

# The future of the bus

Policy and fiscal interventions  
as part of a National Bus Strategy

September 2019



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# Introduction

Buses are the backbone of public transport networks across the country. Well-functioning bus networks improve the connectivity of communities, reduce air pollution, cut carbon emissions, and tackle social and economic exclusion.

This report sets out the policy and fiscal interventions needed to support buses. Pursued as part of a national strategy to support buses, these should be focused on four key aims:



**Increased usage of bus services across the country**



**A clear route to zero emission buses**



**Better integration of buses with other transport**



**Growth in use of technology to improve services**

The need to intervene to support bus networks is clear and urgent. In many areas buses' role and effectiveness has been much reduced over recent decades. Service numbers are barely a third of their 1950s high point.<sup>1</sup> In the 1980s and 1990s, with the deregulation of buses, many local authorities stepped in to subsidise routes that were socially important but not directly commercially viable. These bus services are now being lost in large numbers in the wake of reductions to local authority funding.

The impacts for people and communities when bus services are reduced or withdrawn are clear to see:



### Disconnected communities

In some rural areas, local authority supported buses have disappeared and commercial services have not taken their place. This has left communities poorly served or with no public transport provision.



### Poor living environment

In some urban areas, poor infrastructure and older vehicles are contributing to pollution and congestion, damaging quality of life.



### Isolation grows

People without cars who live in areas poorly served by public transport are more at risk of isolation and loneliness. Around a third of the population is affected by these conditions,<sup>2</sup> which can have a significant effect on health.



### Cost of living goes up

Where there is limited public transport, running one or more cars in a household becomes a necessity. With average costs of over £160 per month,<sup>3</sup> this is a considerable expense for those on low and middle incomes.



### Communities wither

The loss of good bus links can undermine whole communities, creating places where non-car households cannot easily live. Loss of bus services hinders people's access to work, learning, healthcare, choice of shops and social, cultural and sporting activities, and makes vital services, such as doctor's surgeries, more difficult to reach.

Alone amongst the main transport modes, there is no adequate mechanism to support buses in national policy. This makes it difficult to systematically resolve the issues faced and ensure that communities continue to have access to employment, education and other services via public transport.

The Government has a clear need to secure rapid improvements to bus networks to deliver these aims. This report sets out the context and measures to help achieve these.



## Context

### Trends in bus use

Buses remain the most popular form of public transport, accounting for 59 per cent of public transport journeys.<sup>4</sup> They form the backbone of the local public transport network. However, a long-term decline in bus service provision outside London has led to a reduction in bus use across much of the country as a consequence.

Buses are an essential part of the transport system connecting communities, getting people to and from work, and supporting the economy.

**Fewer than 5,000**  
bus services<sup>5</sup>

**4.4 billion**  
journeys per year<sup>6</sup>

The number of bus services have shrunk every year for a decade, falling from a high of over 13,000 in the mid-1950s to under 5,000 now. In rural areas, bus use has declined by more than 10 per cent since 2008 when free concessionary bus travel was introduced.<sup>12</sup>

Between 2009 and 2017, the average annual number of bus journeys per person in England outside London fell from 54 to 46<sup>13</sup>

More than half of all bus journeys now happen in the capital, while use in other large towns and cities has halved since 1985<sup>14</sup>

**59%**  
of all journeys on public transport are by bus<sup>7</sup>

**1 in 3**  
secondary school children  
take the bus to school<sup>8</sup>

**Nearly 900 million**  
journeys are made using concessionary  
bus passes each year<sup>9</sup>

**30%**  
of all journeys outside London  
are made using a concessionary pass<sup>10</sup>

**250,000**  
jobs are directly supported by the bus sector<sup>11</sup>

For many years, Greater London bucked the national trend with passenger numbers doubling from the mid-1980s to the point where it represents more than half of all bus journeys. Here too there are recent signs that patronage is stagnating or falling.

# Impact of lost services

## Poor access

In towns and cities, poor public transport provision contributes to local car dependency and subsequently congestion, poor air quality and other connected problems. High streets, already under pressure from online shopping, home delivery and centralisation of some services, can suffer lower footfall when public transport is reduced.

Evidence suggests the loss of bus services not only disadvantages those who find them convenient or essential, but also contributes to the pressures facing the high street. Research has shown that when bus services are reduced or withdrawn, more than half of those who use that mode to get to the high street expect to switch to another destination (typically an out-of-town retail park), or shop online instead.<sup>15</sup> The subsequent spiral of decline on the high street further reduces the attractiveness and choice of local services.

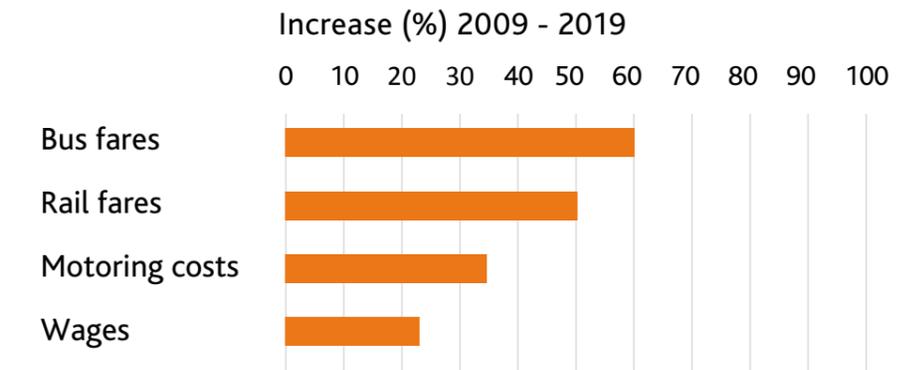
In rural areas, the consequences of poor mobility are often compounded by the need to travel longer distances to access shops, employment and services. For example, between 2000 and 2017 the number of rural Post Offices declined by 31 per cent,<sup>16</sup> and only 65 per cent of rural residents lived within 4 km of a GP surgery.<sup>17</sup> Meanwhile, less than half of those living in smaller rural settlements had access to any regular bus service.<sup>18</sup> In both urban and rural areas, the lack of bus services excludes those who do not have access to a car, most often the young, older people, those with disabilities and low-income groups.



Between 2000 and 2017  
**fewer than half**  
 of those living in smaller rural settlements  
 had access to any regular bus service

# Rising costs to passengers and taxpayers

The cost of bus use has increased rapidly in recent years. In England average bus fares increased by more than 60 per cent between 2009 and 2019; much faster than rail fares (50 per cent), motoring (35 per cent) and wages (23 per cent).<sup>19</sup>



Elderly and disabled people benefiting from concessionary travel now make up more than a third of total bus journeys in England. While operators receive a reimbursement for concessionary pass travel, it is estimated that in practice this reflects only 50-65 per cent of actual costs.<sup>20</sup>

There are also major differences in pricing between different parts of the country. London's franchised bus network offers a flat rate of £1.50 for journeys. Elsewhere, fares can be significantly higher, a situation compounded by some rival operators not accepting each other's tickets.

There are initiatives in the UK and other countries to reduce fares to encourage greater patronage of bus services. The city of Dunkirk is the largest metropolitan area in Europe to have introduced free bus travel (in 2018). There were increases in use by 50 per cent in the first few weeks from coming into force. The city had

previously trialed free public transport at the weekends and on public holidays since 2015. The policy aims to increase the purchasing power of local residents in an area of declining employment, as well as tackle social exclusion.<sup>21</sup> Luxembourg is to introduce free travel on public transport from March 2020 for all residents, cross-border workers, and tourists. The policy intends to tackle high levels of congestion, but is described as primarily as a social measure to reduce the cost of travel for those on low incomes.<sup>22</sup>

In some local areas, further loss of bus services will mean an irrecoverable undermining of existing public transport networks. This damage will come with wider costs to public services with essential journeys needing to be subsidised (for example, NHS non-emergency patient transport), while future reconnection to public transport is likely to be expensive or difficult to achieve.

# Environmental concerns

The Committee on Climate Change has recommended that all bus and coach sales in the UK need to be fully zero emission by 2040, with 50 per cent of new vehicle sales zero emission by 2030.<sup>23</sup> The average age of a bus on UK roads is eight years.<sup>24</sup> This results in the need to rapidly deploy zero emission technology in this sector to meet the net zero target set out in legislation.<sup>25</sup>

The UK's bus sector is currently focused on the deployment of Euro VI diesel buses, and the rollout of zero emission technology is still in its infancy and not of a scale needed to meet the legal emissions targets.

With the current focus on diesel buses in the UK supply chain there will be growing risk of reliance on imports of electric and hydrogen buses if the manufacturing sector is not given a clear direction on the needs of UK transport to invest appropriately.

Many major economies and cities are moving to commitments to shift their entire bus fleet to zero emissions or to only allow the purchase of zero emission fleets.

California, the fifth largest economy in the world, will only allow electric buses to be brought from 2029.<sup>26</sup> Los Angeles has committed to shift its entire 2,200 bus fleet to zero emissions by 2030.<sup>27</sup> The EU will require some buses in Member States to be zero emission by 2025.<sup>28</sup> There are 12 cities that have committed to buy only zero emission buses from 2025, which includes London.<sup>29</sup>

China, has taken the lead in electric buses, and these accounted for 90 per cent of new urban bus sales in 2017 (87,000 out of 97,000 urban buses sold).<sup>30</sup> Shenzhen, a major city in the Guangdong Province, purchased more than 16,000 electric buses in a five-year period and its entire bus fleet was zero emission by the end of 2017.<sup>31</sup> It is estimated that 18 per cent of China's total bus fleet was zero emissions (at tailpipe) at the end of 2018.<sup>32</sup>



In contrast, the UK is moving at a much slower pace due to a lack of clear policy direction, which is resulting in a default to outdated technology that is rapidly losing relevance in the market and in policy terms.

There are 40,300 buses on the UK's roads, of which only 2,500 are low emission.<sup>33</sup> Whilst buses are the backbone of local transport networks they are also the cause of pollution locally, and their use will be affected by the need to cut air pollution in towns and cities if there is continued reliance on diesel buses.

By 2030 Los Angeles' entire

**2,200**

bus fleet will be

**zero emission**

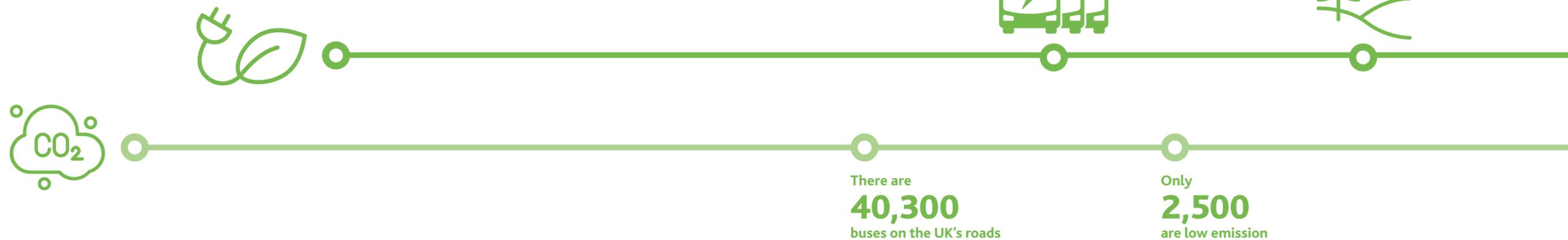


Shenzhen purchased over

**16,000** electric buses

Its entire fleet is now

**zero emission**



# Policy priorities

There are economic, social and environmental goals to which the bus sector and improved bus networks can contribute. In particular, delivering the net zero greenhouse gas emissions target and meeting WHO air quality standards, whilst growing jobs and investment in UK manufacturing, and ensuring communities are connected to employment, education, training, and public services.

Reaching these ends will require policy and fiscal interventions, the key points of which are summarised below.



# Local authority capability

Local authorities' ability to engage with the development and delivery of bus services varies significantly. In the 35 years since bus deregulation, many authorities have lost the skills required to oversee bus services in their area and have only limited control over the quality, cost and frequency of services.

Some such as Southampton have seen passenger numbers increase as they have passed such responsibilities over to operators. Others have invested heavily in subsidising socially important services but have been forced to reduce such support in light of the tight fiscal environment facing local government.

Problems with establishing and transitioning to franchising arrangements along with concerns about legal challenges from the bus industry have been central contributors to the slow take up of Bus Services Act powers. There are questions around whether local authorities have the capability to take on the negotiation and management of partnerships and management contracts for transport services given the reductions in expertise and staffing.

# A National Bus Strategy

The Government should set out a clear policy direction for the bus sector (manufacturers and operators) and local authorities, and send a clear message to communities on the importance placed on bus services as part of their local transport system. This should be through a national strategy with a series of supporting policy and fiscal interventions.

A national strategy should focus on delivering four key aims:

- 1** Increased usage of bus services across the country
- 2** Better integration of buses with other transport
- 3** A clear route to zero emission buses
- 4** Growth in use of technology to improve services

Uniquely for a major transport mode, the UK has had no national strategy for buses for several decades. This is out of kilter with the essential role bus networks play for communities and millions of people across the country.

A National Bus Strategy should be established to provide the leadership, stability and direction needed to help local authorities and bus operators deliver services, increase ridership, and design and fund improvements.

There are three elements that would be transformational for communities, and how they are served by local bus networks that should underpin a strategy:



Local multi-year funding to maximise the benefits of investment, protect services and plan properly for the future



Growing the number of zero emission vehicles to deliver carbon reduction and air pollution targets while developing a world-leading zero emission bus manufacturing sector



National innovation and integration funding to ensure buses are part of the transport network of the future

## Local multi-year funding

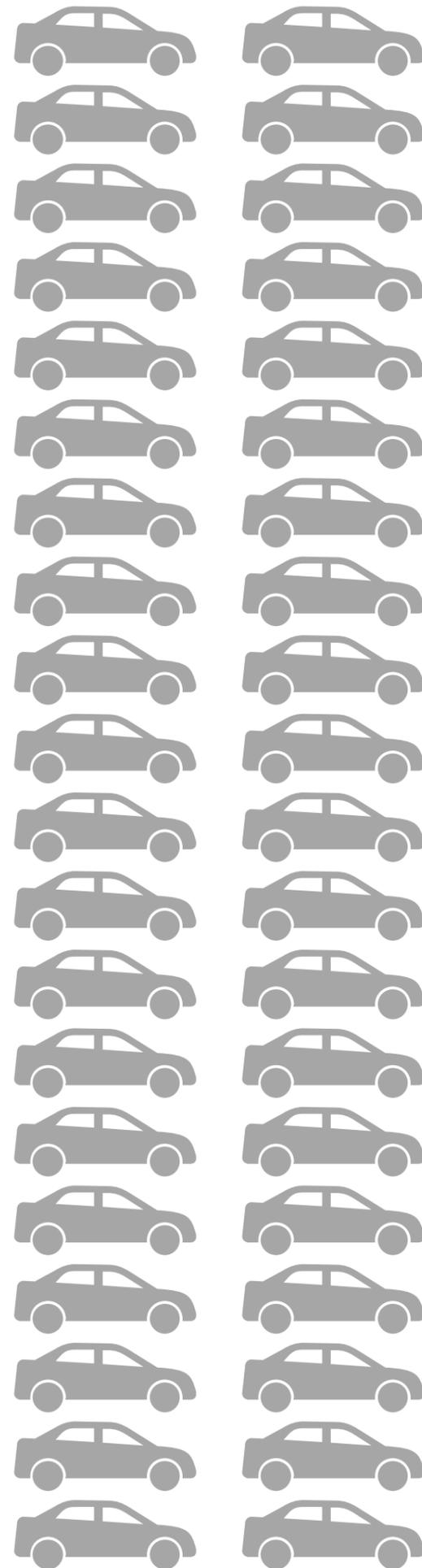
Funding for buses is currently delivering support that is fragmented and short term, and not maximising the benefit from taxpayer funding.

Buses are financially supported in a number of ways. This includes a fuel duty rebate, the Bus Service Operators Grant (BSOG), and reimbursement for concessionary travel. In addition, there are national funding streams and programmes that fund where buses can make a meaningful contribution. For example, this includes tackling loneliness, supporting local economies, reducing carbon and air pollution.

The current funding regime should be replaced with a more coherent approach that delivers against the desired aims of a National Bus Strategy. Such an approach should intend to maximise service levels and value for money by bringing together all public sector spending on buses, including from BSOG, concessionary travel, NHS patient transport, school transport and social services.

Funding sources should be combined within a single long-term framework for revenue and capital support from taxpayer funds. This would give local authorities and bus operators the ability to plan for the longer term and ensure the sustainability of critical services for communities while stemming the cuts in services and seeking to increase patronage.

Local authorities should produce bus investment plans and work with providers to improve usage of the bus locally to maximise the benefits of investment and plan properly for the future. It would also offer the opportunity to develop new services, including demand responsive options.



## Full fleet replacement with zero emission vehicles

With a full double decker taking up to 75 cars off the road, buses are already a more sustainable way to travel. Increasing the percentage of journeys which are taken by bus has the potential to cut carbon emissions and tackle local air pollution while helping reduce road congestion.

It will be necessary to grow the use of zero emission vehicles to deliver carbon reduction and air pollution targets while developing a leading zero emission bus manufacturing and deployment sector. The technology is already being deployed in the form of electric and hydrogen buses. However, with funding to support this transition currently sporadic and limited, there needs to be a different approach to increase deployment of a zero emission bus fleet.

There is a pressing need to accelerate the move to zero emission vehicles. The National Bus Strategy should include a plan to replace the entire UK bus and coach fleet with zero emission vehicles as part of contributing to national and local government environmental and public health objectives. This should also support jobs in bus manufacturing and the supply chain, and help establish the UK as an international leader on zero emission mass transport.



**1 double decker bus can take up to 75 cars off the road**

## National innovation and integration funding

The way people travel is changing. With the emergence of ride sharing, Mobility as a Service and falling car ownership in urban areas, there is an opportunity to ensure buses can take advantage of their natural strengths.

A programme of investment in physical and digital infrastructure to support buses is needed. This should include a new generation of modal interchanges connecting bus networks with rail and other forms of transport for first and last mile journeys; targeted investments to make motorways and other strategic roads more bus-friendly; and incentives to encourage the development of multi-modal ticketing, account-based ticketing and integrated journey planning.



## National Bus Strategy

We would expect the government's policy interventions to focus on the following elements with the intention of an overall contribution to tackling social and economic exclusion, spur the sector to meeting its required contribution of net zero emissions and improving air quality, and support the manufacturing supply chain:

Better journey planning and data availability

Reducing the cost of travel

Meeting air quality and net zero targets

New models of delivery and funding

Setting the wider policy framework

# Policy and fiscal interventions

There are three categories of policy and fiscal interventions that would progress the agenda outlined in a National Bus Strategy:



## Immediate impact:

those interventions that will be able to have a more immediate impact and deliver change on the ground in a short time period



## Short-term opportunities:

those strategic interventions that will have short-term impacts that will leverage longer-term change in bus networks



## Longer-term direction setting:

those interventions that will secure impact into the longer-term, ensuring continued delivery from the industry and local authorities/transport authorities

The National Bus Strategy would give a clear signal to the sector on the importance the Government places on the bus for local communities, and set a clear policy direction for its future. But to ensure the direction is delivered there is a need for policy and fiscal interventions to be outlined in further detail in a National Bus Strategy.

We recommend a package of key interventions, which could include the following:

Issue	Supporting	Interventions		
		Longer-term direction setting	Short-term opportunities	Immediate impact
Better journey planning and data availability	<ul style="list-style-type: none"> <li>Measures that will drive the increasing use of bus services</li> <li>Growth in use of technology to improve services.</li> </ul>	<ul style="list-style-type: none"> <li>Requirement on local authorities on information provision.</li> </ul>	<ul style="list-style-type: none"> <li>Fostering third party market in data and consumer facing tools.</li> </ul>	<ul style="list-style-type: none"> <li>Supporting local authority information provision.</li> </ul>
Reducing the cost of travel	<ul style="list-style-type: none"> <li>Measures that will drive the increasing use of bus services</li> <li>Ensuring better integration.</li> </ul>		<ul style="list-style-type: none"> <li>Targeted fares reductions</li> <li>Smart ticketing requirements</li> <li>Mobility credits.</li> </ul>	<ul style="list-style-type: none"> <li>UK low fares trial.</li> </ul>
Meeting air quality and net zero targets	<ul style="list-style-type: none"> <li>Setting a clear route to zero emissions in the sector to focus the industry and stimulate the supply chain.</li> </ul>	<ul style="list-style-type: none"> <li>Bus manufacturing sector deal.</li> </ul>	<ul style="list-style-type: none"> <li>Bus fleet and depot overhaul programme (with a zero emissions deadline).</li> </ul>	<ul style="list-style-type: none"> <li>Zero emissions town exemplar.</li> </ul>
New models of delivery and funding	<ul style="list-style-type: none"> <li>Measures that will drive the increasing use of bus services</li> <li>Ensuring better integration.</li> </ul>	<ul style="list-style-type: none"> <li>Transforming city transport</li> <li>Revenue support and financial settlement.</li> </ul>	<ul style="list-style-type: none"> <li>New approaches to rural transport delivery.</li> </ul>	<ul style="list-style-type: none"> <li>Demand responsive transport support.</li> </ul>
Setting the wider policy framework		<ul style="list-style-type: none"> <li>Future of rural mobility strategy.</li> </ul>	<ul style="list-style-type: none"> <li>Capacity and capability building for local authorities</li> <li>Kick-starting franchising</li> <li>Local Infrastructure development.</li> </ul>	

# Better journey planning and data availability

Improved journey planning should make it easy for people to find out about services, and to find where to travel from and when, to increase use of the bus. It should help drive increasingly seamless journey planning and usage.

There are two scales of intervention proposed: national and local.

## National

**1** Place a requirement on local authorities on improving information on bus services in exchange for funding

**2** Foster the market in third party data handling and consumer facing apps, common standards & open data

## Local

**3** Focus on an area working with the local authority and operators to create an exemplar of local information provision.

# 1

## Policy

## Requirement on local authorities on information provision

Local authorities should have a requirement placed on them to ensure that adequate information is provided in their areas on the bus services serving communities, including the integration with other modes of transport so connections are clear. This should come with funding attached.

The requirement should be framed as: local authorities should make it accessible and easier for people to know how to use and take public transport in and to/from its area.

The approach taken should be focused on the outcomes, rather than a prescriptive requirement to provide maps, journey planners or paper timetables.

The way to deliver on the requirement should be left to local authorities based on what works for their area and with their communities. They could choose to work with operators in their area or delegate the delivery to them, with direction that it must show the whole network.

## Outcomes and impacts

Users of public transport will have access to better quality information to plan their journeys.

## Constraints and considerations

Currently, local authorities take a varying degree of responsibility here. Some maintain their local bus stops; others leave it to their local operators to ensure paper information at the stops is up-to-date. Others provide journey planners or further forms of information. The majority of information is provided by local operators, where there can be limited visibility of a wider network in an area.

The information is commonly held by operators, and local authorities need to be able to exert influence over them locally where there are no partnership or franchising arrangements.

Requiring prescriptive approaches to providing information could limit the ability of local authorities and operators to provide information in a cost effective means and to utilise new technology.

This is only a partial solution and further use of open data will be necessary to enable users to have access to appropriate journey planning tools from third party providers, which are better placed to undertake this than central or local government.

## Mechanisms to deliver

The Government should agree this as part of the settlement with local government.

This requirement should come with funding from central government to encourage delivery and to secure agreement.

# 2

## Fostering third party market in data and consumer facing tools

### Policy

While the Bus Services Act includes open data powers, the public provision of local bus information varies considerably across the country. A number of city authorities and commercial enterprises are developing smart phone-based apps that integrate journey planning and ticket purchase across all modes. Online journey planning is transforming how decisions about transport mode are made.

The current market in journey planning is growing, with significant players involved in mediating data sets from providers and public bodies (e.g. ITO World) to enable app developers and other conduits for information to consumers (e.g. Google Maps, Citymapper) to provide a coherent journey planning tool.

The tech industry should be encouraged to work with the major cities and towns in improving the availability of journey planning tools in their areas. The intention would be to further encourage the use of tools currently available on the market, as well as encourage innovation (e.g. voice tech, integrating mobile ticketing and real time passenger information) rather than the local authority or PTE building their own platforms (where they don't have expertise or it being an inefficient use of funding).

### Outcomes and impacts

The project would foster the growth of journey planning tools from the tech sector to improve the information available to passengers in towns and cities across the UK.

### Constraints and considerations

Parts of the bus industry have been advocating for a centralised data manager for bus information on a par with the LENNON database in the rail industry. Such a centralised data source is unnecessary. The approach could constrain the provision of information through the industry controlling or limiting access to data by third party providers, as has been seen in rail. Repeating this in bus would hinder the provision of information. Data should be open and freely available through APIs from operators and providers (see the approach taken by Transport for London) as standard. The third party market can then make use of a variety of datasets.

### Mechanisms to deliver

There are three approaches:

- Government could facilitate an increased pace of delivery through leading engagement between the tech sector (e.g. ITO World, Citymapper, Google, Passenger) and local authorities, and using ministerial roundtables and announcements to ensure commitment
- Establish a task and finish group with the sectors working with government
- Providing targeted funding to incentivise tech companies to move into new geographic areas could aid accelerating the delivery.



# 3

## Local authority information provision

### Policy

Government supports the development of an exemplar area on local transport information provision to provide an example of best practice for other local authorities.

The Government should fund and work with a local area, including the local authority and bus operators, to deliver the improvements in local information provision.

The impact on bus use should be assessed, and the project results disseminated to other local authorities as best practice to encourage others to follow suit.

### Outcomes and impacts

The project would establish an example of best practice for other local areas, plus users in the area trialed will have improved information provision.

### Constraints and considerations

This is dependent on securing an area to participate, and willing to prioritise this for its local transport. Due to limited local authority resources and staffing constraints it might be difficult to secure commitment and delivery without funding.

### Mechanisms to deliver

An example area to trial could be Brighton, which has a limited number of providers. Or Cornwall, which is making progress in improving its local bus provision.

The Government should provide funding for one area to bid for to become the exemplar area.



# Reducing the cost of travel

One of the barriers to increasing use of bus services is the cost to passengers, particularly to specific demographics where there would be wider societal benefits for increasing their access to public transport, such as those socially or economic excluded, or those on low incomes.

There are three interventions proposed:

**1** Targeted fares reduction: targeted revenue support or industry settlement to reduce fares for under-19s

**2** Smart ticketing requirements:

- a) System of mobility credits to encourage the shift from private car use to public transport for local journeys
- b) Requiring bus operators participate in the Transport for the North smart ticketing system

**3** Low fares trial focused on one local area to assess the impact on increasing patronage.

## 1

### Policy

## Targeted fares reduction

Targeted support from government to reduce fares for young people under-19. This would aim to ensure that young people have reduced transport costs so they are able to more affordably access education and training.

Support for bus travel for under-19s is inconsistent across the country, with a mixture of free, discounted and adult fares being levied.

There are three degrees to the approach that could be taken:

- The Government could agree a standard fare for those under-19 with the bus industry, with the sector agreeing to reduced margins and revenue from this category of fares
- The Government could choose to provide funding to support fare free travel for school age children with a reduced margin for the bus operators covering these types of tickets/passes. Revenue support and a reduced margin for 16-19 travel could be agreed to support a lower fare so that younger people get used to paying for travel, but limiting the costs to them
- Fund fare free travel for under-19s so there is a consistent scheme across the country.

### Outcomes and impacts

Reduced cost of travel to all young people to support those in education and training.

### Constraints and considerations

It would require agreement with the industry and two of the approaches would need Government commitment to fund for the longer term to make them viable.

This could be linked to the introduction of smart cards/ticketing or similar for travel.

### Mechanisms to deliver

This should be part of a 'national deal' for the sector. In exchange for wider capital and revenue funding for initiatives such as zero emission buses and wider changes noted in this document the industry should commit to reducing their margins on under-19 passengers. As an industry of socially responsible businesses it should see the benefits of lower margins on fares for younger people to increase patronage.



## 2A

### Smart ticketing requirements

#### Policy

As part of encouraging the shift to public transport use there should be greater encouragement of the development of Mobility as a Service (MaaS) propositions and smart ticketing.

As part of securing this across the country, bus operators in the North should be required to participate in the Transport for the North smart ticketing programme.

#### Outcomes and impacts

Reduces car use and encourages public transport use. Accelerates the deployment of smart/account based ticketing and MaaS propositions.

#### Constraints and considerations

The bus industry has currently declined to sign up to the Transport for the North smart ticketing scheme where rail, and light rail are already agreed to participate. There is a fear of losing revenue and control of fares due to capping arrangements, which is designed to limit costs to passengers in the North.

#### Mechanisms to deliver

If the Government is unable to compel operators to work as part of local/regional integrated transport ticketing systems, this should be considered as part of a 'national deal' with the bus industry.



## 2B

### Mobility credits

#### Policy

As part of encouraging the shift to public transport use there should be greater encouragement of the development of MaaS propositions and smart ticketing.

To accelerate the deployment of MaaS, ease the use and reduce the cost of public transport, and switch people out of private vehicles, mobility credits could be utilised.

For example, as part of agreeing to take a diesel or petrol vehicle off-the-road, drivers should be offered mobility credits equivalent to 30 days free travel on public transport to replace the car journeys.

#### Outcomes and impacts

Reduces car use and encourages public transport use. Accelerates the deployment of smart/account based ticketing and MaaS propositions.

#### Constraints and considerations

It can take 30 days to form a new habit, so the duration of the credit use needs to be enough to change habits around choice of transport.

Mobility credits should be considered for shared transport such as car clubs (e.g. Zipcar Flex) to reduce the motivation to purchase a new car through targeting those residual journeys that may require a vehicle.

The smart card/account systems to enable this are limited at present, and the DVLA would need to be engaged as part of the process of scrapping a vehicle.

#### Mechanisms to deliver

There are several approaches to deliver this:

- To encourage scrapping of older/polluting vehicles, offer mobility credits for 30 days free public transport use via a smart card/account credit. This would become part of the process of informing the DVLA that a vehicle had been scrapped at an authorised treatment facility
- The other opportunity is to link the provision of mobility credits to key life moments to encourage the use of public transport. For example:
  - Moving home – when moving into a new property householders are given mobility credits for use on the local public transport system. This could be delivered via the local authority when new residents registered for council tax or to vote
  - Starting a new job – employers could be provided with access to funds to cover the cost of providing all new employees with mobility credits to use public transport for commuting to work, or larger employers funding this to reduce their impacts on the local transport system.



# 3

## Low fares trial

### Policy

A local trial of free or reduced price bus travel to assess the impact on patronage and overall effectiveness of the local transport network. Bus fares have risen 61 per cent since 2009 – significantly faster than rail (50 per cent) and motoring (35 per cent). A trial could take the form of a reduced price flat fare or zero fare available to all travellers or a targeted model available to selected groups, for example 16-18 year olds. It could be deployed either as a reduced price fare or as credits on a travel smart card (to encourage the take up of smarting ticketing and monitor usage).

The low or zero fares trial would be focused on one local area to evaluate the impact on increasing patronage. We would propose an area such as the Medway towns in Kent as a potential area for consideration. Travel within the area would be funded to be free or a proportion of fare subsidised.

### Outcomes and impacts

This could boost patronage in the area of the trial and will provide useful insight on the efficacy of low or zero fares as a policy intervention.

### Constraints and considerations

At this stage, reduction of fares or funding free fares on a wider scale requires a greater degree of analysis on the benefits and impacts; in particular how to target and issues related to funding future investment. It could also undermine perceptions of public transport, and deter people from using public transport if the cost increases.

Making bus travel completely free in some areas or for some groups could have significant impacts on the ability of operators to satisfy demand. Some anecdotal evidence suggests free bus travel could attract journeys current made on foot or by cycle.

An initial trial would be able to consider the wider impacts.

### Mechanisms to deliver

National government support for local authority-implemented scheme.



## Meeting air quality and net zero targets

The UK has stringent greenhouse gas emission targets set in legislation, and a public health imperative to tackle air pollution in urban areas. Public transport should be an early mover and contributor to tackle both of these challenges.

We outline a series of interventions that will create an internationally leading programme to convert the entire bus fleet to zero emissions. This is achieved by setting out a clear route for the industry to zero emissions, and in the early years stimulating the supply chain.

We propose:

- 1 A bus manufacturing sector deal (to support the supply chain)
- 2 A bus fleet and depot overhaul programme (with a zero emission target deadline)
- 3 Zero emission town project.

We recommend an initial focus on the bus sector, and delivering at a more rapid rate than the Committee on Climate Change requires. This would create the space to deal with the more challenging task of overhauling the UK's coach fleet to ensure delivery in line with the recommendations from the Committee on Climate Change overall.

# 1

## Bus fleet and depot overhaul programme

### Policy

The Government should set a deadline for the bus sector to transition to zero emission buses:

- All new buses should be zero emissions (electric or hydrogen) from 2025.
- All buses on the road should be zero emission by 2035.

### Outcomes and impacts

Bus services across the UK will be zero emission, cutting carbon emissions nationally and improving air quality locally.

The pace of change would put the UK alongside other leaders globally on this transition.

Increasing demand for zero emission buses will reduce the upfront costs over time and put the UK sector as a leader in rolling out and managing zero emission fleets, with the opportunity to export services and skills as well as goods.

### Constraints and considerations

The Committee on Climate Change has recommended that all bus and coach sales in the UK need to be fully zero emission by 2040, with 50 per cent of new vehicle sales zero emission by 2030.

It is less complex to implement this overhaul in the bus sector than the coach sector. There are a small number of large operators delivering bus services compared to the coach sector, which has a larger number of smaller operators.

This results in the need to rapidly deploy zero emission technology in the sector to meet the net zero target set out in legislation, and to give more time to make progress in the coach market which will be more complicated.

The average lifetime of a bus and coach on UK roads is eight years so the direction needs to be set early to ensure the industry moves at the required pace on fleet replacement.

The cost of a zero emission bus is higher at present than a diesel version, but they are reaching parity on whole life costs, and the initial capital cost will reduce.

The cost of infrastructure for charging is a barrier to uptake and should be an area of focus.

Consideration will need to be given to wider requirements in a local area to ensure upgrades to the energy distribution network account make most effective use of the capital and reduce duplication of spend across sectors.

The industry may not wish to move at the pace that is required to align with the needs of the net zero emission target. They need to be encouraged, and required, to move at pace if the Government is going to ensure the legal target is met.

### Mechanisms to deliver

This should be set out through government policy, and in a 'national deal' for the bus sector with the appropriate support that tapers over time and scales down as the costs of fleet and whole life costs equalises with diesel buses. If the bus industry does not wish to agree, it should be mandated through a Bus Services (Zero Emission Fleet) Bill.

# 2

## Bus manufacturing sector deal

### Policy

Invest in the capacity of the UK bus industry to transform vehicle fleets to ensure compliance with air quality and decarbonisation objectives. There are currently constraints in the ability of UK bus manufacturers to meet the required demand for zero emission vehicles. This will slow the deployment of an improved vehicle fleet and put in jeopardy local and national policy objectives regarding clean air and net zero.

A manufacturing sector deal would ensure the future viability and growth of UK bus manufacturers, increasing the supply of a modern vehicle fleet and reducing reliance on overseas technology.

This would be in support of delivering against the target for deployment of zero emission buses.

### Outcomes and impacts

Investment would aid progress toward decarbonisation targets and the implementation of clean air plans.

This would create high skilled jobs in the manufacturers and wider supply chain.

### Constraints and considerations

Skilling up the sector, retooling manufacturing lines and training new staff to deliver on the scale of production needed all present challenges to consider in a sector deal.

### Mechanisms to deliver

The Government should negotiate a sector deal with the manufacturers.



# 3

## Zero emission town

### Policy

Invest in the infrastructure needed to replace all fossil fuelled buses within a selected town. While good public transport is key to improving air quality and reducing carbon, buses are a significant generator of air pollution in some urban areas and a move away from diesel engines has been slow overall.

While technical solutions exist in the form of electric battery and hydrogen fuel cell, deployment is currently small scale and limited compared to other countries.

This project would accelerate the deployment of zero emission buses in the UK in one area as an exemplar for other areas on what is possible.

### Outcomes and impacts

Investing in both the vehicles and charging infrastructure needed to make all buses zero emission in a chosen location would demonstrate the part buses can play in improving air quality in urban areas, increase the output from manufacturers, and contribute to cut the UK's carbon emissions.

### Constraints and considerations

Selecting an appropriate location for the trial will be critical, demonstrating the scalability of technology while remaining within existing limitations. This is likely to mean relatively short routes and small numbers of operators and depots.

### Mechanisms to deliver

There are several areas that could be identified as possible opportunities, including:

- **Plymouth** – discreet area with a mixture of short urban, and some longer distance routes. Two operators in the area, one which is larger. Total of 286 buses in use in the area
- **Brighton** – commitment to go to ultra low fleet exists, with electric buses coming through
- **Cornwall** – commitment to go to zero emission fleet by 2030.



## New models of delivery and funding

Current revenue funding support doesn't deliver appropriately targeted funding to maintain services. Capital funding has been piecemeal and not presented as a coherent programme of investment.

We propose:

- 1 A new form of revenue support and a financial settlement to ensure the industry heads in the intended direction
- 2 Transforming city transport through supporting investment in city-wide bus transit networks
- 3 Defining new approaches to rural transport
- 4 Supporting demand responsive travel early deployment.

# 1

## Revenue support and financial settlement

### Policy

Target the revenue support at the delivery of specific benefits, including encouraging bus use, growing services, alongside the capital investment in zero emission fleet, and local infrastructure.

### Outcomes and impacts

Encouraging greater use of the bus and the transition to zero emission fleet.

### Constraints and considerations

Effectively a fuel subsidy, the Bus Service Operators Grant (BSOG) gives revenue support to bus operators based on their annual mileage. BSOG was partially reformed in 2014 with a percentage of grants being made to some local authorities rather than directly to operators.

BSOG is not delivering the desired outcomes in terms of increasing patronage or keeping fares affordable. As the bus fleet is electrified BSOG becomes more redundant as a support mechanism.

While BSOG remains a blunt instrument, the revenue support it gives is essential to the viability of many routes. Changes to its focus must not be achieved at the expense of existing benefits.

### Mechanisms to deliver

Further revenue support and a wider financial settlement on capital investment should be agreed by government.

This should incorporate the wider support for a fleet replacement programme, and other measures the government wishes to support to boost bus use such as local infrastructure and integration.

Revenue support should target specific benefits, for example subsidy for the concessionary fares or to support services in specific geographic locations.

Initially, a regional trial of new revenue support for bus services should be considered as part of an agreement with a defined geographic area. This should be approached as a trial in a region to test the effectiveness of the targeting initiatives to improve the value for money gained from revenue support for the bus sector.



# 2

## Transforming city transport

### Policy

National funding to deliver major bus-based transport improvements. This is likely to include development of high quality electric Bus Rapid Transit networks with physical integration with public, private transport and active travel facilities.

Capital and initial revenue funding would be included with each project developed and delivered by a partnership of national and local government working with operators and other private sector stakeholders.

### Outcomes and impacts

Transforming modal share, significantly shorten journey times, support housing and economic development, reduce congestion and improve local environmental quality.

### Constraints and considerations

This should move beyond existing funding pots such as the Transforming Cities Fund. There are existing programmes such as the West Midlands Sprint project that could be primed through funding support.

### Mechanisms to deliver

The Government should establish a single funding pot for new projects that expand the network and ensure integration with other forms of transport.



# 3

## New approaches to rural transport delivery

### Policy

Changes in the model of delivery for rural communities are required to make sure services are meeting the expectations of the community and serving their needs.

Pilot areas trialing new models of delivery should be rapidly established.

### Outcomes and impacts

The support given to selected local authorities will allow them to develop their own skills, engage constructively with transport operators and the wider transport sector to deliver a more integrated and responsive bus network. This will include:

- Improvements to timetabling and routes
- Development of multi-operator ticketing
- Progress toward franchising where beneficial.

### Constraints and considerations

Establishing and maintaining new models of transport delivery will require high levels of support and coordination involving local government, bus operators, community transport and others.

### Mechanisms to deliver

Start-up funding from central government for local authorities to establish and maintain new rural transport delivery models and partnerships.



# 4

## Demand responsive transport support

### Policy

Providing local authorities with financial support for trials of demand responsive transport in rural areas. Projects will be led by local authorities, run for three to five years and will focus on the development of viable services in lower density population areas or where supported services are no longer viable to maintain in their current form.

This will include working with transport providers, service users and larger journey generators such as major employers, hospitals, and education and training.

### Outcomes and impacts

The support given to selected local authorities will allow them to develop their own skills, engage constructively with transport operators and the wider transport sector to deliver a more integrated and responsive bus network. This will include:

- Improvements to timetabling and routes
- Deployment of new technology
- Development of multi-operator ticketing
- Progress toward franchising where beneficial.

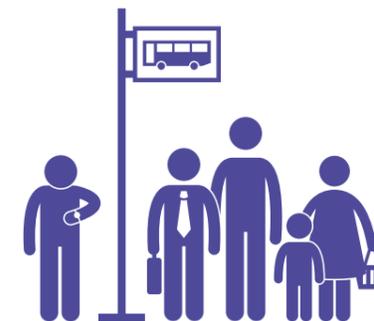
### Constraints and considerations

Effective marketing, service coordination and user interface will be essential in establishing new demand responsive systems.

### Mechanisms to deliver

Local trials would build on the 'Uber-style' initiative being led by the Tees Valley Combined Authority. Merseytravel has a similar project due for launch. Funding could be provided to support and progress these projects currently in development or early stages of deployment.

One gap is ensuring adequate patronage, so initial marketing costs for demand responsive services could be supported.



# Setting the wider policy framework

As part of the National Bus Strategy the Government should set out how to develop wider elements of the policy framework, and how to more rapidly and adequately activate existing policy levers.

This should include:

- 1 A future of rural mobility strategy
- 2 Building the capacity and capability of local authorities to utilise existing levers
- 3 Measures to kick start franchising
- 4 Support for local infrastructure to prioritise buses.



## 1

### Future of rural mobility strategy

#### Proposal

The issues with rural transport are more acute and difficult to solve than urban transport. The government has produced an urban mobility strategy, and committed to develop one for rural mobility.

A rural mobility strategy should be developed by government as a priority of the Department for Transport.

#### Outcomes and impacts

Building an evidence base and guidance on:

- The effectiveness of different approaches to comprehensive public transport provision in rural areas
- The contribution rural public transport provision can make to the provision and accessibility of essential services
- Transport appraisal and modelling to ensure it is responsive to the specific needs of rural areas.

Support the development of zero emissions public transport in rural areas.

#### Constraints and considerations

This requires the Government to provide resource and focus on developing the strategy. It should aim to reduce car dependency and reconnect rural communities through sustainable transport.



# 2

## Capacity and capability building for local authorities

### Proposal

Franchising is in principle available to all top tier local authorities. 35 years since deregulation, many local authorities outside of major conurbations now lack the institutional memory and skills required to oversee and improve bus services in their area. This is a central contributor to slow take up of Bus Services Act powers and more generally the improvements to local transport.

The Government should:

- Develop a central team within government that can be deployed to aid local authorities in building capability in-house on legal, costing services, running and monitoring concessions or contracts, and management of relationships. This should be part of ensuring local authorities can use powers effectively and reducing the learning curve
- A 'transport university' for local authorities to train the next generation of staff. A joint graduate scheme, with the priority being to deploy these into combined authorities or Transport for London to gain experience. This would boost the skills base over time.

### Outcomes and impacts

Improvements in skills and capability across local authorities to ensure effective management of contracts and the ability to develop and manage their local public transport networks.

### Constraints and considerations

There was previously a graduate scheme that provided this sort of output of new staff but this was disbanded in recent years.



# 3

## Kick-starting franchising

### Proposal

There are some barriers to using the powers in the Bus Services Act, which makes the process cumbersome, creates risks related to transition arrangements and costs that pose challenges.

The Government should consider:

- Creating an innovation fund for local authorities that aims to improve skill and capability on partnership working, negotiating skills, and contract monitoring
- Simplifying the process to reduce the burden on local authorities to take up the powers
- Providing kick-start funding by establishing a fund to contribute to the costs of initial setup and internal processes for procurement and management of contracts and initial recruitment at local authorities
- Allowing transition arrangements to tackle risks of stranded assets and operators ceasing services overnight, such as transitioning direct awards before franchise contracts are let to maintain providers and assets, and giving authorities breathing space to set up their franchising arrangements.

### Outcomes and impacts

Improved local services through local authorities being in a stronger position to use the powers in the Bus Services Act where they have decided to do so.

### Constraints and considerations

There are still risks that will need to be mitigated, and initial funding from central government seems necessary to support this.



# 4

## Local infrastructure

### Proposal

Bus priority measures and infrastructure improvements for bus services are necessary to reduce the impact of congestion on the reliability of services, which is one cause of the declining levels of bus use.

The Government could create a local bus infrastructure fund with capital funding to encourage investment by local authorities in activities such as bus lanes, urban traffic control, priority at lights, bus waiting facilities, interchanges and bus stations.

This could be linked to a target of improved patronage or improved speed of services.

### Outcomes and impacts

Improved reliability of services, leading to increased patronage. Bus operators could be encouraged to invest in services locally where local authorities address infrastructure issues that leads to the bus being prioritised.

### Constraints and considerations

The scale of funding would have to be significant to deliver on what is needed across the country, so other measures to encourage sourcing funding through developers and operator contributions should be considered alongside national government funding.



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to high quality, sustainable transport  
that meets their needs, improves quality  
of life and protects the environment.**

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