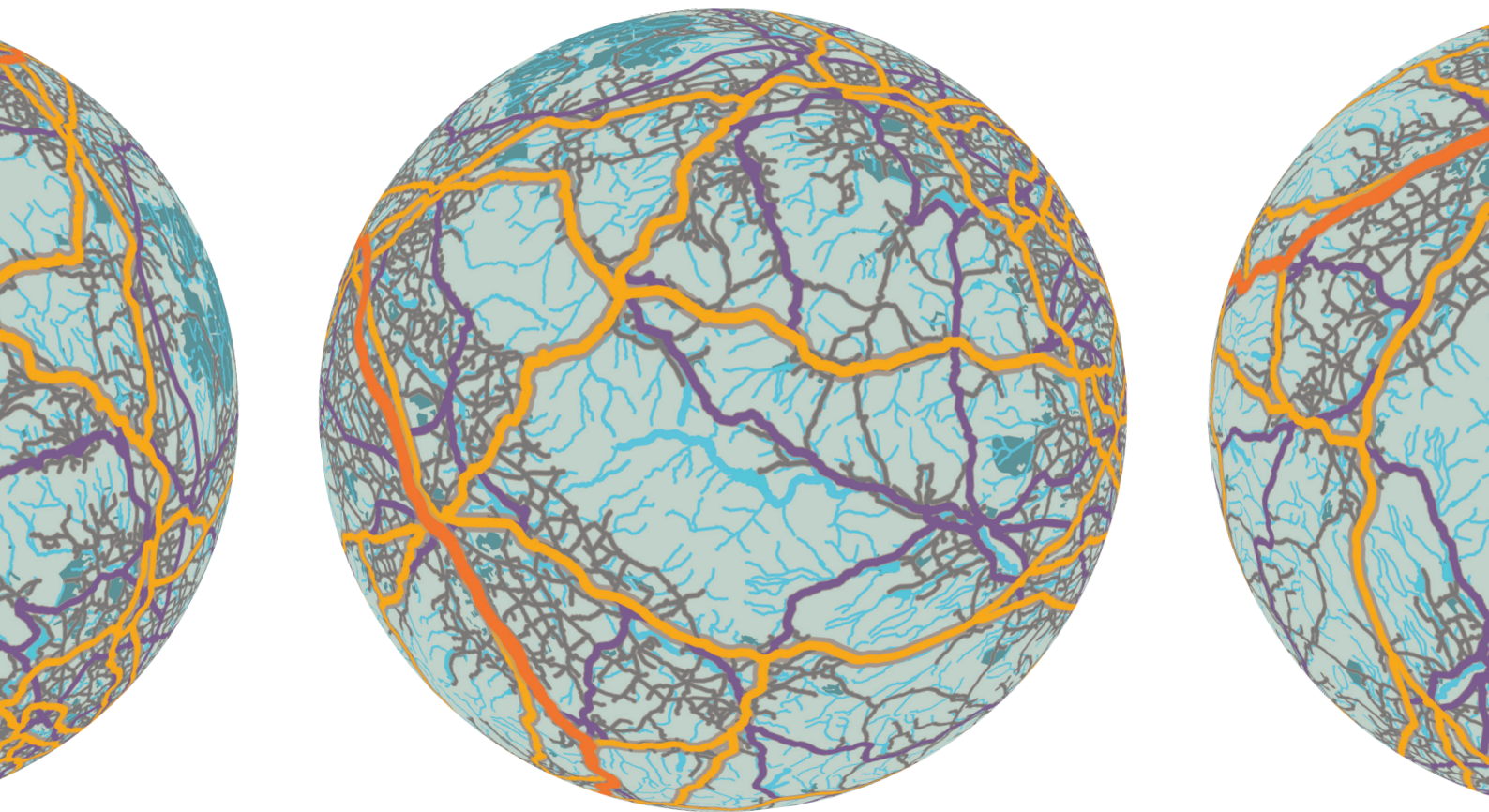REPORT

TOTAL TRANSPORT AUTHORITIES

A NEW DEAL FOR TOWN AND RURAL BUS SERVICES

Luke Raikes, Will Straw
and Clare Linton

BOLD IDEAS
for CHANGE

CONTENTS

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SUMMARY

London's bus services have been thriving for a decade and a half. There are now more passenger journeys in the capital than in the rest of England combined. Other major cities are learning lessons from London's success: Greater Manchester is taking on regulatory powers in their devolution deal; Nexus, Tyne and Wear's passenger transport executive, is applying for the legal power to regulate its local bus routes.

Elsewhere, however – particularly in towns and rural areas – bus services have been decimated through a vicious cycle of falling patronage, rising fares and cuts to services, a process exacerbated by severe cuts to both local authority budgets and subsidies for bus companies. This has left many people isolated – particularly those without a car, which includes large numbers of young people, pensioners, disabled people, and those on low incomes or who are out of work.

IPPR proposes a new settlement for buses and other forms of sustainable public transport. The recommendations set out in this report build on the government's successful 'total transport' pilots, which supports initiatives that take a 'cross-sector approach to the delivery of supported public road passenger transport services', and which go with the grain of moves to devolve greater powers to city- and county-regions.

IPPR recommends the creation of 'total transport authorities' (TTAs) in travel-to-work areas which span multiple local authority geographies. These new bodies should take charge of all transport-related funding and regulatory powers, and encourage the delivery of bus services by a much wider range of providers, including social enterprises, community investment companies and municipal companies. TTAs would pool capacity and expertise rather than creating new bureaucracy.

In their first phase, TTAs would focus on the pooling of services already provided by local authorities, including school, community and welfare transport. Where appropriate, TTAs could regulate local bus services by franchising to provide greater certainty over routes, fares and services. In due course, TTAs could take on responsibility for public transport provided by other public bodies such as hospitals, GPs, further education colleges and higher education institutions. They should also help encourage innovation through the sharing of data, which is often protected by private companies, and by breaking the artificial barriers to cooperation maintained by the current competitive framework.

The government's buses bill, announced in the 2015 Queen's speech (HM Government 2015) could be amended to allow these reforms to take place. This would ensure that the coordination and innovation encouraged by total transport pilots could be rolled out across England. This would promote social justice by improving bus services for thousands of people in isolated communities, and reduce carbon emissions by providing a viable alternative to car travel.

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The networks of buses that serve England's communities are essential. Buses underpin local economies by linking workers with jobs, and customers with shops and leisure opportunities. They provide essential services for those without access to a car, including many young people, pensioners, disabled people, those on low pay or who are out of work, and people who are disadvantaged in other ways.

They also ease congestion on roads, reducing carbon emissions and improving the quality of life.

Yet despite their importance, England's bus services are stalling. Outside London, bus patronage has been falling for years, and is now 36.5 per cent lower than it was on the eve of deregulation in 1986. In 2013/14 there were 2.32 billion passenger journeys in England outside London, compared to 2.38 billion in London alone – making it the second successive year that bus use was higher in London than in the rest of the nation combined.

This report investigates the nature and the causes of this decline, and examines a series of case studies in which local government or bus operators have innovated to improve services for consumers. We have focussed on small towns and rural areas, because England's cities and city-regions have already benefitted (or stand to benefit) from a number of reforms and innovations, while less attention has been paid to services in less densely populated areas, where buses are especially vital for people without a car who need to access services and amenities.

Financial pressures on bus services in towns and rural areas

Bus services are currently funded by a mixture of fare revenues and various forms of public subsidy. The total operating revenue for local bus services was £5.6 billion in 2013/14, including £3.3 billion in passenger fare receipts, £1 billion in concessionary travel funding, £1 billion gross public transport support and £298 million in bus service operators grant (BSOG).

However, both the level and the composition of this funding have changed dramatically in recent years. There has been a proportionately large fall in public sector funding for buses since 2010. While almost all government departments have faced cuts, those applied to the Department for Communities and Local Government (DCLG) have been particularly extreme. Between 2009/10 and 2015/16, the DCLG's current budget fell by £22.7 billion (65 per cent), while its capital budget fell by £6.6 billion (67 per cent). This has resulted in severe cuts to many local authority budgets, which have had knock-on effects on the bus services that they tender where particular routes are not commercially viable for private sector operators.

The 2010 spending review also cut 20 per cent from BSOG, which provides a subsidy to all local bus operators to reimburse them for some of the cost of fuel duty.

These central government decisions have directly and indirectly caused cutbacks to bus services in remote and rural areas. Although metropolitan areas have taken the brunt of cuts overall, non-metropolitan areas such as towns and rural areas have faced far greater cuts in local authority funding for buses. In addition, while the BSOG cut was proportionately smaller in non-metropolitan areas than elsewhere, analysis conducted in 2011 for the Department for Transport (DfT) projected that the impact of these cuts – in terms of higher fares and lower patronage – would be larger in these areas than in urban centres. Overall, the rise in fare receipts in non-metropolitan areas was not enough to prevent total operating revenue falling by 5 per cent. The lack of commercially viable bus routes in towns and rural areas therefore means they are threatened with a downward spiral of higher fares, lower patronage and poorer services.

As well as adversely affecting towns and rural areas generally, these cuts have had a particularly negative impact on the five key groups on whom we focus in this report: older people, younger people, the unemployed, low-income employees and disabled people (see section 2.3). With local authority finances under extreme pressure, some have chosen to cut back on tendered bus services. In North Yorkshire, for example, funding cuts have left many people without access to essential services. Given the

new government's commitment to further deep spending cuts in unprotected areas such as local government, these pressures are likely to worsen in the coming years.

New thinking and innovation

In the absence of additional funding for England's buses, there is a need for fresh thinking and new policy ideas if they are to avoid becoming a 'Cinderella service'. With this in mind, there are a number of existing trends that could be built upon.

- Momentum has swung behind the reintroduction of bus franchising in some areas outside London, such as Greater Manchester, Tyne and Wear, and Cornwall.[1] This reflects growing recognition of the fact that a liberalised bus market is not always in the interests of passengers.

- The growth of alternative business models such as social enterprises and community interest companies, and the continued strength of some municipally owned transport schemes, demonstrate that conventional commercial operations are not the only option.

- Where they exist, partnerships *between* operators (in areas such as smart-ticketing) have improved upon the status quo, while profit-sharing arrangements between operators and authorities also appear to have met with some success.

- Technology is being utilised to create more 'demand-responsive' transport that is more capable of matching the demand for and the supply of local bus services in places like Lincolnshire and Staffordshire, and to develop integrated smart-ticketing systems that surpass London's Oyster card.

Closely related to these developments and initiatives, there is growing recognition of the different publicly funded 'shadow' bus networks that could be consolidated more effectively. Local authorities, government departments and agencies are all funding different services within the same geographical area. Doing more to align these services would, therefore, be good policy regardless of any cuts to funding. Notably, local government spends almost £1 billion on meeting their obligations to provide special educational needs and home-to-school transport. While there is no question over whether this provision should continue, there is scope for policymakers to find much-needed savings by, for example, coordinating these services at a higher tier, maximising the use of their vehicles, and cooperating in the development of 'travel training' schemes.

The total transport pilots – 37 pilots funded from a relatively small pot of seed funding (£7.6 million) by the DfT – are an attempt to make these networks work more efficiently. They provide resources for the local integration of public transport services run by different public bodies, with the aim of ensuring that public funding is coordinated in order to better meet passenger needs and ensure the survival of essential routes. Areas in which these pilots have been successful range from Cambridgeshire and Staffordshire to a rural area corner of Greater Manchester.

Initial results suggest the potential for significant savings, which could be reinvested to maintain and develop services. Northamptonshire estimates that it will be able to save £1 million per annum; if this rate of saving was replicated across all English authorities in 2015/16, the savings would run to about £102 million.

Recommendations

In the course of the research presented in this report, IPPR conducted focus groups and interviews with service users, representatives of the specific groups mentioned above (older people, younger people, the unemployed, low-income

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1   Franchising is one means of reregulating the bus market; the two terms are used interchangeably throughout this report.

employees and disabled people), and people working for bus operators, local government and government departments, and in academia.[2] Our recommendations for how bus services in the UK can be improved, particularly for vulnerable people who are reliant on these services, are underpinned by four principles.

1. Buses are critical to enhancing social justice and tackling carbon emissions.
2. Decisions about the reregulation of bus markets are best made at the level of city- and county-regions, rather by central government.
3. Better outcomes can be achieved through the integration of public funding on buses and public transport at the regional level.
4. These reforms should be undertaken in a way that supports rather than stifles innovation.

Our recommendations build on:

- the continuing success of franchising by Transport for London (TfL) and the extension of this model to Greater Manchester
- the collaboration, cooperation and innovation stimulated by the total transport pilots
- the government's welcome devolution of powers towards cities and county-regions around the country.

We believe that there is a compelling case for the creation in towns and rural areas of new 'total transport authorities' that would bring together decision-making on bus services and other sustainable, public transport in travel-to-work areas. These bodies should be empowered to take on regulatory powers to franchise bus routes in their area, bring together all public funding for buses and other sustainable public transport – initially from local authorities but, in time, from other public bodies – in their region, and encourage innovation and cooperation by bus operators.

1. A new strategic body for public transport in towns and rural areas
New 'total transport authorities' (TTAs) that cross local authority boundaries should be created in non-metropolitan areas. These would be similar to passenger transport executives (PTEs), which already exist in many metropolitan areas, but would take on greater powers and funding responsibilities (see below).

Where local authorities choose to create TTAs, the new bodies would pool resources in order to build the capacity and expertise required to take on new powers; they would not necessitate new bureaucracy. They should cover functional economic or travel-to-work areas, such as those that already underpin combined authority or local enterprise partnership geographies. The resulting economies of scale would enable more strategic expenditure and stimulate innovation.

TTAs should explicitly align their transport strategies with the economic, environmental and social strategies of their constituent authorities and local enterprise partnerships – including, for example, their public health and economic regeneration strategies. TTAs' transport plans should explain how they intend to deliver transport connectivity across all modes of transport, particularly for those vulnerable groups who are more likely to rely on buses. Their plans should be integrated with land-use planning, and should ensure that public transport is provided for new housing and commercial developments.

TTAs would mean more local democratic control over both bus networks and public expenditure on buses. If and when combined authorities are developed in non-metropolitan areas, there would be a strong case for TTAs

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2   These interviews and focus groups were conducted in North and West Yorkshire, the North West, Essex and Jersey; additional phone interviews were undertaken to inform some of the case studies. All took place between April and June 2015.

being accountable to them. Otherwise, TTAs should be accountable to a local committee of councillors and independent members that is similar in structure to the old police authorities. Passenger transport users should be formally involved in scrutinising and advising TTAs, similar to the way in which local Healthwatch organisations engage with health and social care services. TTAs should be responsive to local demand – for example, they should respond to petitions from local people for the consideration of new routes.

2. Reforming and pooling public spending on buses

Over time, total transport authorities should take on responsibility for all public spending on public transport in their locality, and do so in order to spend it more strategically. We propose that this takes place in four stages.

First, **BSOG should be frozen in real terms and devolved to TTAs if they reregulate their bus markets.** The stability of this revenue stream is vital for transport authorities to effectively plan their networks and, having already been cut by 20 per cent, total expenditure on BSOG should be kept at current levels in real terms for a period of 10 years. Subsequently, and as is already the case in London, BSOG funding should be devolved to TTAs and PTEs in tandem with the power to reregulate. The DfT has previously indicated that this would be the case for areas that successfully pursue a quality contract scheme (QCS). It would then be for TTAs to determine whether and how to reform their allocations within their networks. The current allocation, which is based on fuel usage, is inefficient and does not target resources where they are needed – to rural areas, for example. TTAs could choose to, for example, allocate payments on the basis of patronage or distance travelled; equally, they could use it to fund other, non-commercial bus services.

Second, **local authorities should be given the power to transfer their budgets for public transport – such as community, welfare and school transport – to TTAs.** This would provide more rational geographies for policymaking, and by enabling larger scales and greater capacity could deliver better deals for residents and taxpayers. In time, TTAs could become responsible for more of the publicly funded bus routes within their area, such as those tendered by hospitals, GPs' surgeries, further education colleges and higher education institutions. To that end they should learn from the total transport pilots that are currently underway, and draw on the idea of a 'connectivity fund' (PTEG 2014a; CBT 2015).

Third, **local authorities should be allowed to transfer responsibility for statutory concessionary travel to TTAs.** While this report does not advocate the removal of concessionary schemes for over-60s and disabled people, TTAs could consider innovations. For example, schemes could be developed to enable older, wealthier residents to voluntarily donate free transport to younger residents who need free travel in order to access work, education or other services.[3] Spending on discretionary concessionary fares could be spent according either to the priorities of the TTA as a whole, or those of its constituent local authorities. Either way, the actual process of tendering of services could be undertaken by the TTA itself in order to get the best deal.

Finally, **local authorities should be given the power to pool the capital expenditure that is currently spent on public transport**, which would allow these resources to be spent more strategically. Central government should allow TTAs to borrow in order to fund capital investment, as TfL does currently. TTAs should also consider making more innovative use of capital expenditure. For example, the Strathclyde Partnership for Transport has demonstrated that investing capital in a fleet of buses and leasing these to operators on their subsidised routes can result in a significant revenue saving (SPT 2015). Such a move would also enable TTAs to invest in low-carbon vehicles.

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3   Although greater uptake would, of course, mean higher public expenditure.

3. Enabling a 'whole network' approach to franchising

Franchising has worked effectively in London for 15 years, and is now being adopted in Greater Manchester and possibly also in Tyne and Wear, West Yorkshire and Cornwall. Its main advantage is that it allows localities to retain fare revenue and to use it more strategically to cross-subsidise non-commercial routes. Franchising also allows greater democratic accountability over fares, services and routes, and makes smart-ticketing and data-sharing more viable. It ensures greater integration and efficiency at a network level by ensuring that competition laws cannot be used as an excuse for a lack of cooperation between different bus providers.

By contrast, the current system in the rest of the country means that people – many of them poorer and living in out-of-town areas – often have to take several buses, run by different operators, in order to get to low-paid jobs in other parts of a town's periphery, incurring high costs as a result. This acts as a disincentive to work, increases poverty, and discourages people from using public transport networks. While some bus operators are now planning to offer multi-operator ticketing, these tickets tend to come at a premium.

The government should simplify the test for implementing a quality contract scheme, so that TTAs will have the option to undertake franchising. There are concerns that non-urban areas will fail to make franchising viable because they have only a small number of profitable routes. The geography of total transport authorities must therefore include a mixture of commercially viable and non-commercial routes. This would ensure that there is a reasonable level of profit within the area that can be used to cross-subsidise less profitable routes.

Franchising should be used to catalyse innovation by operators. First, attention must be paid to the size of contracts – getting the best deal for passengers and taxpayers may mean striking a balance between large, 'bundled up' contracts that cross-subsidise, and smaller contracts that enable healthier competition and realise the advantages of smaller local providers, as Nexus has done in their pursuit of a QCS. Second, TTAs may decide to award 'non-compliant' contracts (whereby an operator may innovate beyond the authority's specification in order to deliver a better deal overall). Third, within some TTAs' areas there may be a need to explore joint rail and bus franchising, franchising that links commercial tenders with community transport via consortium bids,[4] or contracts that embed an element of demand-responsive transport.

There is no single model of reregulation, and a variety of options should be pursued. For example, under 'gross cost contracts' a franchising authority retains both fare revenues and risk, and pays a service charge to the operator (which makes a profit by putting downward pressure on its costs base). These have been taken a step further by TfL in the form of 'quality incentive contracts', which also reward and fine operators based on the quality of service they deliver. By contrast, 'net cost contracts' transfer the fare revenue and risk to the operator, which can make a profit by raising demand. In rural areas where demand may already be maximised, there are clear advantages to using gross cost or quality incentive contracts.

Another approach that TTAs might want to consider is a profit-share arrangement, which is working successfully in the case of HCT Group in Jersey. Municipal bus companies also provide the opportunity to share profits, and so may be a model worth considering for some TTAs.

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4   In which case the community transport associations involved may need to set up trading companies.

4. Enabling and encouraging innovation

As outlined above, significant innovation is taking place in demand-responsive technology, new ticketing arrangements, and new business models. **TTAs will have an important role to play in both encouraging innovation and ensuring that their rules do not stifle new thinking.**

TTAs should provide an environment in which initiatives to experiment with new routes can be taken forward by either operators or citizens. TTAs should therefore, and within reason, allow and encourage new routes to be developed outside of the current tendered network. The financial circumstances of local government mean that providing grant support will be a challenge; however, they could provide in-kind support and intelligence, while communities or operators could make use of innovative financial streams (as they have in the past). Pilot periods would allow an organisation to experiment for a set period of time, with the proviso that this arrangement is temporary until a point in time when it is either put out to competitive tender or ceases to operate. This could help facilitate innovations, such as a volunteer bus schemes that use local authority vehicles. This has worked well in Jersey, where LibertyBus trialled a volunteer bus scheme called Parish Link. TTAs should monitor the uptake and quality of these services, and manage passengers' expectations appropriately.

Open data is becoming increasingly powerful in the transport sector, and TTAs should encourage and promote it as far as is possible. Open data has well-recognised potential, from helping engineers to identify structural weaknesses in infrastructure to managing traffic and planning transport services (POST 2014). Transport authorities have always tended to collect large amounts of data, but TTAs should keep up with rapid advances in both the production and utilisation of big data in order to make better use of it themselves, and to enable others to innovate.

The government should clarify competition and state aid law as it applies to bus services. There is a great deal of confusion within the sector about whether community transport operators can form consortium bids with commercial operators, for example, and about how organisations in receipt of grant funding can compete for commercial tenders. This uncertainty appears to be stifling innovation.

TTAs should share best-practice and intelligence, and government should not set them against one another in competitive bidding processes. Rather, the government should facilitate the creation of a TTA network to enable knowledge-sharing and secondments between transport authorities in rural areas and small towns.

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Together, these reforms would underpin local, integrated transport networks that put passengers and their needs first. Local government would be put in charge of developing 'whole place' transport networks on behalf of local citizens; public spending would be used as effectively and efficiently as possible; and innovation in technology and business models would be supported and promoted across the country.

1.
INTRODUCTION

1.1 The benefits of buses

Buses have the potential to be the glue that holds society together. In many ways they already are. Buses get people to work, and are crucial to jobseekers; they bring people to and from shops and local amenities; they connect people to vital public services like schools and hospitals; and they give older and disabled people the freedom to travel in their local community. Widespread bus use protects the environment and improves people's quality of life.

However, in many communities buses are not playing these vital roles. These problems are most acute in smaller towns and rural areas, where bus services were most reliant on public subsidy and have therefore been hit hardest by cuts to local authority budgets.

Buses have five major social and economic benefits.

First, they support our labour markets. More people travel to work by bus than by all other forms of public transport combined. Two and a half million jobs are accessed by bus every day, and a further 1 million people use the bus as a back-up option if their primary method of transport fails (Mackie et al 2012). Combined, this accounts for around 12 per cent of the working population and £64 billion of gross value added (ibid). Indeed, one in 10 bus commuters would be forced to look for another job if they were no longer able to commute by bus (ibid). Jobseekers are more than twice as likely to use buses as the rest of the population is (PTEG 2015), and a survey found that 58 per cent of unemployed people had relied on the bus when they were last in work (Johnson et al 2014).

Second, they support the local economy. It is estimated that bus users make 1.4 billion shopping trips per year, spending a total of £21 billion; they also make 471 million trips for leisure annually, spending £6.2 billion (Mackie et al 2012). Where these shops are located makes a big difference in terms of who can access them. Outside London, more shoppers travelled into city centres by bus (a third in total) than by any other mode of transport. However, just 23 per cent of *town* centre shoppers and 13 per cent of retail park visitors travelled by bus, compared to 47 and 78 per cent respectively who travelled by car (Johnson et al 2013).

Third, buses help connect people with local services. Buses play a crucial role in enabling access to education, with 14 per cent of trips to and from school made by local bus – a rate which rises to 18 per cent in more rural areas (DfT 2014a). There is also a marked difference in the use of private (that is, school) buses in more rural areas: while they account for only 2 per cent of journeys to school in urban conurbations, they account for 10 per cent of journeys to school in rural town and fringe areas, and 17 per cent in rural village, hamlet and isolated dwelling areas (ibid). Buses are also key in terms of allowing people to access hospitals – 64 per cent of households are more than a 30-minute journey away from a hospital. Many people therefore rely on buses to get them there, particularly because those who need to access hospitals tend to be less willing or able to use other means of transport (DfT 2014b).

Fourth, concessionary travel schemes for older and disabled people have been very successful in terms of giving these groups the ability to travel freely: in 2013/14 alone, the schemes delivered more than 1 billion trips to 9.73 million pass-holders (DfT 2014c). It is estimated that every £1.00 spent on concessionary bus travel generates at least £2.87 in benefits to bus-pass users and to the wider economy, in the form of significantly reduced congestion, improvements in health and wellbeing, the encouragement of volunteering activities, and other positive impacts (Greener Journeys 2015).

Fifth and finally, buses ease congestion on roads, thereby reducing carbon and other emissions and improving quality of life. Research has shown that congestion not only costs fuel and time but, through the emissions that it generates, also has significant public health impacts (Levy et al 2010). More than a quarter of UK CO_2 emissions are due to road use (DECC 2015), and congestion (that is, stopping and starting in traffic jams) is known to increase these emissions significantly (CEBR 2014). Congestion also has a profound negative impact on air quality, through emissions of particulates and other harmful gases that are detrimental to health. Increasing the use of buses means fewer cars on the road in the first place, and so less congestion, which is particularly damaging. However, as David Simmonds Consultancy (2012) points out, the biggest environmental gains would be made by laying on a greater number of commercially viable peak services in urban areas, while abandoning some other routes would actually benefit the environment. Clearly, environmental concerns need to be balanced against the economic and social need for bus services.

1.2 Britain's declining bus market

As has been well documented, bus patronage outside London has been falling for many years. On the eve of deregulation in 1986, 3.65 billion bus journeys were made in England outside London. This figure had fallen to 2.32 billion by 2013/14 – the second successive year in which bus use was higher in London than it was in the rest of England combined (DfT 2015a). In chapter 2 we will examine the factors that explain this decline in more detail.

The decline in bus use has been most acute in small towns and rural areas, where population density and dispersion tend to mean that many local services must be funded and tendered by local government. Cuts to key revenue streams, such as BSOG (cut by 20 per cent) and local authorities' current expenditure on local public transport (cut by 19.7 per cent) have hurt many of these routes, as is also more fully examined in chapter 2 (HMT 2014a).

Concern about the decline of bus use outside London has sparked renewed interest in the reregulation of bus markets. Nexus, the passenger transport executive for Tyne and Wear, is seeking approval to implement a quality contract scheme (QCS) in order to take greater control over local buses across the North East Combined Authority area. The West Yorkshire Combined Authority is investigating the implementation of its own QCS. Greater Manchester has been given powers to plan and fund a transport system that integrates bus and rail services. The Department for Transport (DfT) has commissioned auditor KPMG to consider whether franchising might be a more appropriate model for commissioning bus services that would benefit both bus users and taxpayers, and whether candidate locations for it exist.[5] Finally, in the Queen's speech shortly after the 2015 general election, the government announced a buses bill that will devolve powers for local buses to authorities with elected mayors (HM Government 2015). Since then, Cornwall has struck a devolution deal with government which will give the council the option to franchise bus services by 2018 (Cornwall Council et al 2015).

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5   http://www.passengertransport.co.uk/2015/01/dft-review-to-examine-role-for-bus-franchising/

The focus of recent developments has overwhelmingly centred on urban areas, with the notable exception of Cornwall. It is positive that policymakers are taking a renewed interest in the issue, but it is important that towns and rural areas are not forgotten. It is to that end that IPPR has undertaken this research.

1.3 Scope and structure of this project

IPPR has set out to examine how powers over, and public funding for, buses and other forms of sustainable, public transport could be reformed to deliver better outcomes for passengers. Our aim is to find ways to give local areas greater strategic oversight, with the goals of:

1. improving the accessibility, reliability and value of bus and related transport services, especially for the most vulnerable people, and
2. reducing greenhouse gas emissions by providing cheap and reliable alternatives to car use.

In doing so IPPR has sought to answer the following questions.

*   What specific reforms to the rules that govern bus markets would best deliver improved outcomes for consumers and the environment?
*   How could a more integrated model of place-based transport funding – covering not only buses but also transport for schools, health and social care – be in put in place?
*   Alongside changes to market rules and funding, what other place-based policies should be introduced to increase demand for buses and other forms of sustainable transport?
*   How can the provision of more sustainable transport by community interest companies and other social enterprises best be supported?

The remainder of this report is structured as follows.

Chapter 2 will review what has happened to bus services in small towns and rural areas in recent years, examining how patronage, fares and funding have changed, and the combined impact that this has had on services and, in particular, on the vulnerable groups that rely most heavily on buses.

Chapter 3 will look at the changes currently taking place – how new initiatives and innovations that are being adopted locally, nationally and internationally could indicate ways forward for bus systems under pressure.

Chapter 4 will draw on the previous sections to propose solutions for improving how the UK's bus system serves small towns and rural areas, and to demonstrate how vital bus services can be not only sustained, but enhanced.

2.
WHAT'S HAPPENED?

This section discusses the underlying changes that have impacted upon bus services. While buses may have been deregulated outside of London, they rely heavily on direct and indirect public funding streams, as well as fare revenue from passengers. As a result of cuts to public expenditure – and especially to local authority funding – bus service provision has suffered in many parts of the country, and has been cut dramatically in some small towns and rural areas.

2.1 Trends in fares and patronage

Fare revenue, which makes up the largest proportion of total operating revenue[6] for local bus services within an area, is determined by a combination of patronage and fare levels, each of which have changed at very different rates in different areas of the country.

Figure 2.1 illustrates a divergence in the rates of change in patronage in different types of area between 2000/01 and 2013/14. Across England as a whole, patronage rose by 22.4 per cent. However, this rise was entirely driven by growth in London (of 77.0 per cent), while in metropolitan areas outside of London bus patronage fell by 15.6 per cent. In English non-metropolitan areas patronage declined until 2004/05, before rising again to just 0.9 per cent above its initial 2000/01 level (DfT 2015a).

Figure 2.1
Passenger journeys on local bus services, indexed (2000/01 = 100)
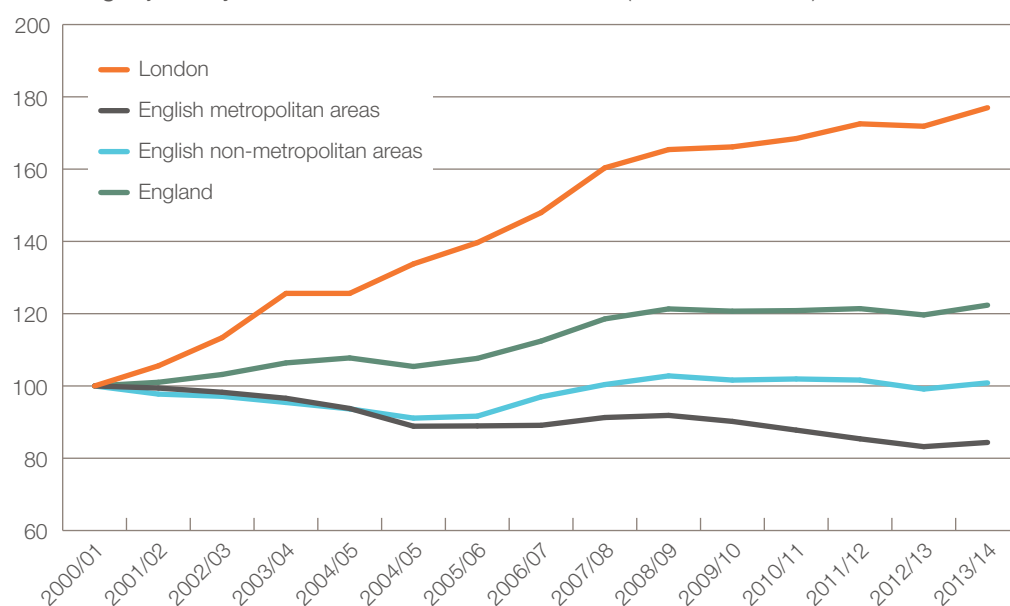
Source: DfT 2015a

6   Throughout this report, 'operating revenue' is used to refer to DfT estimates of 'estimated operating revenue for local bus services', the methodology and definitions behind which are available here: https://www.gov.uk/government/statistics/buses-statistics-guidance

Figure 2.2
Local bus fares index in real terms, adjusted for RPI, (2000/01 = 100)

- London
- English metropolitan areas
- English non-metropolitan areas
- England
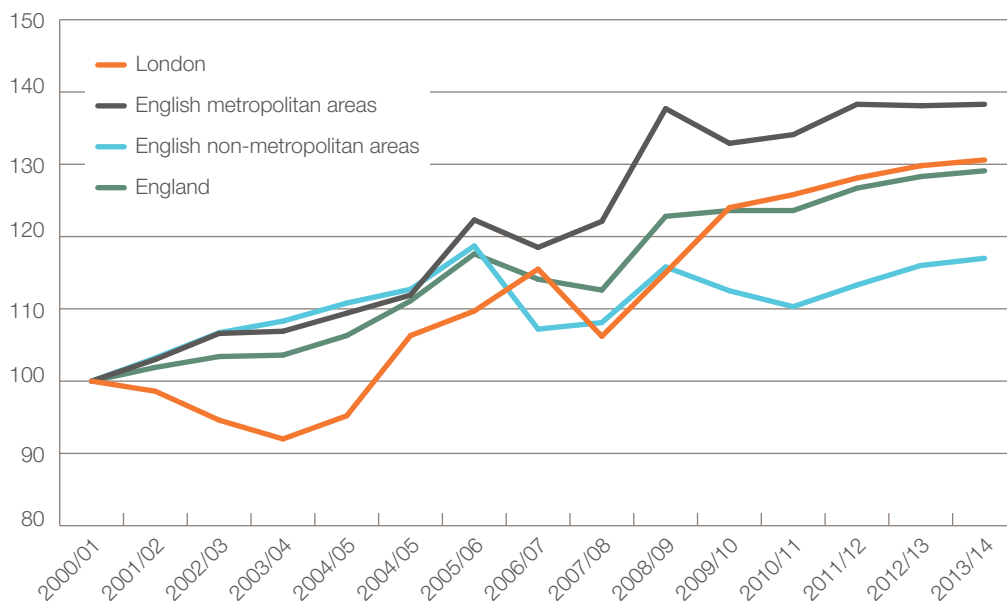
Source: DfT 2015b

Figure 2.3
Revenue from passenger fare receipts, in real terms (2004/05 = 100)

- London
- English metropolitan areas
- English non-metropolitan areas
- England
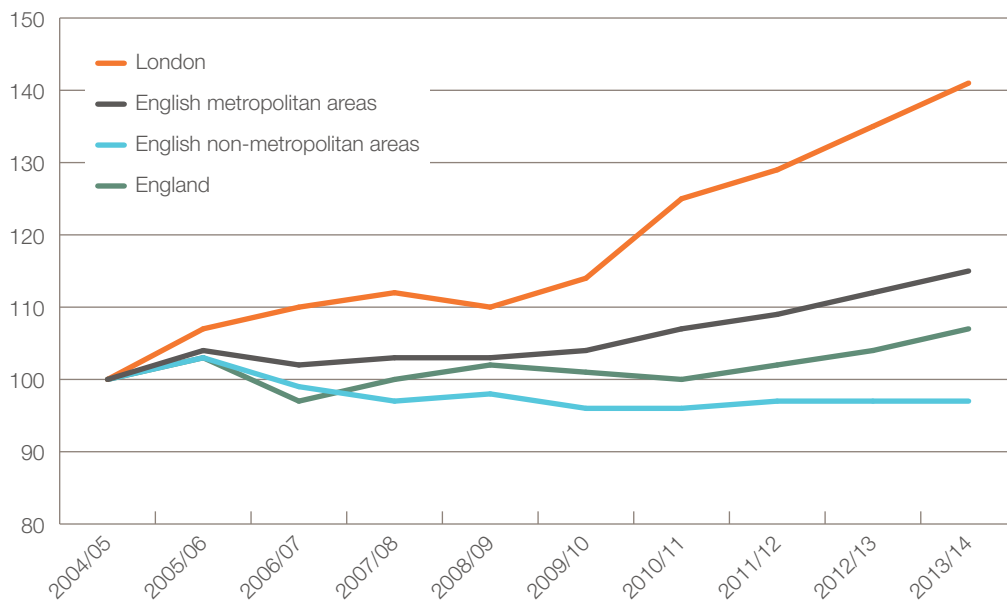
Source: DfT 2015c

Fares also rose significantly in real terms between 2000 and 2014 – but, again, passengers in different types of area had very different experiences. Looking at the average cost to the fare-paying passenger,[7] across England as a whole

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7 This is calculated based on the 'bus fares panel survey'. For further information on the methodology behind this measure see https://www.gov.uk/government/statistics/buses-statistics-guidance

there was a real-terms rise of 29.1 per cent over this period. It was in English metropolitan areas that fares grew most dramatically, rising by 38.3 per cent; fares in London increased to a level just above the English average (rising by 30.6 per cent). In non-metropolitan areas, however, the rise – at 17.0 per cent – was far smaller (DfT 2015b).

These changes are crucial not only to our understanding of issues of supply, demand and fares in their own right, but also because fare income (the product of fare levels and patronage) makes up by far the largest share of total operating revenue for local bus services. As figure 2.3 shows, across England as a whole there was a small rise (of 14.6 per cent) in passenger fare receipts between 2004/05 and 2013/14.[8] However, London again stands out as having driven this rise, with a 41.3 per cent increase over this period. By contrast, revenue from fares in English metropolitan areas fell slightly (by 3.3 per cent), while rising in non-metropolitan areas (by 6.6 per cent) (DfT 2015c).

2.2 Trends in public sector financial support

In addition to fare revenue, bus services are financed by a variety of different government agencies, which do so for different reasons and in very different ways. The total operating revenue for local bus services was £5.6 billion in 2013/14, including £3.3 billion in passenger fare receipts, £1 billion in concessionary travel funding, £1 billion gross public transport support[9] and £298 million in bus service operators grant (BSOG).

BSOG is a subsidy provided to all bus operators that allows them to recover some of the costs of operation. It is based on the amount of fuel their vehicles consume, and was formerly known as the fuel duty rebate. BSOG subsidises travel for everyone (Butcher 2013). The DfT pays it directly to bus operators, with the exception of local authority tendered services and TfL franchised services. In those cases, the authority receives the payment from central government, to be allocated and used to improve the local bus network (DfT 2012a).

The 2010 spending review cut the BSOG allocation by 20 per cent, and the total value of the grant fell from £469 million in 2009/10 to £298 million in 2013/14. In 2011 the DfT projected that this would lead to fare increases, falls in patronage and a decline in the number of services in operation, as table 2.1 below illustrates (DfT analysis in Butcher 2013). They expected that small towns and particularly rural areas would be worst affected.

Table 2.1
Estimated approximate average impact of a 20 per cent reduction in BSOG outside London

	Impact on fares	Impact on services	Impact on patronage
Metropolitan	+2%	-1%	-1%
Conurbations	+1%	-1%	-1%
Small towns	+1%	-2%	-1–2%
Rural	+2%	-2%	-2–3%
Average	*+1%*	*-1%*	*-1%*

Source: DfT analysis (published 2011) in Butcher 2013

8   The difference in the time periods covered in the analysis within this section is due to data availability.

9   This is defined as the total of all local authorities' gross costs incurred in support of bus services, either directly or by subsidies to operators or individuals. The bulk of these costs will be accounted for by payments to operators providing tendered or supported bus services, but some other costs, such as administration costs, are also included.

Cuts aside, there has been debate over whether BSOG represents an efficient way of allocating what remains a significant funding stream. On the one hand, it has been argued that BSOG represents good value for money – that every £1.00 spent on BSOG delivers between £2.50 and £3.50 in wider economic benefits (Greener Journeys 2014). The DfT says that as a result of BSOG, 'on average, bus fares are around 7% lower than they otherwise would be and bus service levels around 7% higher than they otherwise would be' (Butcher 2013). However, there are issues with BSOG: it is poorly targeted, rewards fuel consumption, and has a bias towards congested routes where fuel efficiency is lower (Greener Journeys 2014).

A range of reforms to BSOG have been proposed, including changes to its administration and allocation formulae. These can largely be summarised under two headings.

- **Changing the way BSOG is calculated to a per-passenger basis, or by distance travelled.** These metrics would incentivise different behaviours from operators. Where it is allocated on a per passenger basis, busy urban routes are encouraged, maintaining the economic and environmental benefits of the current allocation approach. Where it is allocated by distance travelled, more incentive is provided to operate rural routes. This offers greater social benefits, but potentially at the expense of some of the economic and environmental benefits of the current approach (Greener Journeys 2014).[10]

- **The devolution of BSOG to transport authorities.** Some have called for the devolution of BSOG payments to local authorities alongside the successful award of a quality contract (LGA 2013 and CTA 2012[11]). The DfT has previously stated that its intention is to devolve BSOG following a QCS award, as this would allow the franchising authority to set its priorities more effectively (DfT 2012b).

In addition to BSOG, there is the £2.7 billion in funding that, in 2013/14, was channelled through local government to support bus services in various ways (including capital and revenue spending).[12] Of this, £1 billion covered statutory concessionary fares, and was therefore mandated expenditure. Local government decides how to spend its money on *discretionary* concessionary fares, but spends a far smaller sum (£145 million) on this. 'Support to operators – bus services' (which includes tendered services)[13] accounted for £882 million (net) revenue expenditure in 2013/14 (DCLG 2014a). Capital expenditure by local authorities was far lower, but still significant: in 2013/14 it was £196 million, with the vast majority of that sum spent on new construction, conversion and renovation, as shown in table 2.3 (DCLG 2014b, 2014c, 2014d).

In addition, local government has statutory responsibility for transporting those with special educational needs, and for home-to-school transport, which entails significant expenditure: in 2014/15 these budgets amounted to almost £1 billion in total – £569 million of which was spent on special educational needs (SEN) transport[14] and £396 million spent on home to school transport (EFA and DfE 2015).

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10   The latter has been policy in Scotland since 2012.

11   However, the CTA specifies that section 19 and section 22 (not-for-profit passenger transport) services should continue to be claimed directly from the DfT.

12   This figure includes expenditure on 'public transport coordination', which covers other modes too but cannot be disaggregated.

13   In total this includes: payments to bus operators; payments to park-and-ride operators; levy payments to PTEs; TfL expenditure on local bus services; and payments to voluntary groups providing quasi-public transport.

14   Central government also spends an additional £23 million on SEN transport.

Table 2.2
Local authority revenue expenditure on highways and transport services related to buses (£'000s), 2013/14*

	Employees	Running expenses	Sales, fees & charges	Other income	Capital items	Net total cost
Statutory concessionary fares	£7,006	£1,064,176	-£10,406	-£40,536	£835	£1,021,075
Discretionary concessionary fares	£1,413	£154,553	-£6,139	-£4,674	£173	£145,326
Support to operators – bus services	£18,438	£992,913	-£41,884	-£96,818	£9,784	£882,433
Public transport coordination	£432,866	£45,583	-£31,824	-£85,006	£227,996	£589,615
Total	£459,723	£2,257,225	-£90,253	-£227,034	£238,788	£2,638,449

Source: DCLG 2014a
*Note that some of these items include other modes of transport.

Table 2.3
Local authority capital expenditure on fixed assets under 'public passenger transport bus' heading (£'000s), 2013/14

	Spend
New construction conversion & renovation	£146,875
Expenditure on grants	£21,189
Vehicles	£11,522
Plant machinery & equipment	£11,112
Expenditure on loans & other financial assistance	£3,832
Acquisition of land & existing buildings	£3,703
Intangible assets	£957
Sales of intangible assets	£0
Repayments of grants loans & financial assistance	-£932
Sales & disposal of tangible fixed assets	-£2,491
Total	£195,767

Source: DCLG 2014b, 2014c and 2014d

Local government expenditure on bus services is clearly vital, particularly for those vulnerable groups who are reliant on tendered services and discretionary fares. However, it is now under extreme financial pressure. While most government departments endured cuts during the post-2010 fiscal consolidation, local government bore the brunt (see figure 2.4). Between 2009/10 and 2015/16, the communities and local government current budget fell by £22.7 billion (64.9 per cent), while the capital budget fell by £6.6 billion (66.5 per cent). The National Audit Office (NAO) has found that many local authorities are in financial difficulty, and auditors are concerned that the majority (56 per cent) will fail to make the medium-term financial strategies (NAO 2014).

Largely as a result of other areas of government spending being protected, the impact that local government cuts have had on local transport services has been acute and disproportionate. As figure 2.5 below illustrates, expenditure on all public services by all tiers of government in England has fell by 2.7 per cent between 2009/10 and 2013/14. However, *local* expenditure on services fell by a much more severe 10.4 per cent. But expenditure on local transport services (which includes buses) has taken an even more severe cut, at 19.7 per cent (authors' analysis of HMT 2014a). The NAO (2014) has also shown that many authorities have

deprioritised spending on transport as part of their efforts to deal with the spending cuts, while tending to protect spending on adult and children's care.

Figure 2.4
Change (£m) in total managed expenditure by departmental group and other expenditure in real terms, 2009/10–2015/16*
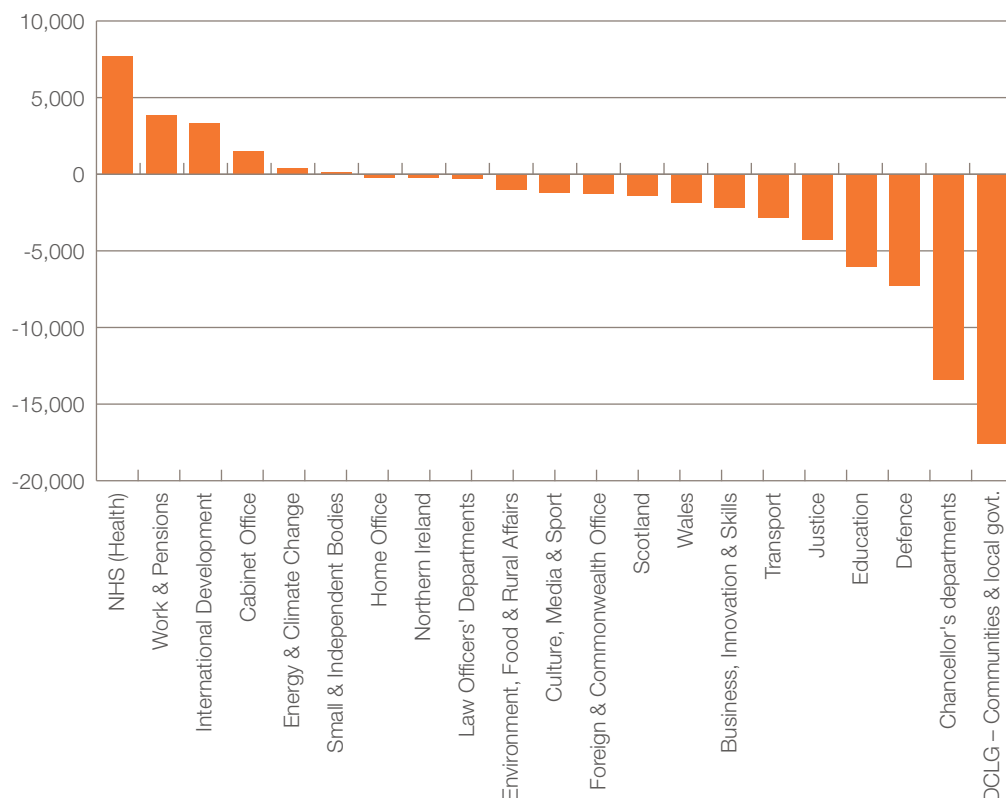
The various financial pressures and spending cuts described above have, together, had very different impacts on different areas of the country. Between 2009/10 and 2013/14 total estimated bus operating revenue fell far more steeply in areas of England outside of London than it did within the capital. Both this, and changes to the composition of bus operating revenues in different types of area, will have serious implications for the viability of some routes outside of London, as figure 2.6 illustrates.

- In London, operating revenue rose marginally by 0.3 per cent between 2009/10 and 2013/14. A far sharper fall in BSOG revenue relative to other areas was more than offset by a significant increase (in absolute terms) in fare revenue and, to a lesser extent, in operating revenue derived from concessionary travel.

- In metropolitan areas outside of London, operating revenue fell by 6 per cent overall. Reductions in BSOG and public transport support[15] had a modest impact, but the cut in funding for concessionary travel and the very marginal rise in fare income (1 per cent) contrast with the significant increases for both in London.

- In non-metropolitan areas, total operating revenue fell by 5 per cent. They were hit by a fall in gross public transport support that was far larger than that suffered

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15 'Public transport support' is the total of all local authorities' gross costs incurred in support of bus services, either directly or by providing subsidies to operators or individuals. The bulk of these costs will be accounted for by payments to operators providing tendered or supported bus services, but some other costs – administration costs, for example – are also included.

in metropolitan areas (though it was still smaller than in London); the BSOG cut was significant but, in proportional terms, less so than elsewhere. The rise in fare receipts (5 per cent) was not enough to compensate for these other factors.

Figure 2.5
Benchmarked expenditure in real terms, indexed (2009/10 = 100)
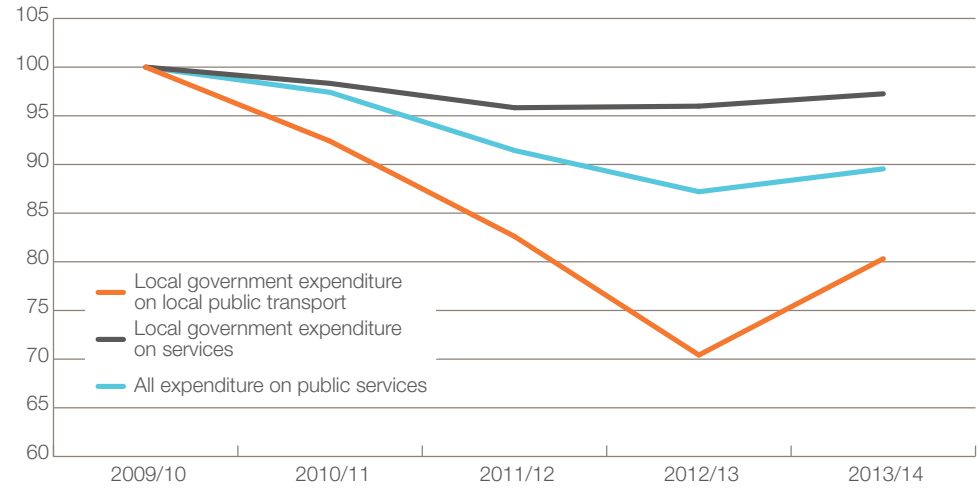
Source: Authors' analysis of HMT 2014a

Figure 2.6
Real-terms change in total estimated bus operating revenue by revenue type, 2009/10–2013/14, in metropolitan and non-metropolitan areas of England, and London

Source: DfT 2015c

However, despite these significant changes in the level, composition and distribution of bus operating revenue in non-metropolitan areas of England, the overall level is no lower than it was at in 2007/08. As figure 2.7 below shows, the reason behind the rise in total operating revenue in English non-metropolitan areas befo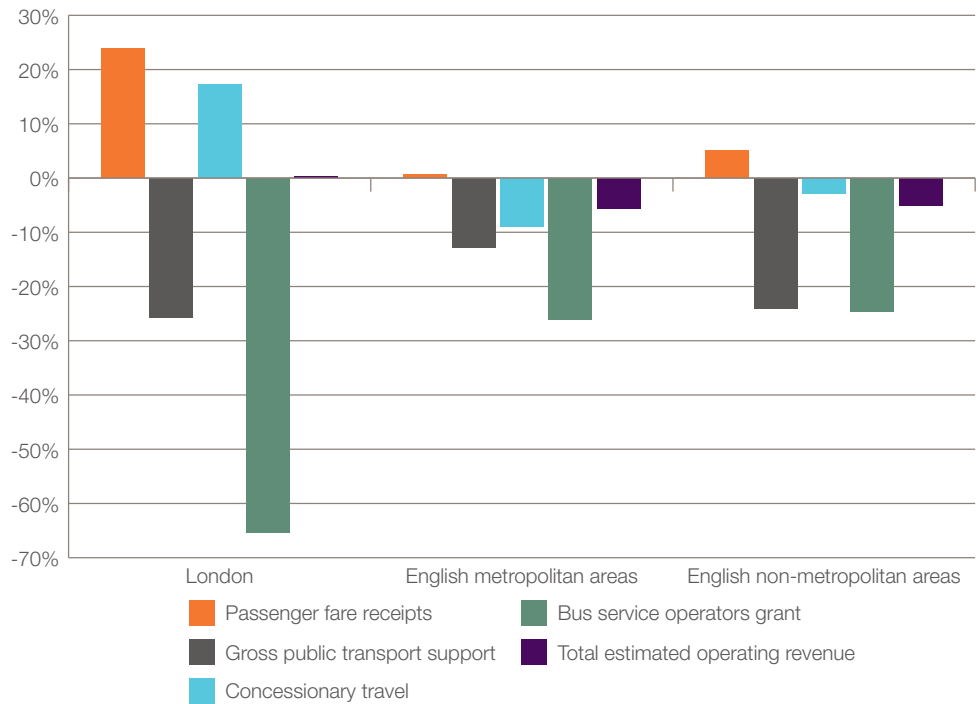re 2009/10 was a significant increase in concessionary fare income. By contrast, the reason for the recent fall has been the cuts to BSOG and to gross public transport support; the rise in fare receipts has prevented a further overall fall (DfT 2015c). The fact that, because of the way that different areas rely on different funding streams, relatively small changes in the total expenditure on buses have had very different impacts on different parts of the country suggests that there is a strong case for a refocussing of bus revenue within the sector, and within local areas, which we will return to in chapter 4.

Figure 2.7
Estimated operating revenue for local bus services by revenue type, English non-metropolitan areas (£, real terms, 2013/14 prices)
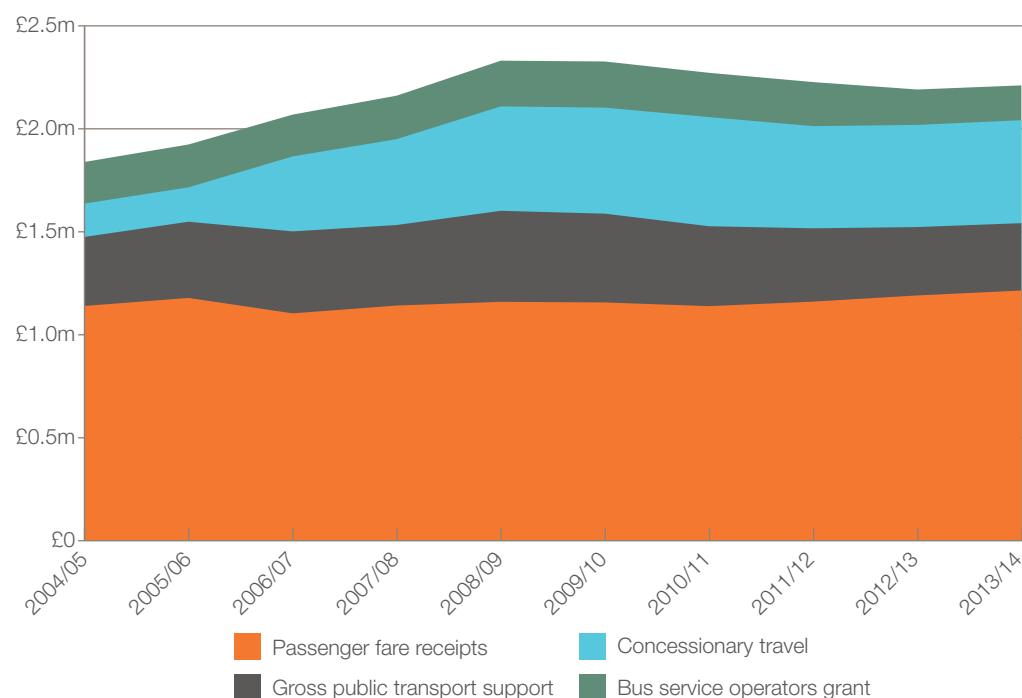
Source: DfT 2015c

In addition to the above funding streams, other government departments and agencies spend money on buses, either specifically or as part of more general expenditure on transport. However, in the course of speaking to authorities and government officials we found that these departments and agencies do not have detailed figures on their expenditure on buses. Many authorities that have made successful total transport pilot bids have sought, as their first objective, to find out how much is spent by the different central government departments in their area. Some commented that based on past experience, even this is likely to be a challenge.

2.3 Impacts on vulnerable groups without car access
Buses are vital for groups that are less likely to have access to other modes of transport, but services are falling short for many people. As figure 2.8 shows,

many people are experiencing severe access problems: just 33.3 per cent of hospital users, 51.4 per cent of primary school users, and 54.9 per cent of secondary school users had reasonable access to those services via public transport or by walking in 2013; and the picture for users of those services who are deemed 'at risk'[16] isn't a great deal better (DfT 2014d).
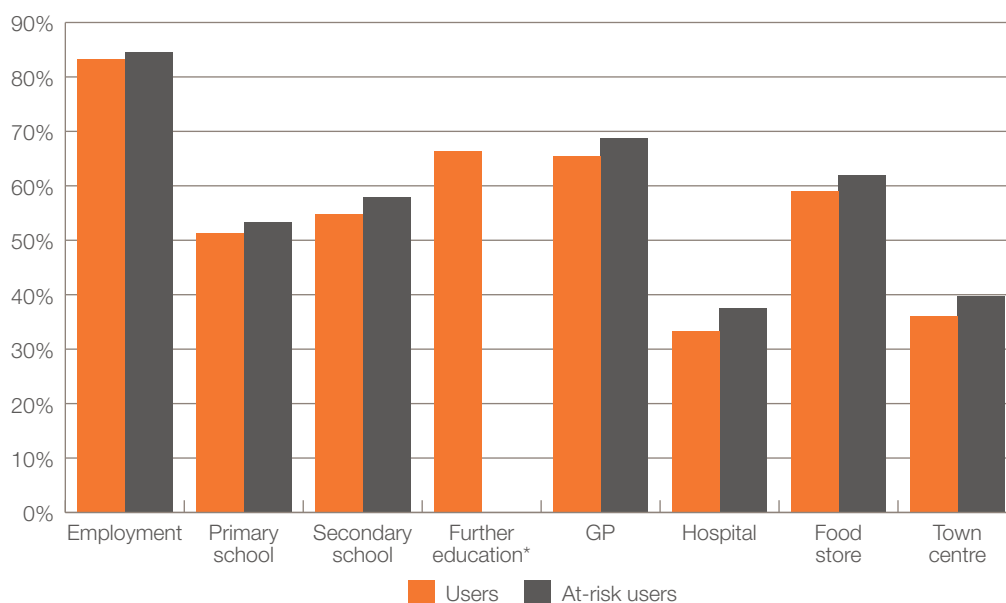
Figure 2.8
Proportion of all service users, and 'at-risk' users, with reasonable access to key services by public transport or walking, 2013

Source: DfT 2014d
* There is no at-risk category for further education.

This report identifies five key demographic groups that are most reliant on bus services, and who are most likely to feel the impact of changes in the transport sector.

- **Older people:** AgeUK has expressed concern about the impacts that cuts to bus services might be having on the elderly population (AgeUK 2013). Foremost among those concerns is that the rising costs of those services that are running, coupled with a reduction in service frequency, has undermined the security of some older rural populations (ibid). Bus travel provides a whole range of benefits to older people; in particular, it helps to reduce the burden on the social care system by maintaining and improving people's independence and wellbeing (Green et al 2014). There is a need to address issues in communication and information delivery between service providers and older people, who may not have access to online sources of information about services, particularly real-time information.

- **Younger people:** Young people are particularly vulnerable to cuts in bus services as they are less likely to have access to their own car or other private transport (British Youth Council 2012). While 48 per cent of 17–20-year-olds held a driving license in the early 1990s, this figure has now fallen to 38 per cent (Transport Committee 2014). The rising cost of driving has priced many young people out, and there is a critical need for alternative modes of

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16   'At risk' service users are those who belong to particular social groups that are at risk of exclusion – for instance, for primary schools, 'at risk' users are children aged between 5 and 10 who are known to be eligible for free school meals. For more details, see https://www.gov.uk/government/uploads/ system/uploads/attachment_data/file/230789/accessibility-statistics-guidance.pdf

transport to facilitate their access to work and education opportunities, as well as other travel needs. The North Yorkshire Youth Council lobbied their local authority to reduce fares for young people who are still in education or training, delivering a '£1 one-way' fare (NYYC 2013). This kind of affordability is needed across rural areas to support travel for education and training.

- **The unemployed:** Access to public transport is essential for those who are unemployed and seeking to enter or re-enter employment. Research has shown that around 57 per cent of unemployed people do not have a car or motorcycle licence, and 77 per cent had no access to a car, van or motorcycle (Johnson et al 2014). Bus services can help open up access to employment for these people – but 23 per cent of unemployed 18–24-year-olds said that lack of a suitable bus service was a barrier to getting a job, and 25 per cent said that the cost of the bus was also a barrier (ibid). Furthermore, many low-skilled and entry-level jobs may involve shift work, which is particularly challenging to reach using public transport, as many evening and weekend bus services have been subject to cuts in recent years (PTEG 2015).

- **Low-income employees:** For those on low incomes, public transport can be extremely important for accessing key services. Around half of households in the lowest income bracket do not own a car while the national average is about 25 per cent (CAB and CBT 2010). In addition, cuts to subsidies have led to fare increases, which have had a particularly severe impact on this group and on the unemployed.

- **Disabled people:** Cuts to services may have had a profound impact on disabled bus users, as around 60 per cent of disabled people live in a household with no car, and disabled people use buses around 20 per cent more frequently than people without disabilities (Transport Committee 2014). Polling commissioned by the Disabled Persons Transport Advisory committee has suggested that transport is a more significant concern for disabled than non-disabled passengers (CBT 2015).

3.
WHAT'S CHANGING?

In many ways, the picture for bus provision in small towns and rural areas looks desperate. However, local authorities and bus companies have attempted to manage these pressures in a wide variety of ways. In this chapter we explore the different approaches that have been taken to delivering transport in small towns in rural areas, including:

- **new budgeting arrangements**, including total transport pilots
- **new regulatory models**, particularly within core cities
- **new business models**, such as community interest companies and social enterprises
- **technology-led solutions**, such as smart-ticketing and new models of demand-responsive transport.

These initiatives demonstrate that there is great potential for innovation in the public, private and voluntary sectors – innovation that will be essential going forward.

In the course of the research presented in this section, IPPR conducted focus groups and interviews with service users, representatives of the specific groups mentioned above (older people, younger people, the unemployed, low-income employees and disabled people), and people working for bus operators, local government and government departments, and in academia.

North Yorkshire provides an interesting case study both of the impact that severe public sector cuts have had on groups that tend to be reliant on bus services, and of some of the innovations that are emerging to meet the challenges that have arisen.

Case study: North Yorkshire
North Yorkshire is one of the areas that has been hit hardest by cuts to bus services, with the council making deep cuts to funding for supported bus services. Across Yorkshire and Humber, spending on buses has fallen from £8.88 per person in 2010 to £6.46 in 2015, and North Yorkshire alone has lost around 90 services (CBT 2015).

In 2011 North Yorkshire county council had a budget of £6 million for supported bus services. The initial round of cuts was made to Sunday, evening and bank holiday supported services, which shaved £750,000 from the subsidy budget in 2011. In 2013, £1.1 million in savings from the subsidy budget needed to be made, and the council looked at reducing service frequency, improving the quality of services, and cutting town services, and reviewed how home school transport was delivered. A total of £2 million in potential cuts were identified, and of the options presented the council chose those that delivered the greatest cost savings. A further round of cuts is currently under consultation, after which the bus subsidy budget will stand at £1.5 million – a fall of £4.5 million over five years. Some services have been retained commercially despite the removal of subsidies; in other cases, the hope has been that community transport would take up the slack. While this has occurred to a degree, where services have been retained routes have often been reduced – the frequency of some services can be as low as once every two hours.

The impacts of the cuts have been felt across the five different groups that we identified in chapter 2. When we interviewed local elderly residents,[17] they pointed out that while town services in Northallerton, a market town in North Yorkshire, have been retained, the service

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17 In a focus group in Northallerton, facilitated by AgeUK North Yorkshire.

no longer serves GP surgeries in the town, making access to healthcare challenging. People now have to walk from the centre of town to their surgery, or are forced to take expensive taxi rides. For elderly residents – who make up a higher proportion of the North Yorkshire population than the UK average – cuts to buses have restricted their access to services.

For disabled people in North Yorkshire, the reduction of services has also, in some cases, had a significant impact. One of the reported challenges is accessing bus services that already have wheelchair users or pushchairs on board. Where service frequency has been reduced, this may leave passengers waiting substantially longer for the next service. While this would be merely irritating for an able-bodied person, such a wait could be a detriment to the health of a physically disabled person, who may be immobile in cold or wet conditions. Furthermore, cuts to buses have restricted access to services. One interviewee, who suffered from MS, was no longer able to access a support group.

Wheels2Work is a community transport organisation that supports people who are trying to enter or re-enter employment, but for whom transport is a barrier to work. The organisation told us that over recent years there has been an increase in the number of applicants to the scheme who have given lack of a bus service as their reason for applying. This may be because there is no bus service at all in the area where they live or work, but often they have found that people who are applying for low-skilled or entry-level jobs would be working shifts that are not compatible with bus timetables – often starting before services begin or finishing after they stop.

Voluntary community transport schemes are receiving support from the county council, which helps them to provide transport links to vulnerable communities that may have lost their local bus service. Nidderdale Plus has partnered with North Yorkshire county council to deliver community transport in the Pateley Bridge area through the purchase of a community car, which provides transport for those without access to public or private transport, and those who might need more assistance. The scheme uses volunteer drivers, and supports around 40 users in the area, running alongside a volunteer car scheme for hospital journeys which is funded by the local clinical commissioning group. The community car model is one that North Yorkshire county council are keen to replicate in other areas. However, it is not without its issues. One elderly resident of Northallerton told us that using a volunteer car scheme feels like charity, and doesn't provide the freedom and flexibility that scheduled bus services can. Disabled people may also face challenges in accessing community car schemes, as they may not always present an appropriate transport option for wheelchair users.

Source: interviews conducted with stakeholders in North Yorkshire

3.1 New budgeting arrangements
'Total transport' pilots
The concept of 'total transport' has been widely advocated, with the Passenger Transport Executive Group (PTEG 2011) and others producing research in support of it. The idea is to recognise that there are 'shadow' bus networks operated by the many public organisations within an area – including local authorities, schools, health centres and hospitals, job centres – and, by pooling both funding and resources (such as personnel and vehicles) at a local level, to deliver more efficient and better-integrated transport services (CBT 2014).

In early 2015, the DfT announced a £4 million fund[18] to support total transport pilot projects, with a particular focus on the integration of transport resources and funding in order to deliver more effective and efficient passenger services.[19] The initial funding was targeted primarily at services in rural areas. If we look at those bids that were submitted to the government and secured funding for these pilots, a number of themes emerge.[20] These include improved passenger information,

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18   Although £7.6 million was actually awarded.
19   See https://www.gov.uk/government/publications/total-transport-pilot-fund
20   The details of these applications are not public – the information on them in this section was provided to IPPR by the local authorities involved.

joint commissioning of buses, a focus on patient transport, and the establishment of new social enterprises to manage rural transport integration. Below are some examples of how each of these themes were taken up in specific pilot bids.

Passenger information
- Norfolk county council was awarded £300,000 for a project that aims to build upon its current efforts to improve access to transport services in the area, and to research and examine the potential for the joint commissioning of transport. A key element of the Norfolk proposal is the development of a 'one-stop shop' for customers and stakeholders, which aims to draw on innovative technology and infrastructure applications in order to improve services.

- Essex and Suffolk county councils were jointly awarded £190,000 to improve integrated transport services in seven rural areas in the two counties, including one that straddles the border between them. The project aims to develop a digital technology solution: an Uber-style app that would provide customers with accurate information about the journey options available to them, allowing them to make informed decisions about how they wish to make these journeys.

- Lincolnshire county council was awarded £400,000 to develop a 'one-stop shop' to provide integrated transport information across the county. Its total transport pilot will build on the county's existing integrated transport unit to further integrate services, including established demand-responsive transport and non-emergency patient transport services.

Joint commissioning and integration
- Cambridgeshire county council was awarded £460,000. This will be used by the existing Cambridgeshire Future Transport (CFT) steering group to improve rural transport provision across the county. The council currently spends £1.5 million on adult social care transport, £17 million on home-to-school transport, and £2 million on CFT, including community transport grants. Integrating these funding streams, and pooling the vehicles that are used to provide the various services, will, its says, deliver efficiency improvements.

Patient transport
- North Yorkshire county council was awarded £120,097 for their project, which is focussed on improving operations in four specific areas of health transport: renal dialysis clinic patient transport; out-of-hours and out-of-area patient transport; evening hospital discharge; and GP non-emergency patient hospital referrals. These have been identified as areas in which transport is not operating effectively. The pilot project will make use of the council's fleet of 75 minibuses, as well as drawing on community transport and volunteer car schemes in the area.

Establishing social enterprises
- Northamptonshire county council received £750,000 – the largest amount of funding to be awarded by the DfT's total transport pilot fund. The bid covers all council-supported transport services in the county – including home-to-school, SEN, and adult social care transport – as well as additional transport services provided by other organisations including universities, community transport providers, demand-responsive services and health transport. The Network Northamptonshire project aims to establish a social innovation company that will deliver integrated transport in the region. Recent reports suggest this is proceeding well, and the council has stated that it expects the initiative to deliver savings of as much as £1 million per annum (Browne 2015).

- Staffordshire county council was awarded £130,000 for two projects, one of which aims to establish a social enterprise to manage its demand-responsive transport under the Moorlands Connect project (see section 3.4 for more detail on this project).

The different approaches adopted by the total transport pilots represent a spectrum of innovative approaches to rural transport provision, and as they are rolled out in the coming months we will stand to learn a lot from rural transport authorities.

Northamptonshire estimates that it will be able to save £1 million per annum; if this rate of saving was replicated across all English authorities in 2015/16, the savings would run to about £102 million.

Connectivity funds

In a similar vein to the total transport pilots, a number of organisations have put forward the idea of a 'connectivity fund' that would secure and enhance funding for local buses. For example, PTEG (2014a) has proposed that £500 million is raised by top-slicing departmental budgets nationally, and that this is put together with BSOG into a fund that is ringfenced for local bus services, then used by local transport authorities to achieve specified objectives. By improving transport provision, such a fund would deliver cross-sector benefits – so funding drawn from health, education and other budgets would deliver benefits in these areas. The money would be provided to local transport authorities to manage and spend at a local level on the most important areas of their network. Such an approach would boost local economies, as well as delivering social and wellbeing benefits and making the bus network more sustainable.

The Campaign for Better Transport is in favour of developing this model, and suggests that the connectivity fund should aim to provide £500 million in bus funding – which would pay for itself by reducing pressure on other services, such as health and social care, and increasing local economic growth (CBT 2015). The work of the connectivity fund should be aligned with key government priorities such as access to employment or reduced environmental impact.

3.2 Devolution and new regulatory models

Outside of the capital, the UK's bus system is completely liberalised, a fact that has contributed to poorer services. England's buses outside of the capital were deregulated in 1986, which meant that operators and authorities were able to enter into voluntary agreements, but operators retained discretion over whether or not to continue providing any given service (unlike in London where they are contracted to deliver specific services). In some cases, particularly in many rural areas, the local transport authority (LTA) will therefore choose to tender non-profitable routes to supplement those that operators provide independently.

There is a distinct lack of competition in the UK bus market, with just 3 per cent of bus routes facing head-to-head competition (DfT 2012c).[21] The Competition Commission has suggested that the cost of this lack of competition has been poorer services for consumers and higher fares – a cost that may be equivalent to as much as £305 million per year (Transport Committee 2012). Competition regulations in the bus market are intended to prevent anti-competitive practices, yet the market is dominated by a few large operators and the barriers to entry are high (Competition Commission 2011).

This lack of competition and excessive operator profits have led some to call for the London model to be adopted more widely, particularly in England's major cities (Rowney and Straw 2014, PTEG 2014b).

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21   In the UK excluding London and Northern Ireland.

Quality contract schemes

Quality contract schemes (QCSs) were introduced to allow areas outside of London to move in this direction. QCSs were introduced in the 2000 Transport Act (and updated in the 2008 Local Transport Act) essentially as a means to reregulate the bus market by 'franchising' services, thereby allowing local authorities to have much greater control over the provision of transport than they do in liberalised, deregulated markets. The QCS process has, however, been criticised for being complex and onerous, which has prevented local authorities from applying (Rowney and Straw 2014, PTEG 2014b). Nevertheless, some authorities have begun to take this route:

- Nexus – the transport authority that covers Tyne and Wear– is currently pursuing a QCS, with the objective of delivering simplified fares and smart-ticketing, better value for young people and an improved passenger experience (Nexus 2013). The area covered by the proposed Nexus QCS would actually extend beyond the boundary of Tyne and Wear, as it falls under the North East Combined Authority (NECA) geography, which includes Northumberland and Durham. While the focus of the QCS is on buses in the metropolitan area of Tyne and Wear, many of these services extend into the rural areas beyond, and Nexus suggests that these areas will benefit from the scheme as well. The NECA will be able to reinvest profits from buses within the urban area of Tyne and Wear into improving local bus services outside the Nexus area (PTEG 2014c). The QCS board has been hearing evidence as it considers whether to approve Nexus's proposal. The process has been highly contentious, with bus operators putting up a great deal of opposition and arguing for voluntary partnership agreements as an alternative to the proposed QCS. However, the authority maintains that by implementing a QCS they can deliver service improvements, reduced fares and an improved passenger experience.

- The West Yorkshire Combined Authority (WYCA) is following Nexus's lead by exploring the options for a QCS in its own region. WYCA also remains open to the different approaches that are possible through voluntary partnerships, and is taking forward both options. However, as in the North East, operators are strongly opposed to the QCS approach, and WYCA is in discussions with the Association of Bus Operators in West Yorkshire to find the best way forward.

Devolution deals

In November 2014 the groundbreaking Greater Manchester Agreement, between the government and the Greater Manchester Combined Authority, was signed. This was a watershed moment for devolution within England, and among the powers it granted to the Greater Manchester mayor was the ability to franchise (or reregulate) bus services – powers similar to those currently held by TfL (HMT and GMCA 2014). Crucially, Greater Manchester has a preponderance of bus companies (unlike some other major UK cities), as well as one of the busiest bus routes in Europe running through its centre. The level of competition in and commercial viability of Greater Manchester's bus network means that, in theory, a significant amount of fare revenue is available for redistribution within the city. The government's buses bill – currently going through parliament – will enable this to happen. As in London, this means that BSOG and funding for the statutory concession schemes will be devolved (although Greater Manchester will still have to ensure the latter is provided).

Cornwall recently became the first rural authority to benefit from devolution, and its deal with the government will give the council the option to franchise bus services by 2018 (Cornwall Council et al 2015). The council argues that by devolving decision-making and funding for buses, its transport network can be better integrated without additional costs to the taxpayer, as there is 'fare box' revenue of £26 million in the region (TransportXtra 2015). As part of the deal, Cornwall

council and the Cornwall and Isles of Scilly local enterprise partnership (LEP) have committed to delivering integrated smart-ticketing, and the introduction of robust governance arrangements such as a bus committee (Cornwall Council et al 2015).

The buses bill that featured in the government's Queen's speech in May 2015 will allow authorities with directly elected mayors to control their local bus network, providing options for franchising and for improving the integration of transport (HM Government 2015). Details of the mechanisms through which this will be enabled are yet to emerge, as is clarity as to whether (in light of Cornwall's deal) directly elected mayors will be required.

Case study: bus franchising in the Netherlands

The Netherlands is committed to delivering integrated and efficient transport. Since 2005, regional transport has been delivered through provincial authorities, which receive funding from central government, with operators bidding for franchises to run services. Generally, three levels of service are delivered: high- and medium-frequency services between towns and cities, which are commercially profitable, and lower frequency services in less densely populated areas, which may involve demand-responsive transport (Van de Velde et al 2010, McKibbin 2012). In many cases the delivery of this demand-responsive transport has been contracted to local taxi companies, with the aim of ensuring an efficient use of vehicles – a car may often be more appropriate than a bus, for instance. In addition to this operator-delivered transport, community transport is delivered using 'Buurtbuses', which are driven and run by volunteers in partnership with operators. There are more than 200 Buurtbus schemes across the country, with real-time information on the services provided to customers (ATCO 2013). Where an existing commercial service is being withdrawn, in order for an area to qualify for a Buurtbus scheme there must be more than 400 passengers per month, there must be no competition to the operator, and the proposed scheme must pass through a consultation process (ibid).

Figure 3.1
The funding and operation of bus services in the Netherlands
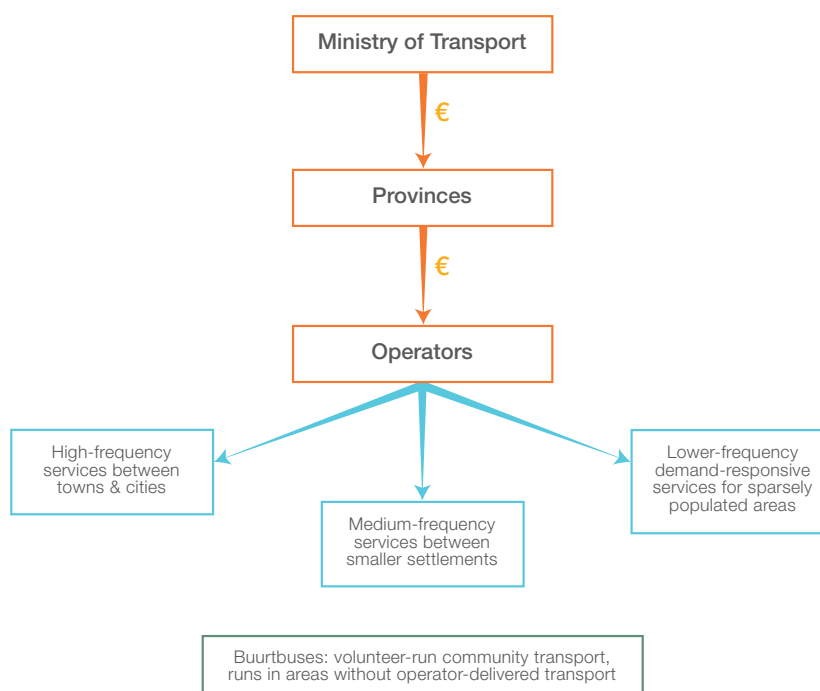
Often, through the regional transport authorities, funding for transport from across departments is pooled together to enable efficient service delivery. This is most often the case in the delivery of services under the Social Security Act, which tend to be low-frequency and demand-responsive, and provide transport in remote areas to those who most need it.

While there are many advocates for, and momentum behind, the reregulation of bus markets outside of London, some organisations have been more critical. TAS Policy Exchange is one of them, and in their *Making Buses Better* report they conclude that the debate about reregulation and franchising 'is, at best, irrelevant to the delivery of better bus services that can contribute to a local area's economic prospects and, at worse [sic], could deliver less cost-effective services' (TAS Policy Exchange 2015). The major concerns that they raise about such reforms are that:

• they would break the link between passengers and operators
• local authorities lack the resources, experience and expertise to manage revenue risk
• 'grave disruption' would follow (ibid).

These are all valid concerns that will be addressed in our recommendations.

The rationale for reregulation in non-metropolitan areas
While the QCS approach has generally been explored by urban transport authorities (PTEs) and proposed in the context of devolution to strong combined authorities in mind, it also offers potential advantages for rural areas. The rationale for reregulation is that it enables a more strategic approach to revenue expenditure (including both BSOG and fare revenue), and that it enables integration and coordination (of timetables and ticketing, for example). Broadly speaking, the key difference between the two types of area in terms of bus services are that rural areas tend to have fewer profitable routes that can be franchised commercially, and from which fare revenue can be pooled. Clearly, this fact does not cancel out all of the advantages that QCS can offer rural areas – rather, it just means that it could be more difficult in rural areas than in urban ones to make a case for it based on reinvesting profits. However, it could be argued that, because of the greater need to make efficient use of resources in rural areas, that there is in fact a greater need for franchising.

However, as we have mentioned, the onerous QCS process itself represents a significant barrier to the adoption of this model and, at present, only major combined authorities have actively considered it. The process could present a greater roadblock to rural areas without a strong local authority that has the capacity, finances and expertise to pursue a QCS approach.

There are also cross-boundary issues in non-metropolitan areas that present less of a problem to metropolitan authorities, which are already cross-boundary PTEs. Differences in policy between different county councils can impact on operators' ability to run services where they cross boundaries. For example, services running in the Yorkshire Dales have been deemed by North Yorkshire county council to be 'leisure services', and therefore not eligible for reimbursement for concessionary fares, whereas the neighbouring Cumbria or West Yorkshire county councils have recognised the value of these services beyond leisure and so continue to make payments to operators. This is a challenging situation in very rural areas, particularly for the smaller operators that may be providing many of these services. This challenge exists in many urban areas too, but these tend to have PTEs, which not only work with constituent authorities but are better able to coordinate connectivity between hinterlands and city-regions.

However, as the Campaign for Better Transport (2014) points out, some authorities have responded to this issue in rural areas with cross-boundary partnerships, although these have met with mixed success. In other countries, such as Germany and France, more formal structures are already in place, so clearly it is possible to overcome such challenges (ibid). Where bus services in rural areas of England are reregulated, their geography needs to be carefully considered to ensure that cross-boundary issues are addressed, and agreements between neighbouring authorities may be required.

3.3 Alternative business models

Despite the liberalised nature of the British bus market, there are a number of alternative business models that pursue broader objectives than profit maximisation alone, including increased sustainability, enhanced social value or improved accessibility. Some, such as community interest companies and social enterprises, are relatively new in the bus sector; others, like municipal ownership, are older but have been forced to innovate by budget constraints. These alternative business models demonstrate the potential of leveraging non-commercial assets such as volunteer time and non-profit motives.

The case studies in this section draw from interviews with representatives from the authorities and services in question, conducted between April and June 2015, as well as our own research.

Social enterprises

Jersey presents an interesting case study in profit sharing, and also illustrates the impact that slightly different regulation regimes can have on services. 'LibertyBus' is run by HCT Group, a community interest company, on contract to the transport and technical services (TTS) department of the States of Jersey.[22]

LibertyBus has a partnership with the tendering authority, including a profit-share arrangement. One of the key aspects of LibertyBus' apparent success has been its partnership relationship with TTS, which allows problems to be resolved collaboratively and with public engagement. The profit-share arrangement allows TTS to invest in infrastructure for the bus network, including bus shelters and improved accessibility at bus stops, and allows LibertyBus to invest its share of the profits back into the community within the social enterprise model outlined above.

The legal environment in Jersey presents both challenges and opportunities to the operator. In Jersey, unlike the mainland UK, there are no notice periods for changes to and the withdrawal of services. HCT Group states this has allowed LibertyBus to try innovative approaches on a pilot basis – for example, the trialling of Parish Link, a volunteer bus scheme inspired by Buurtbus in the Netherlands (see the case study in the previous section). The scheme was initially unsuccessful due to low passenger numbers, so they are currently consulting on how this can be improved upon. However, other Jersey laws present barriers to innovative approaches – for example, they are unable to run demand-responsive transport services, as these would be considered a taxi, rather than bus, service.

This different legal framework, and the absence of bordering authorities, means that not all lessons from Jersey are transferrable to England. However, the positive relationship that the operator has with the tendering authority, and the mutually beneficial profit-sharing arrangement, are important potential alternatives to wholesale franchising.

Community interest companies

Community interest companies (CICs) present a means of developing a business model that works in the interests of the community rather than delivering profits to shareholders.[23] There are examples of these across the bus sector in England, including some that work to deliver transport in isolated rural areas. Dales and Bowland CIC is a bus company that delivers transport in the Yorkshire Dales National Park and the Forest of Bowland area of outstanding natural beauty, and was established in 2006 by the Yorkshire Dales Society. It provides the 'DalesBus' weekend and bank holiday services to and from these areas, which were suffering from cuts to buses, and they serve both local residents and tourists.[24] They have

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22 http://libertybus.je/
23 Community interest companies can also be social enterprises.
24 http://www.dalesbus.org/

struggled to retain support for their services, particularly because North Yorkshire county council decided to get rid of concessionary travel payments on DalesBus, because its services are considered to be 'for leisure'. However, Dales and Bowland CIC continues to provide bus travel in the region. The CIC model has allowed it to work for the community in the Yorkshire Dales; it also works with local businesses, because its passengers are drawing economic activity into the area.

GoRide[25] is a CIC that provides transport in rural areas in south-east England. The CIC model allows it to prioritise delivering value to the community and to reinvest profits in its services, rather than delivering dividends to shareholders. The aim of the company is to deliver better value for money for local authority tendered services and, by reducing fares for passengers, it claims to have increased passenger numbers. An innovative aspect of GoRide's approach is its lack of commercial depots, which reduces so-called 'dead mileage' at the beginning and end of services, with buses being stored in different locations.

Municipal ownership

There remain a number of municipally owned bus companies in the UK – around 11, having fallen from around 60 at the time of deregulation in the 1980s. Rosso[26] is one example. A private limited company, it is owned by Rossendale borough council in Lancashire. Because the county council (Lancashire) is the local transport authority, the owner of Rosso – the borough council – has little influence over the commissioning of and subsidies for tendered services. Though spending on tendered services, which make up one-third of Rosso's operations, has been reduced in the region, the company's main financial pressures come from fuel, insurance and wage costs. Rosso operates services in and around Rossendale but also further afield, with services to both Rochdale and Bury in Greater Manchester. Some cross-boundary challenges were identified in relation to these routes, and are discussed elsewhere in this report. Rosso runs 100 vehicles and has two depots, one in Rossendale and one in Rochdale; around three-quarters of services cross into Greater Manchester, Bolton and Rochdale. Although municipal ownership allows companies to operate without the pressure to deliver profits to shareholders, companies must nevertheless operate commercially and deliver dividends to their owning authority. In the case of Rosso, this is only required when the operator can deliver it. Where this additional revenue is obtained, this arrangement can help local authorities by reducing budgetary pressures.

Alternative business models, like these ones presented here, represent opportunities for the bus sector to take new and innovative approaches. Choosing to operate a business without the pressure to deliver profit to shareholders can allow social values to be put at the heart of that business's activities and deliver considerable benefits for communities. These business models have been taken up by county as well as borough councils – Staffordshire County Council has set up a social enterprise as part of its total transport pilot. This demonstrates that stakeholders across a range of levels and areas can seize the opportunities presented by innovative bus operator business models.

3.4 Technological innovations

In recent years, two major innovations have taken place in the bus market. First, smart-ticketing, including multi-operator and multi-modal ticketing, have been rolled out – most famously in London in the form of the Oyster card.[27] Second, demand-responsive transport, which seeks to more efficiently match demand for and the supply of bus services, has taken off across the country, incentivised by budgetary

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25   http://www.goridebus.co.uk/go_ride/Go_Ride_CIC.html
26   http://www.rossobus.co.uk/
27   https://tfl.gov.uk/fares-and-payments/oyster/what-is-oyster

constraints and facilitated by new technology platforms. There are also a number of new technologies that are likely to be utilised in the coming years. This section examines each in turn.

As in section 3.3 above, the case studies in this section draw from interviews with representatives from the authorities and services in question, conducted between April and June 2015.

Smart-ticketing and information pooling

Smart-ticketing represents an opportunity to improve the customer experience, generate large amounts of transport data, and facilitate multi-operator ticketing. However, there are institutional and (perceived) regulatory barriers to the collaboration between bus operators that is required if this is to be rolled out. While a number of mechanisms are in place to allow collaboration between operators, the threat of financial penalties for anti-competitive behaviour has made operators reluctant to enter into partnerships and created a culture of fear around collaboration.

Despite operators' unwillingness to work together, there are examples of successful partnerships between different bus operators, and between bus operators and other organisations, including local authorities. Both Norfolk and Essex county councils told us that operators, while reluctant to work together, are open to meeting, and both councils have facilitated this. In the West Midlands, Centro (the PTE for the area) has collaborated extensively with local bus operators through the Network West Midlands partnership. This partnership has facilitated multi-operator ticketing, the pooling of information, and improvements to the passenger experience. The partnership ensures that investment in bus services is matched by infrastructure improvements, particularly to bus stops and stations.

In the case of multi-operator ticketing, the DfT has issued guidance to help local authorities establish multi-operator ticketing. This not only helps to overcome the challenges of bringing operators together, but helps combat anti-competitive practices by reducing barriers to entry to local bus markets, and benefits passengers by protecting against fare increases (DfT 2013).

Smart-ticketing has been taken up in some parts of England, initially mostly in urban areas, but these schemes are increasingly reaching beyond metropolitan boundaries. While London's Oyster card is the most famous example, Nexus in Tyne and Wear now has the Pop card,[28] and Merseytravel has the Walrus card.[29] In addition, contactless credit and debit cards are now being accepted for payment within London, which represents a means for extending smart-ticketing countrywide in the future.

Demand-responsive transport

New technology has enhanced demand-responsive transport (DRT) in rural areas and small towns. DRT is a more flexible approach to providing public transport than conventional, scheduled buses: it often uses smaller vehicles to provide door-to-door transport solutions, or semi-scheduled routes that respond to customer requests for journeys (ITS 2003). DRT is not a new concept in itself, and the solutions it describes can take a number of forms – from traditional 'dial-a-ride' services that provide social transport when booked by phone, to new transport services like Uber that allow car journeys to be booked through a mobile app whereby passengers request a journey and an available, pre-registered driver provides the service. There are various new technological developments that could be applied to DRT to improve services for passengers and deliver greater operational efficiency. The following section presents two case studies of DRT schemes in rural areas of Staffordshire and Lincolnshire.

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28 http://www.nexus.org.uk/pop
29 http://www.merseytravel.gov.uk/Tickets/smartsaveaway/Pages/About-Smart-Saveaway.aspx

Case study: Moorlands Connect, Staffordshire

Moorlands Connect is a DRT service in Staffordshire that replaced a low-frequency scheduled service. It has been in operation since 2010, and integrates transport to rural primary schools with other passenger transport. Its two minibuses are fully accessible to wheelchairs and pushchairs, and have racks for up to four bikes. The project represents a total transport approach, as it is delivered through a partnership of local stakeholders and pools funding from various sources. Its use of routing technology for the demand-responsive service is an innovative application of new technology.

The key motivation behind the creation of Moorlands Connect was an unmet demand for transport in the area, since accessibility was known to be a major concern for residents. The area is sparsely populated, and fixed routes had failed to provide residents with effective transport for commuting or access to healthcare. It was decided that DRT would be a more appropriate solution to the accessibility challenges in the area, and this has been demonstrated in practice. The service has double the passenger numbers of the scheduled services that it replaced. The fare structure has minimised costs in order to keep travel affordable, and concessionary passes are accepted for travel.

Moorlands Connect utilises a technology application developed by Mobisoft to schedule and plan the routes of services within the area. This technology administers bookings on a first-come, first-served basis, outside of block bookings for school transport between 8–9am and 3–4pm. Passengers are offered a pick-up time within a 10-minute window, and a drop-off time within a 20 minute window, and this flexibility allows the most effective routes to become established, and for dynamic re-routing. The operator also imposes additional constraints, so that for example a trip can arrive in Leek at 10am and leave at 2pm each day to allow for a shopping trip. Mobisoft's application is helpful for routing, and relays journey information to drivers; however, it does require input into the route-setting process by someone with local geographical knowledge.

Case study: Lincolnshire Call Connect

Lincolnshire Call Connect, which has been running since 2001 operates a county-wide DRT service in a large and sparsely populated area. The service began by running DRT services in the rural hinterland around core corridor routes between larger settlements. As public sector cuts were imposed, demand-responsive services were allocated additional funding by Lincolnshire county council to provide routes that might otherwise have been lost. The traditional 'dial-a-ride' service in Lincolnshire was absorbed into the DRT services, with Call Connect operators working closely with dial-a-ride customers to ensure that they were able to transition into the new service.

As with the Moorlands Connect service in Staffordshire, Lincolnshire Call Connect uses an application developed by Mobisoft to improve their operations. In addition to using the software to route journeys, Lincolnshire has also used Mobisoft's 'OpenDRT' technology to develop an online booking service, which was launched recently and now takes around 20–25 per cent of the service's bookings. The council has a working partnership with Mobisoft that allows them to adapt the technology to their needs and to book and manage vehicles and routes on a dynamic basis. Communication between the booking centre and drivers is vital to enabling the service to be as flexible as possible, which is particularly important for younger people using the service; around 10–15 per cent of bookings are for same-day journeys. Around 75 per cent of passengers are over 60 years old, though where children are not entitled to free transport there has been a rise in the number of home-to-school journeys.

New and future technologies

Technological changes have the potential to improve many aspects of the transport network. For example, a range of technologies are available that are capable of improving the environmental performance of buses both in the short and longer terms. Table 3.1 gives a projection of how and when various new technologies could significantly change transport in the coming decades. Some of these technologies – changes to fuels, for example – will affect how buses are operated but will have a limited effect on passengers, whereas others may improve the way in which information is delivered to passengers.

Table 3.1
Summary of potential high-impact technology groups, by time horizon*

0–10 years	10–20 years	20–30 years
Vehicle efficiency	Vehicle-to-infrastructure (V2I) and vehicle-to-vehicle (V2V) services	Autonomous vehicles
Data analytics	Biofuels	Battery electric vehicles
Hybrid electric vehicles		Fuel cell electric vehicles
Personal communications		

Source: Sharpe et al 2013
*Note: the authors of this table (Sharpe et al 2013) note that such predictions are difficult to make with any degree of accuracy.

Vehicle automation is a technology that has largely focussed on individual private cars, with driverless cars being the subject of the most research. However, a recent study by the International Transport Forum explored the sustainability potential for shared-use self-driving cars (autonomous vehicles) in collaboration with high-capacity transit (that is, bus rapid transit or metro systems). In a medium-sized city[30] with public transit, they found that using 'TaxiBots' – in a system whereby passengers are pooled into shared autonomous vehicles – could remove as many as nine out of 10 cars, although the total distance travelled by car would be slightly higher due to the pooling of car, taxi and some bus journeys into those undertaken by 'TaxiBots' (ITF 2015).

Communication technologies are also important to the future of transport, and could be key for buses in terms of improving information for passengers and allowing increased operational efficiencies – particularly vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) communications (Sharpe et al 2013). These facilitate the delivery of real-time information for passengers, which can improve passenger experience and efficiency of service, thereby potentially leading to increases in demand. For example, improvements in vehicle location technology allow 'next stop' information to be related inside buses, so that passengers know which stop they are approaching and when to get off. One example of V2I communications technology for buses is bus priority measures, whereby the traffic lights are made aware of an approaching bus and allow it to pass on a green light, stopping other traffic. This can improve journey times and operational efficiency.

There is a vast amount of data emerging from the transport sector – from commercial data about users to 'floating data' such as location or travel speeds – from mobile devices. The transition to open data could provide opportunities for this data to be harnessed by both transport operators and developers in order to improve the provision of public transport through a better understanding if the dynamics of demand for, and provision of, transport services. There are already examples of the opening up of transport data, including the National Public Transport Data Repository[31] and TfL's open data service,[32] for which over 5,000 developers are registered. However, there is still a long way to go in terms of opening up data, and its use to improve services. It could be an important means of improving bus services in the future, particularly where it is coupled with DRT and other innovative approaches.

The use and delivery of these types of technology is particularly challenging in rural areas, where passenger numbers may be lower, infrastructure more dispersed and communications often restricted by a lack of broadband or mobile phone signal

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30   The research looked at Lisbon in Portugal, a city with a population of about half a million people.
31   See http://data.gov.uk/dataset/nptdr
32   See http://www.tfl.gov.uk/info-for/open-data-users/

(Velaga et al 2012). These factors act as a disincentive to invest in technologies that might improve passenger information, such as real-time information and vehicle location and tracking. However, investment in these technologies in rural areas would deliver clear benefits both to passengers and to bus companies, which would stand to benefit from substantial operational efficiencies.

4.
WHAT SHOULD WE DO NOW?

4.1 Summary of research and principles of reform

The economic, social and environmental importance of buses is irrefutable. Buses connect the labour force with employers, bring customers to shops and leisure opportunities, and connect service users with vital public services. As a form of mass transit that provides an alternative to car use, buses also reduce carbon emissions. They are economically, socially and environmentally essential.

However, our research has demonstrated that bus provision is under significant financial pressure in most parts of the country. Direct subsidies for bus companies and support provided through local authorities have all been severely cut; non-metropolitan areas, with their heavy reliance on local government funding, have been hit particularly hard. But while funding has been cut, bus operating revenue has fallen back to a level no lower than in 2007/08,[33] which suggests that a more sensible allocation of public and private funds could lead to better outcomes overall.

The reductions in services that have resulted from these cuts have had a particularly acute impact on some of the most vulnerable people in society, who tend to rely on bus services. There is evidence to suggest that disabled people, younger people, older people, the low-paid and the unemployed have been among the hardest hit, and that their sometimes quite specific needs are not being met by appropriate public transport provision. There is also a risk that a decline in bus services pushes people into their cars, and therefore increases carbon pollution.

In response to these pressures, and out of a broader desire to innovate, a wide range of initiatives are being taken forward in some parts of the country, as we have seen. New regulatory models, particularly within core cities; new business models such as community interest companies and social enterprises; technology-led solutions, such as smart-ticketing and demand-responsive transport – all have the potential to contribute to very different models of bus service provision. However, the implementation and performance of these new models and solutions is patchy, and very much reliant on the capacity of local government, social enterprises or private companies to innovate.

The same is true of the various 'partnerships' that have developed between operators and authorities. These have helped to encourage collaboration, and to overcome a very literal interpretation of competition rules, particularly in relation to smart-ticketing. Profit-share agreements between transport authorities and operators do appear to be working well in those areas where they are in place, but these unfortunately tend to be rare innovations.

Closely related to these developments is a growing recognition of different publicly funded 'shadow' bus networks that could be consolidated more effectively. Local authorities, government departments and agencies are all funding different services within the same areas – aligning them makes a great deal of sense, regardless of the cuts to funding. The total transport pilots represent an attempt to make these networks work more efficiently.

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33   See figure 2.7.

For much of the country, business as usual is not an option. But a one-size-fits-all model of reregulation is unlikely to work. Drawing on the research in this report, the principles below set out a framework for how bus services in England, and especially its rural areas and small towns, can be improved.

Our recommendations for how to improve bus services in the UK, particularly for vulnerable people reliant on buses, are underpinned by four principles.

1. Buses are critical to enhancing social justice and tackling carbon emissions.
2. Decisions about the reregulation of bus markets are best made at the level of city- and county-regions, rather by central government.
3. Better outcomes can be achieved through the integration of public funding on buses and public transport at the regional level.
4. These reforms should be undertaken in a way that supports rather than stifles innovation.

4.2 Recommendations

Bus services in England's towns and rural areas face both threats and opportunities. To make them both sustainable and fit for the future, the finance and governance structures of bus services all need to be gradually but radically changed.

However, before such changes are enacted, it is crucial to recognise and build upon the innovations in business models, technologies and public policy that are already taking place across England, and which should act as the starting point of any future reforms.

Our recommendations build on:

• the continuing success of franchising by Transport for London (TfL) and the extension of this model to Greater Manchester
• the collaboration, cooperation and innovation stimulated by the total transport pilots
• the government's welcome devolution of powers towards cities and county-regions around the country.

As such, we propose that new 'total transport authorities' (TTAs) that cover travel-to-work areas, and which span multiple local authority geographies, should take charge of all funding and regulatory powers that relate to public transport in towns and rural areas.

We believe that there is a compelling case for the creation of total transport authorities (TTAs) in towns and rural areas. These would bring together decision-making on bus services and other sustainable, public transport in travel-to-work areas. These bodies should be empowered to take on regulatory powers to franchise bus routes in their area, bring together all public funding for buses and other sustainable public transport – initially from local authorities but, in time, from other public bodies – in their region, and encourage innovation and cooperation by bus operators.

In their first phase, TTAs would focus on the pooling of services already provided by local authorities, including school and community transport. Where appropriate, TTAs could regulate local bus services by franchising to provide greater certainty over routes, fares and services. In due course, TTAs could take on responsibility for public transport provided by other public bodies such as hospitals, GP surgeries, further education colleges and higher education institutions. They should also help encourage innovation through the sharing of data, which is often protected by private companies, and by breaking the artificial barriers to cooperation maintained by the current competitive framework.

The government's buses bill, announced in the 2015 Queen's speech, that will enable combined authority areas with directly elected mayors to take responsibility for the running of their local bus services (HM Government 2015), could be amended to allow these reforms to take place. This would ensure that the coordination and innovation encouraged by total transport pilots could be rolled out across England. This would promote social justice by improving bus services for thousands of people in isolated communities, and reduce carbon emissions by providing a viable alternative to car travel.

It will take time for these changes to be fully realised, and to build local capacity and draw up the strategies described below – but these steps are essential if towns and rural areas are to be provided with the bus services they need.

Figure 4.1
Total transport authorities: proposed transfer of powers and funding
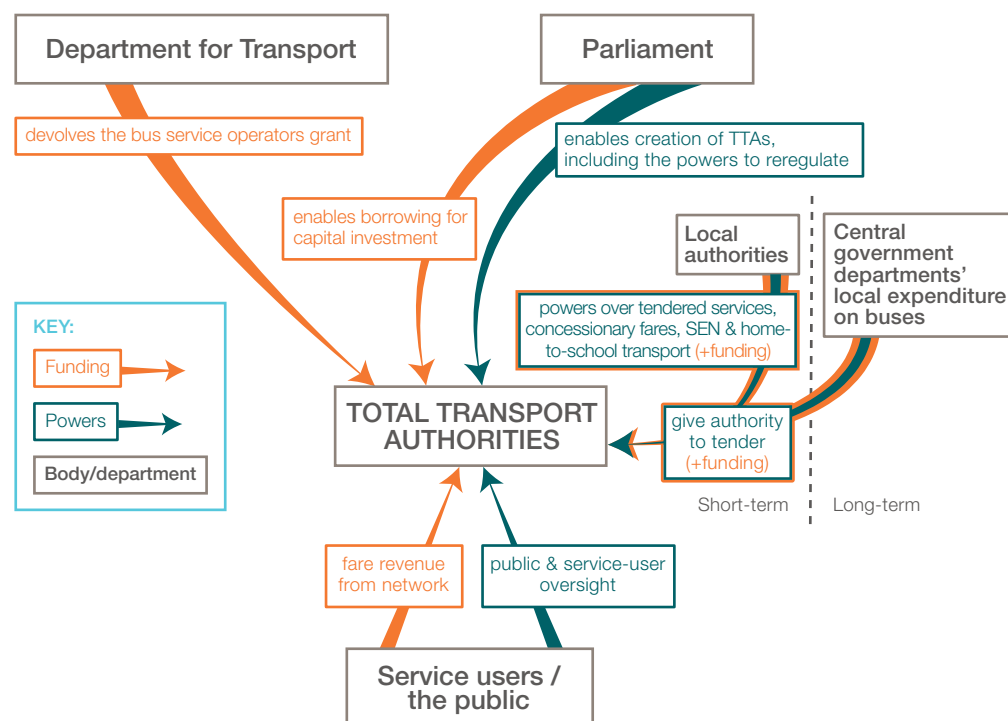
4.3 A new strategic body for public transport in towns and rural areas

New TTAs that cross local authority boundaries should be instituted in non-metropolitan areas. They would be similar to PTEs, which already exist in metropolitan areas, but should take on greater powers and funding responsibilities. Functional economic areas, such as those that underpin combined authority or LEP geographies, should be the starting point. Unlike LEPs, however, there should be no overlap between these authorities.[34] Furthermore, it should be required that each of these geographies has the right mix of profitable and non-profitable routes to enable TTAs to draw up a sustainable transport plan as the basis for the powers and funding they request from central government. If they were to be based on combined

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34   There is, incidentally, a strong case for rationalising LEP geographies and instituting coterminous combined authorities – see Cox et al 2014.

authority or LEP geographies, the scale of these bodies would be such that they would contain at least some profitable routes; however, where there are clear city-hinterland relationships agreements will need to be made between TTAs and PTEs, for which the Nexus agreements with Northumberland and Durham set a precedent. These new TTA bodies would also need to be integrated with any future institutional developments, especially pan-regional bodies such as Transport for the North.[35]

The new TTAs would enable the public sector to secure a better deal from its bus operators. The economies of scale that could be achieved at this level are likely to enable money to be spent more strategically, to stimulate innovations and, crucially, to pool capacity and expertise so that whole networks of commercial and non-commercial services can be franchised. Local authorities' powers over and spending on supporting transport should be transferred to these authorities, but this transfer should not be forced by central government. Given that central government would be devolving significant powers and funding to TTAs, based on coherent transport plans, and given that local authorities are often lacking capacity and funding, many local authorities would see a strong rationale for pooling resources in this way. Given this pooling of resources, TTAs should not necessitate new bureaucracy.

With regard to internal boundaries, the TTAs should work to align policies and, over time, drive forward agreements between counties and districts (where there can sometimes be tensions between parking and bus policies, for example) to develop a coherent transport network. There will, of course, still be routes that cross the boundaries between neighbouring urban or rural transport authorities, but this is inevitable, and any issues could be resolved by contractual agreement between neighbouring transport authorities (as in both the North East and Strathclyde, for example). Indeed, cross-border agreements should be easier once all local transport services in an area have become the responsibility of a single public agency, rather than of myriad different schools, hospitals, and local authorities.

TTAs should be responsible for bringing forward integrated ticketing across all modes of transport, and should use their franchising powers to do so. There are well-recognised benefits to integrated smart-ticketing: it broadens access, makes fare-setting fairer, and enables fare revenue to be collected centrally so that it can be spent strategically by the public authority. Clearly it will need to be integrated with the franchising of rail services – and while in the longer term much of this could also be devolved, at present the DfT should use its powers to ensure that it occurs. TTAs should include such proposals as part of their 10-year transport plans, but they should be driven forward as a high priority.

TTAs would mean greater local democratic control over the bus network. The TTAs should be accountable to local people through existing local authority representatives. They should explicitly align their transport strategies with the economic, environmental and social strategies of their constituent authorities (public health and economic regeneration strategies, for example) and of the LEPs whose areas they cover. Their strategies should be integrated with land-use planning, and be particularly responsive to new housing developments or business parks, which can change travel patterns quite dramatically. This opens up the possibility of using section 106 planning powers to fund new bus routes; it would also allow transport considerations to be factored into the planning process at an earlier stage. If combined authorities are put in place across rural areas, then there is clearly a strong case for their becoming the accountable body for TTAs – particularly because, as a result of wider devolution, they would then be able to bring together complementary strands of economic development and wider public policy. However, in the absence of combined authorities in rural areas, TTAs should

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35   IPPR North has previously made the case for the Transport for the North body to adopt a far more significant role than it currently has – see Cox and Raikes 2015.

be accountable to a local committee of councillors and independent members similar in structure to the old police authorities. Passenger transport users should be formally involved in scrutinising and advising TTAs, similar to the way in which local Healthwatch organisations engage with health and social care services (indeed, an organisation such as Bus Users UK could form groups aligned with TTA geographies in order to fulfil this purpose).

4.4 Reforming and pooling public spending on buses

Over time, TTAs should take responsibility for all public spending on public transport in their localities. This should take place in four stages.

Reforming the bus service operators grant

First, BSOG should be reformed, and should be distributed by TTAs. The current allocation, which is based on fuel usage, is inefficient and does not target resources to where they are most needed – in rural areas, for example.

TTAs should draw up a 'network development plan' as a basis for BSOG allocation. The devolution of BSOG goes hand-in-hand with the devolution of franchising, as any reduction in subsidy to operators is reflected in higher prices for tendered contracts. However, simply devolving the current allocation will simply embed the disadvantage of rural areas, and will fail to unlock the potential of BSOG, which is a significant resource. The process of devolution should therefore start with TTAs and urban authorities (PTEs) drawing up a strategy for providing and developing passenger transport services within their area. This plan should be designed to support the economic, environmental and social priorities of both the constituent authorities and the area as a whole. This strategy should describe how the TTA intends to ensure the delivery of transport connectivity across all transport modes in the area – and in particular, to ensure that those groups that are reliant on bus services are adequately provided for. These plans will be far broader and more radical in scope and will cover a longer time period than the local transport plans that local authorities currently prepare.

BSOG should then be frozen in real terms and devolved to TTAs, provided that they reregulate their bus markets. The stability of this revenue stream is vital for effective network planning by transport authorities, so total expenditure on BSOG, having already been cut by 20 per cent, should be kept at current levels in real terms for a period of 10 years. BSOG should then be devolved alongside the powers of TTAs and PTEs to reregulate; the amount awarded should be proportional to current expenditure within each area. It would then be for TTAs to decide how to allocate this money within their bus market. They could, for instance, choose a different system of BSOG allocation, such as paying operators on the basis of fuel usage, passenger numbers or distance travelled, or they could use it to fund other non-commercial bus services as they see fit.

Transferring budgets and powers to TTAs

Second, local authorities should be given the power to transfer their budgets for public transport – such as community, welfare and school transport – to TTAs. It should be for the constituent local authorities within a TTA area (as opposed to central government) to choose whether, and on what terms, to transfer their existing powers in relation to transport to the TTAs. However, we would recommend that they do so, as TTAs would provide more rational geographies for policymaking and deliver better deals for residents and taxpayers through enhanced scale and capacity.

TTAs should, over time, be given responsibility for the expenditure of all public funding on bus services. A more radical (and challenging) second phase in the development of TTAs would see them become responsible for more of the publicly funded bus routes within their area, such as those serving hospitals, GP surgeries, further education colleges and higher education institutions. Experience suggests

that this will take time, as there are institutional barriers between different public sector organisations that must be overcome. However, the total transport pilots are an important step in this direction, and the 'connectivity fund' idea advocated by both the Passenger Transport Executive Group (PTEG 2014a) and the Campaign for Better Transport (CBT 2015) offers another potential way forward.

Delivering innovations in concessionary travel

Third, local authorities should be allowed to transfer responsibility for statutory concessionary travel to TTAs. While this report doesn't advocate any changes to entitlement criteria for the statutory concessionary schemes for over-60s and disabled people, TTAs could consider innovations in this area. For example, schemes could be developed to enable and encourage the voluntary donation of free transport from older, wealthier residents to younger residents who need free travel in order to access work, education or other services.[36] Spending on discretionary concessionary fares could be spent according either to the priorities of the TTA as a whole, or those of its constituent local authorities. Either way, the actual process of tendering of services could be undertaken by the TTA itself in order to get the best deal.

Pooling capital expenditure, and strategic investment

Finally, local authorities should be given the power to pool the capital expenditure that is currently spent on public transport, which would allow these resources to be spent more strategically. Central government should allow TTAs to borrow in order to fund capital investment, as TfL does currently. TTAs should also consider how capital expenditure can be used more innovatively. Strathclyde Partnership for Transport, for example, has demonstrated that investing capital in a fleet of buses and leasing these to operators on their subsidised routes can significantly reduce revenue costs (SPT 2015). Such a move would also enable TTAs to invest in low carbon vehicles.

4.5 Enabling a 'whole network' approach to franchising

Franchising has worked effectively in London for 15 years, and is now being adopted in Greater Manchester and possibly also in Tyne and Wear, West Yorkshire and Cornwall. Its main advantage is that it allows localities to retain fare revenue and to use it more strategically to cross-subsidise uncommercial routes. Franchising also allows greater democratic accountability over fares, services and routes, and makes smart-ticketing and data-sharing more viable. It ensures greater integration and efficiency at a network level by ensuring that competition laws cannot be used as an excuse for a lack of cooperation between different bus providers.

By contrast, the current system in the rest of the country means that people – many of them poorer and living in out-of-town areas – often have to take several buses, run by different operators, in order to get to low-paid jobs in other parts of a town's periphery, incurring high costs as a result. This acts as a disincentive to work, increases poverty, and discourages people from using public transport networks. While some bus operators are now planning to offer multi-operator ticketing, these tickets tend to come at a premium.

As noted above, TTAs should put together a local transport plan for their area, and reregulation should be a realistic option. **The government should simplify the process of implementing a QCS, so that TTAs have the option to build franchising into their local transport plans.** While urban and rural bus geographies are, of course, different in many ways, there remains a case for franchising that is based on more strategic expenditure of resources and better coordination of services. The case for doing so rests on the need for fare revenue to be spent more strategically across large areas (and therefore by a single public authority), and the need for an integrated and efficient network – again, something only a single public authority can realistically achieve.

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36 Although greater uptake would, of course, mean higher public expenditure.

The differences between urban and non-urban areas do need to be accounted for, and this can be done by ensuring that the TTAs have the right geographical scale, and by making reforms to BSOG as outlined above. The primary difference between urban and non-urban areas is that the latter have lower proportions of profitable routes. To account for this, TTAs must cover geographies that guarantee a reasonable level of profit, which can then be used for cross-subsidy within the area. Franchising would then enable the authorities to combine several routes into a single contract, so that commercially viable routes can be grouped with those that are not commercially viable. The gaps that remain should be detailed in TTAs' network development plans, and could then be supported by reformed allocation of BSOG.

Franchising should be used to catalyse innovation by operators. First, attention must be paid to the size of contracts – getting the best deal for passengers and taxpayers may mean striking a balance between large, 'bundled up' contracts that cross-subsidise, and smaller contracts that enable healthier competition and realise the advantages of smaller local providers, as Nexus has done in their pursuit of a QCS. Second, TTAs may decide to award 'non-compliant' contracts (whereby an operator may innovate beyond the authority's specification in order to deliver a better deal overall). Third, within some TTAs' areas there may be a need to explore joint rail and bus franchising, franchising that links commercial tenders with community transport via consortium bids,[37] or contracts that embed an element of demand-responsive transport.

There may be concerns about whether TTAs will have the capacity to undertake franchising, but this can be addressed. Clearly, larger TTAs will enable economies of scale, and the specialisation of officers over the long term. In the short term, a central specialist team could be commissioned to undertake franchising on behalf of each TTA in turn. Alternatively, several TTAs could group together to bring in and share the required expertise. Because each area will have fewer routes to tender than London or the other major cities, it would be possible for multiple TTAs to work together in this way, and franchising cycles could therefore be staggered across the country.

There is no single model of reregulation, and while gross cost or quality incentive contracts perhaps hold the most promise, other types are worth exploring. Quality incentive contracts are used by TfL, and under them the franchising authority takes on both the fare revenue and risk, and then pays a service charge to the operator who makes a profit by putting downward pressure on their costs base. Under net cost contracts, on the other hand, the operator takes the fare revenue and risk, and increases its profits by raising demand.

As covered in section 3.3, there are alternatives to regulation of the bus markets that authorities could pursue, and any regulation that is put in place can of course take various forms. For example, agreements can and have been put in place that share profit between the franchising authority and operator, and some have argued that quality partnership schemes can improve services.

Despite the availability of other models, where demand is already maximised – as it may be in some rural areas – there are clear advantages to reregulating using gross cost contracts or the quality incentive contracts adopted by TfL. This approach accounts for the principal objections advanced against reregulation: the link between passengers and operators is maintained, just with a different commercial relationship, and it also offers opportunities for passengers and other citizens to exercise influence and democratic control at the strategic level via the TTA governance arrangements discussed above. Any issues regarding the resources, experience and expertise of local authority staff can be resolved by pooling local authority capacity at the TTA level, and building capacity over time.

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37 In which case the community transport associations involved may need to set up trading companies.

We do not recommend that all areas reregulate: merely that they are offered the opportunity to do so. It is extremely unlikely that TTAs will pursue courses of action that are either costly to taxpayers or disruptive to passengers.

4.6 Enabling and encouraging innovation

As this report has shown, there is a great deal of innovation taking place in the bus sector in relation to demand-responsive technology, new ticketing arrangements and new business models. It is vital that TTAs and the other changes described above do not have any negative impacts on this renaissance – indeed, TTAs could play an important role in encouraging innovation, and in setting rules that reward new thinking rather than stifling it.

TTAs should provide an environment in which initiatives can be taken forward by either operators or citizens to experiment with new routes. TTAs should consider alternative business models from the outset instead of as a last resort, and they should, within reason, allow and encourage new routes to be developed outside of the current tendered network. While local governments' current financial circumstances mean that providing grant support will be a challenge, they could provide in-kind support and intelligence, while communities or operators could make use of innovative new financial streams (as they have in the past). Pilot periods would allow organisations to experiment for a set period of time, with the proviso that such initiatives are temporary until such time as they either are put out to competitive tender or cease to operate. This could help to facilitate innovations such as volunteer bus schemes that use local authority vehicles. This has worked well in Jersey, for example, where LibertyBus has trialled a volunteer bus scheme called Parish Link (see section 3.3). TTAs should monitor the uptake and quality of these services, and manage passengers' expectations appropriately.

Open data is becoming increasingly powerful in the transport sector, and TTAs should encourage and promote it as far as is possible. Open data has well-recognised potential, from helping engineers to identify structural weaknesses in infrastructure to managing traffic and planning transport services (POST 2014). Transport authorities have always tended to collect large amounts of data, but TTAs should keep up with rapid advances in both the production and utilisation of big data in order to make better use of it better themselves, and to enable others to innovate.

The government should clarify competition and state aid law as it applies to bus services. There is a great deal of confusion within the sector about whether community transport operators can form consortium bids with commercia operators, for example, and about how organisations in receipt of grant funding can compete for commercial tenders. This uncertainty appears to be stifling innovation.

TTAs should share best-practice and intelligence, and government should not set them against one another in competitive bidding processes. Rather, the government should facilitate the creation of a TTA network to enable knowledge-sharing and secondments between transport authorities in rural areas and small towns.

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Together, the reforms proposed in this report would underpin local, integrated transport networks that put passengers and their needs first. Local government would be put in charge of developing 'whole place' transport networks on behalf of local citizens; public spending would be used as effectively and efficiently as possible; and innovation in technology and business models would be supported and promoted across the country.

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