Covid-19 Recovery
Renewing the transport system
July 2020
Contents

Executive Summary 3
Introduction 5
Impact of the crisis 7
Opportunity for renewal 15
Facilitating the shift to a rapid renewal 34
References 36

Acknowledgements

This paper was developed by Campaign for Better Transport and is solely its view. Organisations were engaged directly and through four virtual roundtable discussions in May 2020, with senior representatives of train and bus operators, government representatives, local authorities, passenger bodies, technology companies and other stakeholders.

Thanks go to the following organisations that were engaged or participated in discussions to inform the contents of this report, including:


The paper has also been peer reviewed by the Campaign for Better Transport Policy Associates Network. Thank you to Isabel Dedring, Jim Steer, Keith Buchan, Kris Beuret, Leon Daniels, Lilli Matson, Lynda Addison, Matt Lovering, Phil Jones, Prof. Rachel Aldred, Simon Jones, Dr Simon Less, and Steve Gooding for their feedback on the report. Thank you also to Dr Fiona Spooner, Exeter University, for data analysis supporting this report.

The listing of these organisations and individuals does not imply acceptance or endorsement of the recommendations or contents in this report.
Executive summary

The Covid-19 crisis has changed how transport will have to be planned and managed in future. The government’s support has sustained the sector through the crisis so far, but the planning, design, scope, scale, funding and management of transport all need to be explored in the changing context.

Prior to the crisis the government began to set out an agenda that would have seen the transport system transformed, including greater levels of sustainable transport through increased active travel and public transport, and the move to zero emission vehicles. The government should now increase its ambition and accelerate the delivery to ensure that transport better serves communities across the country. This agenda should be integral to a green recovery programme.

There is an opportunity to transform the transport system to facilitate economic growth, meet legal obligations around carbon emissions and air quality, and tackle social exclusion. A future focused strategy from the government is essential for the transport system to survive and communities to retain connectivity.

There is a risk to the viability of public transport following limited use in the short-term, and potentially lower levels of use beyond the pandemic following clear messages against using it. The long-term economic and social costs of permanently diminishing the public transport system will be much greater than the short-term costs of renewing the sector.

Achieving net zero carbon emissions, while keeping air pollution down, will necessitate a transformation of the transport fleet to zero emission vehicles (tail pipe and fuel source), improvements in road infrastructure for active travel and public transport, new networks and services to improve connectivity, and infrastructure to support zero emission vehicles.

These are the near-term opportunities that should be harnessed by the government as part of the rebuilding of the economy.
A transport-led recovery should deliver:

A world leading public transport system and improved connectivity through more local transport authority involvement in planning and coordinating local networks, with reforms to the bus and rail sectors.

100% zero emission road transport and railway with support for UK-based manufacturing.

Permanent improvements to sustain greater levels of walking and cycling at the local level.

Changing the way transport is paid for, including new means to raise revenue and refocusing government funding.

To achieve this the government should:

• require local transport authorities to produce plans to permanently reshape local transport networks based on active travel, shared and public transport. Future government capital and revenue funding should be linked to these plans.

• ensure local authorities and bus operators work together to replan bus provision, with better integrated, multi-modal networks. Tendered and franchised services are likely to play more of a role due to the fragility of the sector and risk to communities connectivity. A new funding approach should be introduced to support bus services.

• not return to the previous franchises on the railway and place a greater focus on leisure as well as commuter travel and new industry structures with devolution of control to city regions.

• accelerate the shift to 100% zero emission road and rail travel through requiring all buses to be zero emission, supporting the growth of a hydrogen fuelled heavy fleet sector in the UK, incentivise the shift to electric vans for deliveries and fleet, and initiate a rolling programme of rail electrification.

• lock in the shift to active travel with permanent infrastructure changes and ensuring that it does not restrict public transport and bus services. E-scooters should be legalised for use on the road and cycle lanes with a procurement framework for hire schemes setup and powers for local authorities to issue permits for hire operators.

• prioritise infrastructure to support sustainable transport, such as rail reopenings, bus priority and digital systems

• establish new sources of raising revenue to support the shift to sustainable transport should be put in place.
Introduction

Transport plays a fundamental role in our society: it underpins the functioning of our economy enabling access to employment, education, public services, and leisure activities. It is key to moving goods to where they are needed, and bringing people together. It is vital for a functioning community and connecting people.

Prior to the Covid-19 outbreak, commuting patterns were adapting as working from home became more common, and the growth in online shopping had led to greater prevalence of home deliveries. More people were using smartphones to plan their journeys or to hire shared vehicles, such as dockless bikes, private hire vehicles and car pooling. Transport was also the cause of high levels of air pollution damaging people’s health and the sector was the biggest contributor to carbon emissions.

Transport is unlikely to return to as it was prior to the pandemic and there could be long-term impacts on many communities. While many of the drivers of travel that influence people’s decisions will continue to exist post-Covid (where we choose to live and work, family, social and personal factors will remain unchanged for many), there could be an acceleration of some trends, with working from home, online services and access to technology removing the need to travel, while changes in retailing could lead to greater shifts from bricks and mortar operations. There could be fundamental shifts in behaviours and choices and, coupled with widespread public mistrust in the safety of public transport due to the spread of infection and the expected economic downturn, passenger demand is going to be affected.

The impact of the pandemic has highlighted four challenges to address:

- **Connectivity and accessibility** – risk of further degraded or absent services leaving communities disconnected
- **Making systems work** – gaps in capacity and capability to plan and deliver, plus lack of responsiveness and inertia hindering improvements
- **Affordability and flexibility** – lack of integration, high fare levels, and rigid, inflexible service make public transport less attractive or not useable for too many
- **Environmental impact** – high levels of air pollution and carbon emissions due to transport

Covid-19 Recovery • Renewing the transport system
Transport policy will have to adapt to ensure the social, environmental and economic benefits are secured following the pandemic. An economic renewal should put in place a transport system that delivers against a number of objectives:

**Economic:**
Facilitates economic growth and supports access to education, training and employment; supports commuting and leisure travel; provides value for money from public funding.

**Social:**
Supports access to essential public services, as well as social and leisure activities; provides equal access to travel by different demographic groups, and tackles social exclusion and isolation; balanced between regions and catering to local requirements.

**Environmental:**
Cleans up private and public transport vehicles in line with net-zero carbon goals, legal limits on air pollutions and reducing wider environmental impacts.

There is a risk that further retrenchment of provision, or services not being reinstated post-pandemic, will lead to an increasing number of communities suffering worsening exclusion and rising costs of travel. Those reliant on public transport may end up disconnected from jobs, education, public services, shops and their friends and family.

In the current environment, the traditional commercial and operating models in the transport sector are under threat and stalwarts of the sector could fail or withdraw, costing jobs and connectivity. Now is the opportunity to reimagine the shape of transport in the UK for moving people and goods.

Rebalancing transport options post-Covid to ensure communities across the country have access to reliable, convenient, affordable and sustainable transport will be essential to improve public health in the long term and to support the economic recovery. The shift in travel demand and the operating landscape from Covid-19 will necessitate new strategies and commercial models.

Local transport should be based around active travel and passenger-centric, zero emission and more responsive public transport services, with gaps being filled by shared transport services. The transport sector needs to define a renewed purpose and take the opportunity of the disruption to operation over the coming months to reshape the sector.

This paper explores measures that should be considered by the UK Government, devolved administrations, local authorities and transport operators for the next phase of the response to Covid-19.
Impact of the crisis

Covid-19 led to immediate impacts in relation to transport use, but could result in sustained impacts on demand, changes in means of transport taken, and the social, health and environmental consequences these will create.

During lockdown, all leisure facilities and non-essential shops were closed and a significant proportion of the population were either furloughed or working from home. The direction given by government was to not travel. This meant that both public transport and private vehicle use dropped dramatically (see figures 1 and 2):

- Car and van use was significantly higher than public transport use across the country before the lockdown. At its lowest point car use dropped to a quarter of its usual level, although vans and lorries continued to make essential deliveries;
- Tube and rail use dropped to less than five per cent of their usual levels;
- Bus use dropped to between 10-15 per cent of its usual level;
- Cycling, on the other hand, has been increasing to double its usual levels during the week and peaked particularly on weekends, nearly three times the usual levels, as people used bikes for exercise and leisure.¹

During lockdown, tube and rail use declined to less than 5% of usual levels

Figure 1: Average distance travelled, per person, per day, by mode of travel (excluding motor vehicles), Great Britain, since 1 March 2020.
This had some welcome impacts on communities. The drop in traffic resulted in significant air quality improvements, with a 60 per cent reduction in nitrogen dioxide concentrations in many cities.² In Central London average nitrogen dioxide concentrations fell by 40 per cent during the lockdown, in addition to a 44 per cent reduction before the lockdown due to the introduction of the Ultra Low Emission Zone.³

In many cities, nitrogen dioxide concentrations decreased by 60% ▼
In Central London, nitrogen dioxide concentrations decreased by 40% ▼

As the lockdown restrictions on workplaces, schools, shops and leisure facilities have been incrementally lifted, a gradual increase in transport use has been observed. However, with the government advising people to avoid public transport, its use has remained largely unchanged. Instead, motor vehicles use has already grown to two thirds of pre-Covid levels. Breaking down travel trends to the regional level, car use increases have been more evident and to greater levels outside London (see Figure 3). Of course, traffic varies further between cities, and between cities, towns and rural areas.⁴

As lockdown eases, motor vehicle use has already grown to two thirds of pre-Covid levels
Figure 3: Distance travelled (daily), by mode and by region

North East

- Car
- National Rail
- Local bus
- Bicycle

North West

- Car
- National Rail
- Local bus
- Bicycle

Yorkshire

- Car
- National Rail
- Local bus
- Bicycle
In the short term, the Covid-19 outbreak has severely affected the transport sector. Reduced passenger numbers have profound financial implications for operators as fare revenue has evaporated.

To maintain services and the industry, and ensure transport for key workers, the government stepped in with financial support for transport operators as fare revenues collapsed.

- Bus operators in England have been given a £167 million Covid-19 Bus Services Support Grant (CBSSG) paid over 12 weeks on the basis of distance driven. In return, bus operators are required to maintain services at a level sufficient to meet demand in this period. In addition, £200 million of existing funding under the Bus Services Operators Grant (BSOG) continued to be paid as normal, on the basis of fuel consumed before the pandemic, despite reduced services. Also, up to £30 million of extra funding, originally earmarked for starting new services, was instead redirected to local authorities to maintain their existing subsidies for concessionary fares.\(^5\)

- Train operators on Department for Transport-let franchises have been temporarily suspended and transitioned onto Emergency Measures Agreements (EMAs), transferring all revenue and cost risk to the government. Operators continue to run day-to-day services for a pre-determined management fee, set at a maximum of two per cent of the cost base of the franchise before the pandemic began.\(^6\)

- As an authority with devolved powers over transport, London was given a bespoke funding package. It consists of a grant of £1.095 billion and a loan of £505 million and runs until October 2020. In return, the Mayor of London had to agree to increase fares by the Retail Price Index plus one per cent, as well as changes to the Congestion Charge, concessionary fares and other conditions.\(^7\)
• In terms of roads, the government announced a £1.7 billion Transport Infrastructure Investment Fund for repairs and improvements, safety enhancements and priority bus lanes, while accelerating £175 million worth of works on the rail and road network during the quieter period.8

While the current financial arrangement is only temporary, it may be some time before public transport customer levels return to previous levels due to the risk of infection and the expected economic downturn.

A Transport Infrastructure Investment Fund of £1.7 billion was announced for roads

Throughout the period of lockdown, and since, a number of measures have been implemented on public transport by government and operators to reduce the risk of transmission of the virus:

• Strict hygiene measures, including deep cleaning at the end of the day and cleaning regular ‘touch points’ throughout the day.
• Making hand sanitiser available on vehicles and at stations.
• Removing cash payments on routes where this is possible and greater use of digital payment and ticketing solutions.
• Driver safety measures, including sealing off the driver cab, no front door boarding and cordonning off the first front seats to passengers.
• Official advice for passengers who absolutely need to use public transport has been to wear non-medical face coverings, and these were made mandatory from 15th June.9,10
• The main preventive measure has been social distancing – and the UK government advice was to maintain a two metre distance from others, which has been in place in all public spaces. This was subsequently reduced to one metre plus.
Safety measures in other countries vary. For example, at the time of writing (May 2020):

- Germany requires a 1.5 metre social distance and passengers are required to use face coverings.\textsuperscript{11}
- In Belgium, a 1.5 metre social distance is desired and face coverings are mandatory in acknowledgement it may not be achievable.\textsuperscript{12}
- France requires a one metre social distance, commuters are required to have a permit to travel at peak times and to wear face coverings, which are given away for free on Paris metro.\textsuperscript{13}
- Italy requires one metre social distance and passengers are advised to wear face coverings.\textsuperscript{14}
- Norway and Sweden require a one metre social distance, meaning that 50 per cent of seats cannot be used, but there are no regulations regarding wearing face coverings.\textsuperscript{15}

These differing rules have also contributed to different recovery rates in transport provision in these countries. According to data from Apple’s Mobility Index, demand in mid-June for public transport services in Germany was already at nearly 90 per cent of its usual levels and France was at 70 per cent, while the UK was at 30 per cent of the usual way-finding requests (see Figure 4).\textsuperscript{16} This suggests that public transport demand in France, which started easing lockdown restrictions on 11 May, and Germany, where relaxation started from mid-May, recovered much faster.

Figure 4: Public transport demand, based on changes in daily requests for directions for Apple users, rolling ten-day average, by country, since 22 January 2020.\textsuperscript{17}
Opportunities for renewal

The government had started to set out an agenda that would see the transport system transformed, including greater levels of active travel and public transport use, and the move to zero emission vehicles.

In the March 2020 government paper on decarbonising transport, the Secretary of State, Grant Shapps MP, acknowledged:

“The scale of the challenge demands a step change in both the breadth and scale of ambition and we have a duty to act quickly and decisively to reduce emissions.”

And when announcing his active travel support package in May, he said:

“Our national recovery can also become a green recovery.”

Recent analysis found transitioning to net zero would provide a large economic boost, supporting over 200,000 jobs in 2030 and generating over £90bn of annual benefits to the UK.

The government has the opportunity to accelerate progress on delivering a sustainable transport system and ensure that transport serves communities across the country. This agenda should be integral to a wider green economic recovery programme.

Transitioning to net zero would support 200,000 jobs in 2030.

Achieving net zero carbon emissions, while keeping air pollution down, will necessitate a transformation of the transport fleet to zero emission vehicles (tail pipe and fuel source), improvements in road infrastructure for active travel and public transport, new networks and services to improve connectivity, and infrastructure to support zero emission vehicles. These are the near-term opportunities that should be harnessed by the government as part of rebuilding of the economy, creating jobs and facilitating greater economic activity across the country.

Transitioning to net zero would generate over £90 billion of annual benefits to the UK.
A transport-led recovery should deliver:

1. **A world-leading public transport system and improved connectivity**
   
   Public transport will play a crucial role in reconnecting people with employment, education and services despite the disruptive trends being predicted. An affordable, reliable, efficient public transport network will be necessary. The UK can have a world-leading public transport system, and can improve connectivity for those areas that are currently under-served or that are transport deserts.

   Central government should set a strategic direction nationally for transport, which should be accompanied by focused modal strategies. Its plan should outline the future for local transport to mobilise the resource available nationally, locally and from the private sector.

2. **100% zero emission road transport and railway**

3. **Permanent improvements to sustain greater levels of walking and cycling**

4. **Changing the way transport is paid for**

This should deliver against the following goals:

- Lead to reductions in carbon emissions and air pollution in line with legal targets
- Improve connectivity for communities with better access to employment and services to reverse economic damage of Covid-19
- Embed sustainable transport choices in people’s lives

The next iteration of the Cycling and Walking Investment Strategy, the forthcoming National Bus Strategy, as well as strategies for the future of mobility and reform of the railway will all need to be refocused towards achieving these goals and the Department for Transport (DfT) will need a more considered, integrated, cross-modal approach to local transport.
An integrated approach to transport

Transport decisions should be made at the administrative level best placed to make these. Local authorities – or combined authorities where these are in place – are best placed to review local transport needs, plan for how these should be met and to work with operators and other partners to deliver these services.

Local authorities should be required to produce local integrated transport plans that outline how they will permanently reprioritise provision locally to ensure a sustainable transport system based on active travel, shared and public transport (including rail, if devolved) that responds to, and meets, the needs of the community.

The plans should aim to:

- Address connectivity in their area and how to do so through sustainable transport
- Determine how different transport modes and types of provision will be provided
- Enable allocation of space in the local built environment to improve intermodal interchanges
- Set out how they will move at pace to implement the renewal agenda
- Give central Government confidence that delivery will achieve value for money and there is a plan for investing the funding allocated by central government in a way that meets its goals.

Producing this should be a prerequisite of accessing any future tranches of capital or revenue funding. It must also be a requirement that these plans are aligned with meeting net zero carbon emissions and complying with air pollution legal limits, and support bus services, as well as wider public policy goals to improve levels of physical activity and wellbeing and reduce loneliness. Transport planning should also be more joined up with built environment and land use planning to enable space allocation to public transport and shared mobility links.
Local capacity and capability

While local transport authorities have access to new powers and funding to implement improvements, their ability to engage with the development and delivery of local transport services varies significantly. One of the biggest barriers to tackle in delivering the renewal of transport will be the capacity and capability constraints at local authority level, and within operators.

Many places have suffered declining public transport services in recent years and capacity across local government has similarly been weakened through budget cuts and resourcing constraints. They have lost the skills required to oversee bus services in their area and have only limited control over the quality, cost and frequency of services. There are gaps in authorities to take on the negotiation and management of partnerships and management contracts for transport services given the reduction in expertise and staffing. Add to this the requirements for capacity and capabilities when looking at active travel, integrated transport and the railways, and there are significant gaps across the country that will hinder the government’s ability to deliver on its agenda.

The government should provide support for local authorities where it is needed to boost the capacity and capability in transport oversight and planning. The timing of its support should be staged to achieve the most impact. Initially, the Combined Authorities with transport powers will be in a better position to move at pace to deliver on the renewal of transport. The first tranche of funding should primarily focus on delivery in these areas to benefit the most people at the fastest possible pace. Alongside these, there are a cohort of local authorities and towns that will be most able to produce integrated transport plans early and should receive funding in the first tranche.

A second wave of local authorities will require support to develop their transport plans, which should be delivered through a co-development process with DfT. A third wave will be those with greater capacity and capability gaps that will struggle to develop plans and spend significant funds in the next two years. These should be supported to improve their capacity and capability to gain access to funds for transport improvements.
Bus services

Buses are the backbone of local public transport networks across the country. With a full double decker taking up to 75 cars off the road,\textsuperscript{21} buses are already a more sustainable way to travel. Well-functioning bus networks improve the connectivity of communities, reduce air pollution, cut carbon emissions, and tackle social and economic exclusion.

The impact of Covid-19 on bus services has led to uncertainty that has undermined traditional business models, which will need rethinking. With passenger numbers assumed to be depressed for some time post-Covid, further government support of the sector will likely be necessary.

Given the increased scale of public funding that is likely to be needed, the government should be able to specify benefit from its investment and support for the sector. There needs to be an end to the division and disputes within the sector on what the future model for bus service provision will be. The potential models range from franchising, tendered networks, to commercially provided services. It is likely that a mix of models will be appropriate to harness the benefits from public funding. A key change needed is greater planning led by local authorities, as they are best placed to understand and deliver on local needs and priorities across the transport system.

Franchised and tendered networks would provide certainty for the industry on expected returns, and a means for local needs to be accounted for through specifying the network but may not be suitable everywhere. By working collaboratively with commercial operators, local authorities can develop planned and integrated networks offering high-quality services, with strengthened core services and franchised supporting elements. From a passenger’s perspective, having an integrated, inclusive network on a single map would be much easier to navigate, and multi-operator, multi-modal ticketing would bring benefits. Models in place in Cornwall and Jersey provide for a less divisive approach.

Measures will also be needed to address the fragmented and short-term nature of the current funding while targeting capital investment and revenue support at the delivery of specific benefits.

The role of the Traffic Commissioner could be considered for reform. They could play a role in ensuring an integrated network provision, in cooperation with local authorities, by refusing to register a commercial service, if it undermined the local network. The government should also review if the regulatory body is relevant in a franchise model and if the regulatory regime is fit for purpose more generally. A new approach to consumer protection and passenger representation that adequately protects passenger rights at a national and local level should also be devised.

The government should ensure that a new model for the delivery addresses issues for rural as well as urban areas. The government should also progress the electric bus town programme, and should deliver a similar scale scheme for hydrogen buses.
The railway

The way rail services are run is complex and fragmented. Prior to Covid-19 DfT was responsible for overall strategy and funding of the railways, and determining franchise packages, with services then run by Train Operating Companies (TOCs). Sub-national and regional bodies such as Transport for London and Merseytravel also have franchising powers for their areas. Infrastructure and operations are run separately, with Network Rail in charge of investment, operation and maintenance of railway infrastructure (tracks, bridges, signals, some stations). Covid-19 resulted in all TOCs on DfT let franchises being placed on EMA’s with the Government taking on the revenue risk and costs.

Temporary extensions of the Emergency Measures Agreements should be used by Government as an opportunity to design new contractual arrangements for the railway.

The Government should not return to franchises. Instead, a much more flexible outcome-based specification should be adopted. To help achieve this, the government should reform the railway based on six key principles:

- **Competition at the right place in the system**
- **Devolution of responsibility to regional and local government**
- **Local development and provision of services**
- **Integration with other forms of transport**
- **Passenger centred**
- **Affordable to use.**

There should be a greater focus on leisure markets as well as commuter markets and regional commuter railways should be devolved to city regions where they are best placed to oversee services that integrate with wider local transport.

It is likely that the shape of the recommendations from the Williams Review may still be relevant, but with a markedly different context and a faster pace of change the government should consider which recommendations are still appropriate and how to introduce them. A combination of models should be considered to satisfy different communities’ needs.22
• Competitive intercity/long-distance model based on creating smaller units to compete for customers on intercity routes by applying for packages of slots and operating rights. This would combine best practice from airline and utility models with the specific operating requirements of the railway. It would capture the benefits of competition identified by the Competition and Markets Authority in a way that would not compromise capacity or customer service on the rail network.

• An urban transport model for cities outside London, designed to ensure the private sector operator is incentivised to promote integrated transport, modal shift and economic growth as well as retaining a traditional commercial focus on costs and revenue. This could provide a new model for integrated transport.

• A regional transport concession offering vertical integration across rail and horizontal integration for managing (and potentially delivering) different modes of travel, scoped to deliver the best possible service within a pre-defined budget envelope.

• A project management operation specifically designed to steward agreements through periods of significant change. Such a model would place the emphasis of programme management in the hands of specialist operators, who would then procure train services as part of an integrated package to deliver change in a timely and cost-effective way.

• A design-build-operate (DBO) model capturing the benefits that integrated DBO contracts have seen in other markets to expedite the development of new infrastructure from delivery to initial operation. This model could be applied to major schemes such as East West Railway or to reopening local branch lines as feeders to the main network.

A new structure is needed that delivers the benefits of a nationally integrated network with more influence and control from local areas, allowing rail to mesh with and respond to local objectives and needs. Devolved powers and local contract management in areas like London and Liverpool have contributed towards higher standards of service and greater responsiveness to problems. There should be a move to devolve more local rail services to the city region and sub-regional level.

The role of the regulator and consumer bodies in the rail sector is not functioning to adequately protect passengers. The Office of Rail and Road should be reformed, and the passenger representative bodies replaced with new arrangements.
The government should accelerate the transition of road transport and the railway to zero emissions. Implementing new infrastructure and fleet will require government to set the direction and pace of change as part of its green recovery programme to support job creation, economic activity and pollution reduction. It can create and scale the market by setting a timeline for the decarbonisation of passenger and freight fleets and supporting the accelerated development of new products and associated infrastructure.

Bus fleet and depots

The government should introduce a zero emission bus fleet and depot overhaul programme that requires all new buses be zero emission from 2025 and aim to replace all fossil-fuelled buses on the road by 2035 at the latest. The government should mandate this through a Bus Services (Zero Emission Fleet) Bill. There are 33,900 buses on England’s roads, with 29 per cent of these in London. A programme that starts with London and the Combined Authorities would address 56 per cent of the fleet and allow the manufacturing sector to scale and reduce costs for smaller authorities or areas. This will require supporting changes to depots with local planning for the retrofit or re-siting of depots.

The government should support growth in the capacity of the UK manufacturing sector to deliver the zero emission bus fleet. A manufacturing sector deal would ensure the future viability and growth of UK bus manufacturing of zero emission fleet at the scale needed, increasing the supply of a modern vehicle fleet, boosting UK supply chains, and reducing reliance on overseas technology and suppliers.
Hydrogen fuel provides a viable zero-emission option for fleets that are too heavy or require longer ranges than electric batteries are suitable for (e.g. buses for rural use, trucks, ferries, trains). The government should support the growth of hydrogen-fuelled buses, fuelling infrastructure and green hydrogen production. With significant capacity for the production of both green hydrogen and hydrogen-fuelled vehicles, the UK has a major competitive advantage compared to other countries. There is a short window to secure a leading position for the UK, especially as costs are set to fall by up to 60 per cent over the next decade. This will create jobs across the supply chain and regions, and build export opportunities for future growth. There should be a ban on the use of brown hydrogen for transport from the outset.

Cars and vans

Removing fossil fuelled cars and vans from the road will be necessary to improve air quality and cut carbon emissions. The government should only support the growth in electric vehicles (cars and vans) to accelerate the replacement rate for the dirtiest vehicles. There should be consideration given to an early focus on fleet replacement for businesses, car hire and car sharing schemes with incentives developed. The van fleet in the delivery sector should be supported to move to zero emissions through reducing the upfront cost of electric vans while the second hand market develops. This should also be targeted to encourage small businesses to replace their diesel vans with zero emission options. The government should aim for the entire UK urban delivery fleet to be zero emission.

The government should provide £1.5 billion of incentives (for vans and cars) over the next two years.

Rail

The rail network is losing its advantage as a green mode of transport. The diesel train fleet needs to be removed from service to achieve decarbonisation. The target to decarbonise the railway by 2040 cannot be achieved without greater electrification. A rolling programme of electrification should be established with the intensively used parts of the network for passenger and freight trains electrified early to facilitate fleet replacement. The Government should support the introduction of zero-emission technology such as hydrogen fuel cell trains to stimulate the market for alternatives to diesel trains and make the UK a leading manufacturer. With wider electrification, there is also scope to make rail entirely powered by renewables.
There have been greater levels of walking and cycling during the lockdown for shopping and exercise as people are constrained in how far they can travel, and car and public transport journeys that are not essential have been discouraged.

The government has tried to encourage greater levels of walking and cycling through allocating funding, removing some regulatory barriers and issuing guidance for local authorities to reallocate road space through temporary pavement and cycle lane expansions. These measures are very welcome and should provide the extra space for people to walk and cycle more safely and confidently, while maintaining social distancing, and at the same time discourage private cars for short journeys.

Local authorities should ensure that road infrastructure for active travel is complemented by sufficient bicycle parking facilities, as well as bus priority and other public transport prioritisation measures. The government should ensure its second tranche of funding for active travel is usable for various types of interventions.

Road layouts should be carefully planned with sufficient segregated provision for pedestrians, cyclists and buses so that reliable journey times can be maintained, particularly if temporary measures already instated are to be made permanent. London’s Streetspace plan includes a number of examples where separate cycle and bus lanes have been maintained alongside general traffic, as well as car-free, cycling-and-public-transport-only streets on key corridors. Cycle lane designs should also take into account different users’ needs, with widths, kerbs, crossings and parking spaces suited to a wide range of adapted and cargo bikes and e-bikes.

Any temporary measures put in place by local authorities to improve cycling and walking infrastructure should not restrict public transport and bus services. Such measures could be to the detriment of wider transport connectivity post-Covid.

Ultimately, however, the use of road space will need to be managed to prevent an overloading of the road network. As the number of journeys permissible increases, there should be clear communication on what is acceptable travel, with active travel and public transport use encouraged as a first choice and car journeys discouraged. To provide an alternative for residual private car journeys that cannot be easily walked or cycled or done by public transport, shared mobility, such as car clubs and car pooling, should be facilitated so that road space is utilised more efficiently.

3. Permanent improvements to sustain greater levels of walking and cycling
The Department for Transport has accelerated trials for the introduction of regulations to legalise the use of e-scooters on the road and in cycle lanes. E-scooters and other electrically-assisted micromobility vehicles (including trikes and adapted bikes for disabled and older people) can provide a viable alternative to driving for first and last mile journeys that may be too long or too difficult for people to walk or cycle.

Alongside regulations to legalise the use of e-scooters, national government should develop a framework for e-scooter and dockless bike hire scheme arrangements to assist local authorities that wish to support the rollout of hire schemes locally. This should seek to standardise the approach taken by local authorities in order to reduce the burden on local authorities and operators on introducing such schemes. Consideration should be given to whether Crown Commercial Service can develop such a framework rapidly. In addition, the government should ensure local authorities have the appropriate powers to issue permits to hire scheme operators, so that service specifications can be adopted that suit local needs.
4. Changing the way transport is paid for

The way transport is funded and paid for should change. Covid-19 has presented the government with a means to address long-term dysfunction in transport markets, such as the lack of smart or account-based ticketing, and inappropriate support mechanisms that are not incentivising appropriate outcomes.

There are four areas we recommend the government pursue:

- How government supports local transport
- How consumers pay for transport
- Encouraging private sector investment
- How local transport authorities generate revenue to facilitate a shift to a more sustainable transport system

Government support for local transport

The programme outlined in this paper will require greater funding than is currently allocated. In-year funding should be announced as soon as possible with clear commitments for future year funding that can be identified to give certainty to the market and local authorities. The capital and resource funding to support the next five years of the programme should be confirmed via the spending round in Autumn alongside a detailed plan for renewal.

The renewal of the transport system should see ring-fenced funding for local transport channelled through local authorities, where appropriate and where they have local transport plans in place, to achieve a more integrated network across transport with greater stability. This approach should aim to facilitate rapid rollout of improvements in fleet and connectivity. The government should require local authorities to include local bus services in their local integrated transport plans.
**Infrastructure**

The government should prioritise infrastructure spending that will deliver a sustainable transport system. Active travel, bus and electric vehicle infrastructure investment should be prioritised locally. Network Rail should bring forward re-planned investments to enhance the rail network, and the rail reopenings should be delivered.

Connecting transport deserts through rail and bus services will improve access to jobs and services. The ability to physically get to a rail station is a significant concern in the East Midlands (23 per cent), South West (22 per cent) and West Midlands (21 per cent). Efforts to expand the rail network through new lines and stations are likely to be particularly beneficial in poorly served areas. The government should set aside £4.74 billion to £6.37 billion for delivering the rail reopenings programme. There should be £1.82 billions of this fund invested in the next five years to deliver schemes, with a further £1 billion in the same period for fast tracking development of future schemes. This could deliver at least 33 reopening schemes with 72 new stations and 343 miles of reinstated passenger services miles over 25 years.³⁷

A programme of investment in physical and digital infrastructure to support local transport is needed. This should include a new generation of modal interchanges connecting bus networks with rail and other forms of transport for first and last mile journeys and targeted investments to make motorways and other strategic roads more bus-friendly.

Bus priority measures and infrastructure improvements for bus services are necessary to reduce the impact of congestion on the reliability of services, which is one cause of the declining level of bus use. The government should provide capital funding for local bus infrastructure to encourage investment by local authorities in bus lanes, urban traffic control, priority at lights, bus waiting facilities, interchanges and bus stations. The funding should be allocated based on plans local authorities should be required to produce to access future funding.

---

**Over 25 years** the rail reopenings programme would deliver:

- **72 new stations**
- **343 miles of reinstated passenger services**
- **33 reopening schemes**
The current funding structures for bus services are complex. The current funding landscape does not ensure value is achieved from the multiple sources of public sector spending, including BSOG, concessionary travel, NHS patient transport, school transport and social services. BSOG remains a blunt instrument. The English National Concessionary Travel Scheme funding has failed to keep up with inflation while privileging bus pass holders of a specific demographic above other equally deserving groups. The multiple sources of funding coming from different government departments needs to be addressed. These funding mechanisms should not continue in their current form beyond Covid-19.

Measures will be needed to address the fragmented and short-term nature of the current funding. Revenue support should be reformed and better targeted at delivering specific benefits against desired outcomes such as increasing bus use and ensuring socially necessary services that are critical to communities are in place. This cannot be achieved with the existing short-term funding arrangements. Revenue funding sources should be combined within a single, ring-fenced, multi-year funding framework covering revenue and capital support from taxpayer funds to local authorities.

There are two elements to a new revenue support mechanism that should be explored: a primary funding stream for improving provision, and a supplemental funding stream for general support to all operators that is provided if there is any transition period after Covid recovery to a new funding landscape.

**The primary funding stream should ensure revenue support for the following purposes:**

- Retaining and instating services identified locally as socially important, including support for evening and weekend services
- Facilitating the expansion in use of a Total Transport model combining funding and commissioning of local transport services to support socially necessary services at the local level
- Funding concessionary fares and targeted measures to reduce fares
- Incentives for consumers to switch to public transport
- Accelerating the take-up of new city bus-based services, such as demand-responsive transport
- Initiating new models of delivery for rural transport
A supplemental funding stream can be considered as part of the new revenue support mechanism as a measure to smooth the transition from BSOG to a new funding landscape. It should act as wider support while the primary revenue funding delivers improvements in patronage, encourages modal shift to support those services that are not commercially viable.

Through its funding the government should no longer provide grant or revenue support for fossil fuelled buses that will hinder the ability to meet its legally binding net zero greenhouse gas emissions targets, or its obligations to improve air quality.

The government should confirm a funding allocation for the next five years of at least £8 billion covering revenue support and concessionary fares, which is equivalent to the current annual settlement. An additional £3 billion funding should be allocated on top of this for the transformation of bus services from the £5 billion announced earlier this year for buses and cycling.

The government should consider the following elements to a supplemental funding stream:

- A basic supplemental payment on a per passenger or per mile basis.
- An additional incentive payment that only zero emissions buses are eligible for on top of the basic supplemental payment to incentivise the shift to zero emissions buses.
- Support for fossil fuelled vehicles should taper, with the most polluting vehicles losing support (Euro IV and lower) immediately, with all fossil fuelled vehicle support withdrawn by 2025.
- This supplemental funding stream should taper over time to reduce the level of grant payment given to all bus services, with it being withdrawn by 2030 at the latest, influenced by the pace of rebuilding patronage post-Covid.

The railways should continue to be funded primarily from farebox income and public investment, but additional tools will be needed to capture the value of the full economic, social and environmental benefits that rail needs to deliver. Future public investment should be assured so there is a clear investment pipeline. The associated benefits of proximity to rail services for new developments should be captured. This can best be achieved through devolved regional models, which integrate land-use planning and investment decisions. Operators of stations should put greater onus on station front-of-house retail that benefits the local community and provides a revenue stream from leasing retail units.
Reforms to fares, fare structures and ticketing should be prioritised. For some time though, many have felt they get poor value for money from public transport. Given the potential impacts of Covid-19 on the economy, the government should cancel the next planned fare increase on the railway due in January 2021, which will be confirmed in August with the announcement of the July inflation rate. Raising rail fares at this stage would be counter-productive to encouraging passengers back and to limiting the cost of people getting into work.

A new approach is needed to fare setting on public transport, which should address future fare rises (or reductions) and how these are calculated. Fares structures should be reviewed. Currently, there are too many confusing options for the different types of tickets and fares, and passengers are not automatically offered the best-value option.

From a passenger’s perspective, having an integrated multi-operator and multi-modal ticketing approach would bring benefits, including simplifying the ticket purchasing process and improving affordability.

Digital ticketing and booking systems for passengers will need to be default for the sector with a move away from paper tickets.

There should be a rapid move to simplified fare structures and account-based ticketing. Multi-modal tickets and zonal fares should be expedited for the cities beyond London as part of more devolved and better integrated transport. Local transport authorities that are devolved responsibility for rail should consider introducing new fares structures with tickets valid across operators, so passengers are not penalised if they need to change trains and from trains to buses.

How consumers pay for transport

Reforms to fares, fare structures and ticketing should be prioritised. For some time though, many have felt they get poor value for money from public transport. Given the potential impacts of Covid-19 on the economy, the government should cancel the next planned fare increase on the railway due in January 2021, which will be confirmed in August with the announcement of the July inflation rate. Raising rail fares at this stage would be counter-productive to encouraging passengers back and to limiting the cost of people getting into work.

A new approach is needed to fare setting on public transport, which should address future fare rises (or reductions) and how these are calculated. Fares structures should be reviewed. Currently, there are too many confusing options for the different types of tickets and fares, and passengers are not automatically offered the best-value option.

From a passenger’s perspective, having an integrated multi-operator and multi-modal ticketing approach would bring benefits, including simplifying the ticket purchasing process and improving affordability.

Digital ticketing and booking systems for passengers will need to be default for the sector with a move away from paper tickets.

There should be a rapid move to simplified fare structures and account-based ticketing. Multi-modal tickets and zonal fares should be expedited for the cities beyond London as part of more devolved and better integrated transport. Local transport authorities that are devolved responsibility for rail should consider introducing new fares structures with tickets valid across operators, so passengers are not penalised if they need to change trains and from trains to buses.
The government will need to step in to facilitate this and require operators to participate in account-based ticketing schemes and put in place the systems necessary. There will need to be investment in the back-end systems as well as an opening up of data across the transport sector and provision of APIs so that technology firms and operators can provide new retail and transport information products to consumers. Improved integration between modes should also be actively supported, including capital funding from government to support easier physical interchange, data availability for journey planning and the widespread adoption of multi-modal ticketing.

Inflexible season tickets have left those who do not need to commute every day being faced with buying either a full-time season ticket they will not use fully and cannot transfer, or expensive daily ‘anytime’ tickets that give no discount for frequent or regular travel. With greater potential for working patterns changing post-Covid and greater likelihood of working from home at least part of the week creating a larger cohort of part-time commuters, there should be a new range of capped, flexible season ticket products, which better address this need.

The government should review the model of concessionary fares and how these are funded. It should support specific demographics that would benefit from concessionary fares to improve access to education and employment, producing a return for the economy by enabling those least able to afford it to travel. It will be vital to keep fares on public transport low, and to increase the levels of patronage.
Encouraging private sector investment

The government should support large-scale procurement of zero emission fleet to reduce costs, but capital funding from government should be limited with private finance and leasing arrangements encouraged to reduce the upfront capital costs of the transition to zero emission fleet.

For example, the government should provide capital support to kick-start the transition to a zero emission bus fleet with the express intention of increasing the demand for zero emission buses and supporting depot infrastructure enabling towns and cities to renew their networks. The government funding should leverage private sector investment to reach the scale needed to overhaul the UK bus fleet and depots. This will require a new private funding model, and the government should foster new leasing arrangements or a ROSCO-style model for buses. This should support battery electric vehicle (BEV) and fuel cell electric vehicle (FCEV) technologies. The government should allocate £1 billion of capital funding for this, and Combined Authorities should leverage Transforming Cities funding.

Raising new revenue

Alternative sources of income should be developed to put in place long-term and secure revenue streams for local transport authorities so they can be less reliant on central government revenue funding to support their local transport networks. The transport system should reward sustainable transport and embrace the “polluter pays” principle, so that public transport, active travel and shared mobility use are enabled and encouraged, while dissuading the use of polluting or congestion-inducing transport services and use.

Local transport authorities should be able to freely access revenue raising tools that will also influence behaviour and choices. The income from these mechanisms should be restricted to funding improvements to public transport networks and services and road maintenance.

Workplace Parking Levy (WPL)

Local authorities in England have had the powers to implement WPL – a levy paid by employers over a certain size in a specified area based on the number of parking places they provide – since 2000, although schemes must be approved by the Secretary of State for Transport. So far, Nottingham is the only city that has implemented a WPL, but a number of local authorities and boroughs in London are considering it. To expedite the adoption of this mechanism, the government should issue further guidance clarifying the process, conditions and the amount of levy that can be charged (as the Mayor of London has provided in the guidance for boroughs), and remove the requirement to seek permission from the Secretary of State. Money raised should be used to support specific local transport improvements, which will also benefit levy-paying businesses and their employees and customers directly through improved active or public transport.
Drivers currently pay Vehicle Excise Duty (VED) and fuel duty, which is collected directly by central government. However, these do not internalise the full costs of use of the roads and therefore do not provide a link between the use of road space and the cost of use.

A new approach to pricing is needed that is a clear proposition for the consumer capturing the full range of impacts from use of the road space by vehicles, including congestion, air pollution and carbon emissions. A road use charging mechanism should be better for the consumer and business.

Technology currently available would allow a more sophisticated approach to charging compared to existing approaches. A charging mechanism should be based on distance travelled, time of day, location, and level of emissions and impact on the environment of the vehicle. Such variable, distance-based charging would reflect the impacts of individual journeys more appropriately and, unlike clean air zones or congestion charges, account for both pollution and congestion at the same time.

Local authorities in England have had the power to implement road use charging since 2000. Central government should simplify the means for transport authorities to introduce road use charging and issue new guidance to local authorities. In addition, the government should introduce a national distance-based charging scheme that local transport authorities can participate in. The national scheme could also apply to the Strategic Road Network where revenue is retained by Highways England for road maintenance. The revenue from journeys on local roads should be retained by the local transport authority to fund road maintenance, modal shift and public transport improvements. The management of local roads should be simplified, with powers and funding shifting to Combined Authorities where they exist, alongside the management of any locally-raised revenue.

As the pace of electrification of road transport grows, this should provide a mechanism for charging all vehicles for their impact and use of the road space. VED and fuel duty will decline over time as a result but could be increased in the short-term to encourage a shift from fossil fuelled vehicles to zero emission. Combined with intense investment in reliable, cheaper, clean and integrated public transport provision as an alternative to driving, this would provide an effective incentive for reducing car reliance, especially in cities and larger towns.
Facilitating the shift to a rapid renewal

As the government lifts the lockdown and considers its approach to maintaining public transport provision while use remains depressed it can put in place measures that will facilitate a more rapid renewal.

Temporary funding arrangements

On-going reduced use of public transport will lead to lower revenues for operators and transport authorities putting at risk, in the short-term, the viability of services and the sector. The government will need to provide continued bridging funding for bus, light rail and metro operations for local transport authorities, combined authorities and bus operators (including municipal operators) through the duration of the recovery phase. The government must ensure that operations and a functioning industry are maintained for beyond the pandemic.

Once this funding period expires, the government should put in place an appropriate interim funding regime that sustains local networks through to beyond the pandemic response and into a new permanent funding landscape. Funding should be directed via local transport authorities where they have an appropriate plan (developed with operators) in place, with all funding, in particular bus funding, ring-fenced so it cannot be diverted to other uses.

For the rail sector, the government should renew EMAs after their initial 6-month period. As passenger numbers and revenues are set to remain low, continued support will still be required. A revised form of EMAs should be in place for 18 months and incentivise performance, efficiency to remove costs, and implementing innovations to improve services and the passenger experience.

In terms of bus funding, the current approach to funding through the CBSSG should be continued for the immediate term. Higher funding will be necessary as capacity and demand increase, but revenues remain too low to sustain operations. Certainty will be necessary for operators and local transport authorities that these costs will be met in the immediate term (until October or November).

This funding arrangement would help maintain services in the short term, while new arrangements for the rail sector are instigated.
Public messaging on use of public transport

The government’s current advice on the use of public transport is:

“You should avoid using public transport where possible. Instead try to walk, cycle, or drive. If you do travel, thinking carefully about the times, routes and ways you travel will mean we will all have more space to stay safe.”

The current messaging is therefore encouraging people to default to car use. Polling suggests a greater proportion of people (around 60 per cent) are more likely to drive more than the proportion more likely to cycle and walk more (54 per cent), rather than use public transport, once travel restrictions are relaxed. The same survey found that 53 per cent of people drove in the preceding week, compared to eight per cent who cycled, and one and two per cent used the tube/train and bus respectively.

Public polling shows that

six in ten
people are more likely to drive than to use public transport once travel restrictions are relaxed

This needs to be addressed before new habits on how people travel are locked in. As lockdown measures have been relaxed and more people are encouraged to return to work and to the shops, in order to kick-start the economy, different communications on how and when to use transport will be necessary at the national and local level as demand is likely to increase. Passengers should be reassured that public transport is safe and encouraged to use it again, so confidence levels can start returning. It is also important for a long-term plan with clear milestones for expected use of public transport to be communicated to operators and the general public, so that changes in how people will travel can be put in place in good time.
References


2. BBC (8 April 2020), Coronavirus lockdown sees air pollution plummet across UK, https://www.bbc.co.uk/news/uk-england-52202974


4. See for example differences in Centre for Cities (2 June 2020), Is life returning to normal as lockdown lifts? https://wwwcentreforcities.org/blog/is-life-returning-to-normal-as-lockdown-lifts/


9. Department for Transport and The Rt Hon Grant Shapps MP (4 June 2020), Face coverings to become mandatory on public transport

10. This happened at the same time as the World Health Organization (WHO) changed its stance and also recommended wearing face coverings on public transport and other potentially crowded places. World Health Organization (5 June 2020), Advice on the use of masks in the context of COVID-19: Interim guidance, https://apps.who.int/iris/rest/bitstreams/1279750/retrieve; Guardian (5 June 2020), WHO advises public to wear face masks when unable to distance, https://www.theguardian.com/world/2020/jun/05/who-changes-advice-medical-grade-masks-over-60s


17. Source: Apple Mobility Trends Reports


Icon credits:

Campaign for Better Transport’s vision is for all communities to have access to high quality, sustainable transport that meets their needs, improves quality of life and protects the environment.