment:** by encouraging and enabling more people into work while making work pay; affordability and availability of bus services is especially vital for low paid workers³⁶⁶.
- **Tackle the cost of living crisis:** by ensuring that transport remains affordable and cheaper housing is increasingly accessible.
- **Improve health and well-being:** by encouraging active travel and greater social interaction, especially amongst children, young people and the elderly.
- **Cutting carbon and improving air quality:** by promoting modal shift and cutting congestion.

Implications for operators

The Connectivity Fund will only work on the basis that a) total funding for buses is greater than it is now b) funding is ring fenced for buses. Otherwise there is the danger that operators will compensate for any reduction in the income they currently directly receive from BSOG through fares increases and service reductions.

The proposed Connectivity Fund addresses both these concerns. It would also allow any LTA to maintain equivalent BSOG payments to operators and have extra resource to improve the quality of existing bus services, support new bus services and invest in bus infrastructure.

Concluding remarks

The bus is one of the biggest bargains available to transport policy makers in achieving a very broad range of transport, economic, environmental and social objectives in a cost effective way and in a timely fashion. Public funding for bus services reduces congestion for all road users, connects people to jobs, gets young people into education and training, and lifts people out of isolation. The long term costs to budgets across Whitehall of a declining bus network are far greater than ensuring a funding system for bus services that works. At present, the way in which buses are funded is mired in complexity, fails to reflect the cross-sector benefits that bus services provide, has no central oversight and is contributing to the decline of the industry.

This report has articulated the benefits that bus services bring for departments across Government, demonstrating the vital contribution of the bus. It is an important step towards ensuring that these wide-ranging, cross-sector benefits are understood and recognised, particularly in the complex way in which bus services are supported. Our proposals for funding reform, and particularly for a new Connectivity Fund better recognise and safeguard this contribution.

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