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The acronym “PCP” can refer to two things. The first is a drug that leaves its users staggering, incoherent and prone to convulsions. The second is a form of car finance that, while it sounds prosaic, could have the same effects on the market for the UK’s most popular form of transport.

**Personal contract purchase (PCP) deals are loans that allow people to “buy” a new car every few years; deposits and monthly repayments are low, because the deal never actually pays off the cost of the car. Most PCP deals end with the buyer starting a new PCP on another new car. Since 2012, PCP finance has grown explosively; it now funds 90 per cent of new car sales in the UK, adding tens of billions per year in consumer debt. That this type of debt – traded by banks in “deep subprime” bonds – could precipitate a crisis in the car market is fast becoming more of a “when” than an “if”. In the US, six million people are more than three months behind on their car loan.

Further warnings emerged in the first half of this year. In March, the Financial Conduct Authority began reporting on its research into motor finance. While the FCA’s findings will not be published until September, it has already found that “despite favourable credit conditions”, arrears and defaults are growing. Last month, two of the big ratings agencies separately published research that showed PCP deals in the UK were increasingly under pressure from “voluntary termination” – people deciding they couldn’t afford their new car, and handing it back.

Banks are less exposed to the teetering edifice of car finance than they were to subprime mortgages. Car manufacturers – which are in many cases the providers of PCP finance – are less secure. The question policymakers should now consider is whether the private car is “too big to fail”, and if it remains suited to an increasingly urban population. Will roads be bailed out, or is the market telling us that the future belongs to bigger, greener, more social forms of transport?
London’s transport needs investment, or else it will fail

Deputy Mayor for Transport
Val Shawcross
lays out City Hall’s new 25-year transport plan, and explains why more government support for the UK’s capital is vital

Emblazoned on the older public buildings in Southwark, at the historic and geographical centre of London, you will find a powerful statement of public purpose, borrowed from Cicero: “The health of the people is the highest law.” With the UK’s multiple 21st century public health crises of air pollution, environmental degradation and growing obesity-related ill health, it’s clear that this “law” needs to be restated as a guiding force for the future development of London.

And through transport we have the opportunity to make a real difference. There’s no doubt how important a transport network is to a city. An efficient, functioning transport system spurs growth and speeds development, but it also has the power to transform day-to-day life. We’ve seen over the decades how London has thrived with a network that has been the envy of the world. But to stay at the forefront, the capital has had to move with the times, and now, more than ever, it’s vital that we do something bold, something different. That’s because around a third of journeys are still made by car every day and, although lower than many UK cities, this has led to inactivity, congestion, growing health problems and an air pollution crisis.

With London’s population expected to rise to 10.8m people by 2041 we have to make changes. We need more people walking, cycling and using public transport. That’s why the Mayor has published a bold new transport strategy that will create affordable, accessible and world-class transport for every Londoner over the next 25 years. It’s a strategy that puts these active travel choices and emissions reduction right at the heart of our capital’s future, and will significantly reduce our reliance on the car.

The issue of affordability is particularly important and one that Sadiq Khan acted on from the moment he took office. If we are to encourage more people to use public transport it must be affordable. It’s simply
outrageous that TfL fares went up by 42 per cent between 2008 and 2016. Some said Sadiq couldn’t invest in transport and make it affordable at the same time, but that’s exactly what he’s done, and thanks to his freeze our passenger numbers are performing far better than the rail networks.

I have no doubt that this strategy will change London as we know it for the better, but it’s essential that we have support from the government in the short and long term.

We need their backing to deliver Crossrail 2 to support hundreds of thousands of jobs and homes, and prevent unprecedented overcrowding, as part of a co-ordinated major UK-wide development plan for rail transport infrastructure. We need the government to back rail devolution, having seen that allowing TfL to run the suburban lines is the fastest and most cost-effective way to guarantee better transport services to vast areas of south London.

But importantly we need the government’s backing now, too. With the economic uncertainty of Brexit, it’s more important than ever that we are supported because when London succeeds, the country succeeds.

But instead of support, they’ve taken away more than £700m per year in funding for our transport system. We have to keep London moving and get it started along this essential road to the future, but the government is effectively making us work with one hand tied behind our back by taking away our vital grant.

There are obvious consequences of a £700m per year reduction in government funding. It’s a significant budget reduction that means all non-essential road improvements have been paused for two years. There’s no doubt that this lack of proactive work could lead to an increase in disruption on the roads.

The government is also blocking us from accessing the new £220m National Clean Air Fund and the £1.7bn Transforming Cities Fund. Ridiculously, London doesn’t receive any dedicated roads funding – unlike all other parts of the country – despite more than £500m in Vehicle Excise Duty being collected from Londoners each year. Ultimately this means Londoners are paying for improving roads elsewhere in the country and the costs of running London’s roads are being subsidised from public transport farepayers.

This can’t go on. Sadiq understands that transport doesn’t just impact on our daily lives by helping us get around; it also creates new opportunities, unlocks housing potential and shapes the whole character of our city. A blossoming transport network helps a city thrive. That’s why it’s so important that the government backs us and gives us the support we need to deliver an affordable, reliable and accessible transport network.

Thanks to his transformative efficiency programme at TfL, we’re delivering the new Elizabeth Line, investing more in step-free stations than ever before, creating the greenest bus fleet in the world and transforming our streets for the benefit of people walking and cycling, while keeping TfL fares the same and bringing down the cost of bus and tram travel, with the Hopper fare allowing unlimited journeys in one hour for the price of one. All this while the government has been taking away support and overseeing spiralling fare increases on the national rail network, with their passengers suffering from delays, cancellations and disruption.

Our bold strategy must begin a national shift towards a more progressive, environmentally friendly approach to transport policy. We want it to mark the beginning of a new appreciation of the importance of growing and improving our rail networks and services. And we want the whole of the UK to see how vital the role of walking, cycling and public transport can be in making us healthier and improving the places where we live. It’s vital that this happens and it’s time for the government to get behind us for the good of the capital and the country.
The chief executive of HS2 Ltd, Mark Thurston, talks to Augusta Riddy about executing the biggest public infrastructure project in a generation

Can HS2 be the “people’s railway”? 

Upon entry to the High Speed Two Limited (HS2 Ltd) offices in Euston every visitor is required, under the watchful eye of a receptionist, to watch a short health and safety video. It explains that under no circumstances should you move around the office without a designated HS2 employee, and encourages the watcher to report any potential hazards; it offers a stray cable – a tripping risk – as an example.

Once the video ends, visitors are handed a pamphlet reiterating the key points.

The excessive care in the office – it makes you wonder what it’ll be like when construction actually starts – gives a palpable sense of the pressure HS2 is under.

Thurston, who began his career as an apprentice with London Underground, took up the £535,000-a-year position of CEO in March 2017. He picked up the baton from Simon Kirby, who left to join Rolls-Royce in the wake of a scandal in which millions of pounds in redundancy payments, most of which were unauthorised by the Department for Transport, were paid to departing senior managers. The Public Accounts Committee accused HS2 of lacking “basic financial controls”, and even raised the possibility of court action against Kirby.

“My job,” Thurston explains, “is to give HS2 Ltd the feel of a permanent company with the sort of discipline, governance and arrangements that you’d expect.”

He is aware that the most challenging period is to come. Over the next two to three years the company will become “increasingly visible” to the public as construction begins. Phase one will involve moving 135m tonnes of earth – 16 times the amount moved for Crossrail.

“A lot of [the construction sites] are quite rural, quite small roads, in local

do,” he admits, and that comes with the “inevitable scrutiny”. “It’s not unreasonable if you think how much money we’re spending.” High Speed Two is the second high-speed railway line to be built in the UK (the first connects London to the Channel Tunnel). The current projected cost of both phases is £56bn, a figure that was revised up from £32.7bn in 2010. In March 2018 alone, HS2 bought as much land as there is in the state of Monaco.

The project is divided into two stages: the first will connect Birmingham to London, and the second will connect Birmingham to Leeds via one branch and Manchester via the other. Upon completion, the whole network will form a “Y” shape across the country (refer to map). The first phase is expected to have trains running by the end of 2026 – it currently has contractors on the ground and construction is expected to begin mid-2019 – and the second phase has a target completion date of 2033, but is still working its way through the parliamentary consent process.

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“Birmingham is the heart of the network”

It’s upon completion of phase two that Thurston believes the whole network will make sense, and yield the benefits promised. “Yes, [HS2] will make a huge difference for getting between London and the Midlands, but the big prize for rebalancing the economy and generating that sort of growth will come from the second phase.” That phase two could not happen is unlikely, but it is also unthinkable; in such a situation, more than £22bn would have been spent on getting travellers from London to Birmingham 31 minutes faster.

Northern political leaders are already frothing at the mouth over a gulf in transport funding between the South and North, a public relations issue that HS2 are wise to. Any suggestion that the network will revolve around London is quickly rebuffed. “Birmingham is the heart of the network,” Thurston asserts. “The railway really runs north from Birmingham and south from Birmingham. It doesn’t run from London to Birmingham and beyond.”

While significant upgrades to existing lines are kicked into the long grass – the decision by Chris Grayling in 2017 to cancel three major northern electrification schemes incurred particular ire – many people remain unconvinced by the promise that HS2 will bolster the economy of the North. The decision not to extend HS2 to Newcastle and Liverpool, despite Liverpool City Council’s offer of £2bn to add the final 20 miles to the city, has attracted criticism from northern city regions and authorities in Scotland. Thurston says that by giving the existing planned route “that extra capacity, connectivity and journey time savings,” HS2 will nevertheless “transform” the northern economy.

Liverpool City Region Mayor Steve Rotheram and Greater Manchester Mayor Andy Burnham have argued that a high speed rail which cuts across the North – dubbed “HS3” – is a crucial investment if the aim is to rebalance the economy. That is the aim, agrees Thurston, and he insists that HS2 is the answer, or at least a large part of the solution. “Assuming they connect the bit across the top, so you can get from Manchester to Leeds,” by connecting Leeds and Birmingham, and Birmingham and Manchester, “you’ll create the ability to travel around the North.”

Phase two isn’t expected to be completed for another 15 years. Connecting “that bit” between Leeds and Manchester, as part of a hypothetical HS3 network that stretches across the North, isn’t included in the current plans, and northern leaders are concerned it won’t happen for a very long time, if at all. “This is a scheme for the next generation,” admits Thurston, who recognises these frustrations. “HS2 needs to be ‘and’ not ‘instead of’ things like electrification. There’s work to be done on the existing infrastructure.”

Further down the line, the government will “appoint a partner to operate the railway”. The case for HS2 rests on it becoming a “people’s railway,” argues Thurston. “The whole premise of this thing is about being accessible to all types of people.” Unless the trains, which can carry up to 1,000 people, are full – “the pricing structure has got to be affordable for inter-city travel” – then the numbers won’t add up. The public will have to hope that the government in place when the network is complete will find a partner that is more successful at keeping prices down than has been the case in recent years; research by the Trade Union Congress found that British commuters are spending up to five times the amount of salary as commuters in France, Italy, Germany, Belgium and Spain. “There’s recognition that the current fares system requires a review,” says Thurston, “so we would expect to be part of that.”

Despite the job being very challenging both “personally and professionally”, Thurston says he manages to balance professional focus with enjoyment of his role. “I take what I do really seriously, and have great belief in this idea that if you’re going to do a job do it properly, but I don’t take myself too seriously,” he says. “This is a cool job. It is without doubt a privilege.”
The world is waiting for Britain’s new runway

Regardless of political orientation or opinions on Brexit, there is broad national consensus on one issue: Britain must remain a confident, outward-looking trading nation.

To do this, it needs stronger global connections, ensuring that as Brexit unfolds, Britain’s exports and expertise can continue to flow out to the world, while tourists and investment can flow in.

This is why – nearly 50 years after the Roskill Commission was set up to debate the need for new airport capacity – the government backed a new runway at Heathrow in October 2016, endorsing the unanimous recommendation of the independent Airports Commission.

As the UK’s only hub airport, Heathrow is a cornerstone of the UK economy. It connects British businesses large and small to markets all around the globe; it is Britain’s trading gateway and the UK’s largest port by value outside the EU and Switzerland, handling over 30 per cent of UK exports by value to these key markets.

Today, Heathrow is almost full. It has been operating at 98 per cent capacity for ten years, while trading routes to major emerging markets, like Shanghai, Delhi and Los Angeles, are also close to capacity.

A new runway will allow the UK to reach up to 40 new long-haul trading posts, making it the best-connected nation in the world, and doubling cargo capacity.

It will generate tens of billions in growth and thousands of jobs. It means 10,000 apprenticeships at the airport and through our supply chain, with the potential to eradicate youth unemployment in the boroughs closest to Heathrow.

We understand our role in enabling British business to trade globally, and encouraging inward investment. That is why, in September 2017, we launched our ambitious nine-point plan, “Bringing Britain Closer”, to improve connections all over the country to Heathrow. The plan includes a £1bn “Route Development Fund” to help establish new connections to currently unserved UK airports from an expanded Heathrow; campaigning for the abolition of domestic Air Passenger Duty to make UK flights more affordable and sustainable; and being the first UK airport to support the principle of ring-fencing of new air slots for domestic use.

We are moving forward with the plan; last year we launched a £10 discount on departing passenger charges for domestic flights, which we increased by 50 per cent in January 2018 to £15, helping to strengthen existing domestic connections to Heathrow, and potential future routes.

As a major national infrastructure project, Heathrow expansion is a chance to build a lasting skills legacy for the UK. Through our supply chain strategy we want to revolutionise the way the UK builds its infrastructure. We are in the process of locating four logistics hubs across the UK, off-site centres for pre-assembly and consolidation, which will drive benefits nationally. This has never been done before at such a scale, and we hope it will set a new precedent.

We have established the Heathrow Skills Taskforce, under the chairmanship of Lord Blunkett, and it will publish its findings later this year. It has been working with other major infrastructure projects like HS2 to discuss how best to arm future generations with crucial skills.

Heathrow expansion sends a bold signal that Britain is open for business. But as time goes by, the UK risks falling behind, as competitor hubs like Frankfurt and Amsterdam race ahead.

That’s why we can’t afford to delay, and British businesses, trade unions, and over 40 Chambers of Commerce support this vital project for Britain’s future.

The world is waiting for the UK, and the new opportunities expansion will bring. We must get on with it.

IN ASSOCIATION WITH

Heathrow
In today’s society, there are plenty of incredible, “smart” technologies on the horizon that seem to have come straight out of a science-fiction novel.

At Grid Smarter Cities, before we embrace the technology of the future, we believe we need to get the “smaller stuff” right. By focusing on getting the things people actually need working well, we will have the right foundation for thinking that all this might really be on the horizon.

Our cities are crying out for practical, common sense solutions to solve their practical problems. Kerb space is key to commercial activity within a city – the home of taxi pick-ups and set-downs, car share and cycle hire schemes, bus stops, car parking and places where commercial vehicles load and unload.

Currently kerb space is the most under-utilised piece of real estate that the city owns, but potentially the most valuable. With proper management, the era of kerbside chaos could be over, argues Neil Herron, chief executive and founder of Grid Smarter Cities.

Kerb space isn’t being utilised to its full potential. With proper management, the kerbside chaos could be over, argues Neil Herron, chief executive and founder of Grid Smarter Cities.

Kerb will revolutionise how cities manage their kerb space, allowing freight and commercial operators to book slots to load and unload rather than circling and competing for kerb space, causing entirely avoidable congestion.

Planes would never be allowed to land without a slot. We should therefore assess congested areas of cities in the same way. The kerb space could be dynamically managed through a booking platform, enabling authorities to offer permissions for commercial activities at certain times that least impact on the network, helping the city to transition from a chaotic, free-for-all to a managed approach.

If we want to realise the potential of smart cities we need to watch the kerb. Currently, Smart City “solutions” seem to be siloed rather than holistic. There is a lack of understanding that the kerb is one of the most under-used pieces of real estate we have in our cities.

The commercial actors in any city circle the kerb, risking fines, avoiding penalties and competing for space that is restricted and limited. The congestion creates extra emissions that lead to poor air quality, which everyone is now quite rightly focusing on improving. With simple technology and practical management, and a carrot rather than stick approach, we can make start to achieve gains.

The authorities make their kerb space available at specific “hotspot” locations when it will have the least impact on traffic. The amount of kerb space is finite, but permission doesn’t have to be. Kerb enables the allowing of “permissions” when they are most needed (in advance or in real-time) in line with protocol.

Local Authorities can nudge behaviour through charging. A clean air zone, for example, would be able to create differential charging with pricing preference for zero or low-carbon vehicles without having to resort to massive costs.

By dynamically using the kerb space, what is used as a delivery bay in the morning and a courier bay in the afternoon could become a taxi rank in the evening. Add in a rapid charger for EVs and modal shift is incentivised.

Kerb is ready to go live in a number of London locations and provincial cities and a number of commercial freight operators are in a similar advanced position. The problems that exist in UK cities are the same the world over.

To see cities get smart, watch the kerb.

For more info: www.gridsmartercities.com
What does the future hold for freight?

As the Brexit deal deadline approaches, Rohan Banerjee asks Lilian Greenwood, chair of the Transport Select Committee, what this means for UK imports and exports.

**Will the UK still adhere to the EU’s Common Transport Policy post-Brexit on issues such as environmental impact, safety, and interoperable infrastructure?**

It depends on the nature of the deals that the UK can secure. Existing deals – such as the EU-Switzerland Air Transport Agreement or the Agreement on the EEA – work largely on the basis of extending the application of existing EU policies, mutual recognition of policies and acceptance of reciprocal rights. There are perhaps signs from the European Commission that can be read as being optimistic about the progress being made on a deal.

The Commission has recently announced that transport, goods, customs, and the mobility framework will all be part of discussions on economic partnership. But we should be under no illusion that the government’s red lines around the jurisdiction of the European Court of Justice could be a big stumbling block to any common transport agreement.

On 17th May, the Commission set out its plans for modernisation of Europe’s transport systems, with the aim of allowing Europeans to benefit from safer traffic, less polluting vehicles and more advanced technological solutions, while supporting the competitiveness of EU industry.

Regardless of whether the UK is in or out of the single market we will still need to act in broadly the same policy areas as the EU; economically to facilitate integrated transport; socially to promote safety; environmentally to reduce harmful emissions; on infrastructure to maintain, renew and build interoperable networks; and internationally on common standards and agreements.

**What enforcement will there be on UK vehicles going into EU member states after Brexit?**

Again, this depends on the detail in any deal. There are already issues with enforcement and exchange of data about drivers and owners to facilitate enforcement. Perhaps there is an opportunity, on the back of the Brexit negotiations, to reach some agreements on this.

**Will there be an increase in fuel duty?**

This is a matter for HM Treasury. Brexit aside, there are plenty of reasons why the government should look at its policy on fuel duty and the role it could play in encouraging modal shift and driving down harmful emissions from transport.

**British importers and exporters tend to prefer direct mainline container services calling at their national ports and tend to dislike feeder services. Is there a risk that a politically isolated UK will no longer benefit from direct calls?**

We don’t have to end up politically isolated. The nature of the deals we do with the EU and bilaterally with other countries will shape our trading relationships. We need to get our regulatory and fiscal frameworks right and we need deals that get us access to the markets that are important to our importers and exporters. It’s easy to say but much harder to do.

**British shippers are nervous about losing the benefits of free trade and customs harmonisation with the single market. What can be done, if anything, to assuage those concerns?**

It is the uncertainty about future arrangements that businesses find difficult to deal with. Once we know what the arrangements are they can start putting in place the measures they need to implement them, as well as reaping any benefits and cope with any detriment that the new arrangements bring.
Driving the next generation of digital rail services

Digitally advanced train travel will transform the mode of transport for passengers and the economy alike, argues Billy D’Arcy, UK chief executive officer of BAI Communications

Today’s rail sector has two key challenges to address: upgrading physical infrastructure to support growing capacity, while simultaneously digitising the industry to improve service delivery and passenger experience.

Getting this right is crucial. The last 20 years has seen a doubling in the number of UK rail passengers, and it’s anticipated this number will double again in the coming two decades. In tandem with journey volumes, passenger expectations are rising too. The digitisation of sectors like retail has led to demands for transport to offer similar responsiveness when addressing customer needs, including greater flexibility and transparency when it comes to services and ticketing.

Digital transformation has the potential to directly address these issues, dramatically improving the UK’s metropolitan and inter-city rail networks. In doing so, it can even give the economy a boost. Secretary of State for Transport Chris Grayling, along with a host of businesses and regional bodies, recently stated that improving connectivity would drive productivity growth across the UK – a challenge since the 2008 financial crisis. By providing ubiquitous high-speed mobile data and reliable call services across a more connected rail network, commuters could make better use of their journey.

An assessment of UK rail usage statistics backs this up – 1.7bn annual train journeys and an average journey of 76 minutes means as many as 2bn potential working hours go unaccounted for each year. With GDP equating to approximately £31 per hour, and approximately ten per cent of train journeys focused on business, connected commuters could give the UK a potential annual productivity boost of £6.2bn.

Delivering data-driven services

Passenger productivity aside, enhanced connectivity will be key to enabling the data-centric operations required to increase rail network efficiency and deliver next-generation services. High-speed wireless data, paired with advanced sensor technology and Internet of Things (IoT)-enabled devices, will allow organisations to implement centralised, real-time collection of data. Analytics, and increasingly artificial intelligence (AI), can then be applied to derive actionable insights from this information. Data generated by train or track-side infrastructure, for example, can enable predictive maintenance, minimising unexpected malfunction, downtime and disruption. In the event a service is disrupted, this insight can also help to reroute later trains to prevent further disruption and costly penalties.

Other benefits provided by increased connectivity include better addressing the issue of passenger safety. Following deployment of network-wide mobile wireless on Toronto subway stations, the Toronto Transit Commission (TTC) was able to launch a new mobile app for passengers to report harassment, safety...
concerns and suspicious activities to the TTC control centre. An alert is then issued so that a member of staff or the relevant authorities are waiting at the next station, knowing the specific nature of the problem, as well as the location in the train where it is occurring.

Realising the benefits of connectivity
Ensuring the full benefits of digitisation are realised depends on more than just adopting new technologies. Rail also needs to modernise operations and business models. Transport and technology sectors are very different so finding ways to more closely align will be central to success. Both inter-city and metro rail, for instance, are characterised by huge, long-term investments in infrastructure. Rail systems and rolling stock will often remain in service for decades, and trains are typically purchased on a 30-year cycle. In contrast, the technology sector is incredibly fast-paced, driven by ever-accelerating rates of development, where technology generations can change several times over in similar timeframes.

Addressing this challenge effectively will rely on rail organisations experimenting with strategies more commonly associated with disruptive digital companies. Where rail is typified by monolithic business models, the technology sector is often built on partnerships, involving a variety of stakeholders – an approach that makes sense when you consider the range of technologies involved in delivering next-generation rail services.

Aside from legacy solutions, IoT, data analytics and AI, the industry will also have to contend with mobile evolution when 5G is introduced in 2019. Passenger and employee-focused digital apps will continue to become more sophisticated, paper tickets will become a thing of the past with the introduction of smart ticketing, and networks will become more deeply integrated with broader civic infrastructure as smart cities become established.

Partnering for success
BAI Communications has fulfilled this technology partnership role for a range of transport authorities, providing expertise for everything from the designing of bespoke equipment for the protection of mobile transmitters in underground rail environments, to training engineers to work with high-speed fibre required for data services. As a result of infrastructure deployed by Transit Wireless, a majority-owned BAI Communications company, the New York subway has been able to launch innovative passenger-focused services like Subway Library, a partnership with three New York libraries allowing commuters to access hundreds of e-books via their mobiles to make journeys enjoyable.

With many transport bodies turning their attention to mobile connectivity, now is the perfect time to talk about how we effectively digitise the broader UK rail network. For example, Transport for London is providing a fantastic example of how to leverage data, using insights generated by its industry-leading Oyster card system to optimise services in line with passenger needs. As such, it could serve as an effective pathfinder for the rest of the industry.

The rail network is central to the wider UK economy, and is one of the most intensively used in Europe. Addressing the challenge of digitisation will not only address the need for safe and reliable transport, it will hopefully open new revenue opportunities for the industry, and boost the economy. Perhaps most importantly, at a time when the UK is changing its relationship with the broader global economy, it will position it as a modern, digitally-enabled country that’s open for business.

BAI Communications is a global transit communications specialist with major projects in New York City, Toronto and Hong Kong.
Britain’s railway is in demand, with more than 1.7bn passenger journeys being made in 2016-17. Each journey connects people with jobs, education, family and friends, strengthening our society and economy. Network Rail’s job of operating, maintaining, renewing and enhancing the infrastructure of the mainline railway is vital. The success of the industry as a whole depends on the success of Network Rail.

At the Office of Rail and Road our role is to protect the interests of rail and road users. An important aspect is the economic regulation of Network Rail, holding it to account for delivering high levels of performance and service, as well as good value for money – for passengers, freight customers and taxpayers.

The basis for this regulatory system was set in 1993 as part of the process of privatisation. Since then the infrastructure owner has followed a path from a privatised company – as Railtrack plc – back to the fully publicly owned Network Rail in 2013.

In that time the regulatory model has evolved but has not been radically overhauled. As we approach the next five-year funding settlement for Network Rail, beginning in April 2019, we are undertaking our periodic review of the company. Our aim is to support a more efficient, safer and better used railway, delivering value for passengers, freight customers and taxpayers in CP6 and beyond. So how are we taking this opportunity to reset our regulation of Network Rail?

Economic regulation: incentivising a publicly owned company

Economic regulation was established in response to the privatisation of utilities in the late 1980s. Economic
regulation starts with understanding the monopoly’s motivations. In the case of privately owned companies, firms aim to maximise profit and shareholders aim to maximise their return on investment. Put simply, the role of economic regulators was to ensure that the monopoly did not achieve its profit maximising through the exploitation of its customers.

In a world where the government owns a monopoly, such as Network Rail, a single incentive of profit maximisation no longer exists. Instead, there are two broad incentives at play within the company: enhancing its reputation and an aversion to risk.

People like to work in successful organisations. Success reflects on them directly and indirectly giving them opportunities in the future, both individually and corporately. Pressing against this positive reputational incentive can be a tendency to defer difficult decisions and avoid risk. The motivation of the state as shareholder is also different when compared to the private sector. The shareholder is now political. The role of the shareholder to exert pressure on management or to replace the management remains, but the shareholder’s incentives are more closely linked to the political cycle and narrative.

**Route devolution: an opportunity for regulation**

This change in the company’s incentives, from profit to reputation maximisation, requires a change in approach to ensure we are still regulating Network Rail effectively. In Network Rail’s case this change is facilitated by the opportunity brought by its transformation into eight devolved geographical route businesses, supported by a national system planning function.

This route-based structure creates opportunities to better use the reputational incentives on Network Rail and its routes to meet the requirements sought by funders on behalf of passengers and freight customers. These routes are smaller, more focussed businesses, which will strengthen the line of sight between them and their customers, the train operators, and ultimately passengers and freight customers. In addition, they will also enable us as regulator to make comparisons between route management teams carrying out comparable activities in different parts of the country.

As a minimum, our periodic review will need to make sure that the routes have their own budgets and clarity around what they are expected to deliver. They also need the opportunity to innovate and do things differently from each other, so we can identify best practice and share it between the routes.

We know anecdotally that this structure is already generating a sense of competition between routes and is used by their managing directors to motivate their teams.

**Regulating efficiency**

Efficiency is always a priority for taxpayers and governments faced with a wide range of competing demands for resource. The picture in recent years at Network Rail has not been positive with year on year declines in how efficiently it is renewing the network. Network Rail now operates within a fixed funding envelope. To stay within this envelope it has forecast that it will have to defer £3.9bn’s worth of work into future years, in turn requiring more re-planning which in itself can create further inefficiency.

Traditionally utility regulators have not monitored efficiency in the same way that they monitor the quality of service received by customers. This is because within the profit maximising model there is already a powerful incentive to become efficient, but this is not easily replicated in the reputation maximising model.

Our approach as a regulator to assessing Network Rail’s plans, as well as our ongoing monitoring of efficiency, has had to change. Throughout our periodic review we have placed a strong emphasis on the importance of good quality, bottom-up plans owned by the routes with specific plans to deliver efficiencies. It is no longer sufficient for us as regulator to report only on what has happened in terms of efficiency. In future we will be reporting on leading indicators which aim to show ahead of time how Network Rail is performing. This future look will enable action to be taken to correct it.

**What’s next?**

The initial conclusions from our periodic review will be published on 12 June, ahead of our final determination in the Autumn. Then, we will be holding each of Network Rail’s route businesses to account for delivering their £53bn investment plans, which are vital to the success of the whole railway, and the passengers and freight customers who rely on them.
The road to improvement

Maintaining the UK’s road and rail infrastructure is about more than repairs. We must invest in new transport technologies safely and sustainably, writes Dr Mark Brown, development director at Amey Consulting.

The UK’s infrastructure network is as complex and sophisticated as the human body’s nervous and circulatory systems – and just as vital to the health of our nation. Our roads, railways, air and sea ports interlink in myriad ways, enabling the population to move freely within and beyond the country, so that businesses can prosper and government, academia and industry stay well connected.

Yet often the issue of connectivity, domestically and abroad, is misunderstood by the powers that be. Particularly on the road and rail network, we see investment focused on simply keeping on top of maintenance rather than committing to continuous improvement. Filling potholes is good; but preventing them in the first place should always be the aim.

Some UK transport policymakers can be keen to pursue innovation without seeming to grasp that any new technologies will necessitate the modernisation of existing infrastructure. The allure and need for energy-efficiency, speed and cost-effectiveness is clear, but it is short-sighted to invest in building electric vehicles if the roads or tracks they are to drive on can’t support them.

Brexit offers an opportunity

The UK’s decision to leave the European Union provides a fresh impetus to set this connectivity problem straight. Brexit means that the UK is under pressure to achieve a greater level of self-sustainability that means ensuring we upskill our workforce so we are not so reliant on migrant labour but also that we have the best possible infrastructure that means we can access our own people and resources as easily as possible. For too long it has simply been quicker or cheaper to reach out abroad.

The finger of blame for this failure to effectively invest in our transport infrastructure is too often pointed towards local authorities and the wider public sector. But in reality, it is not that straightforward. Under successive governments, the funding available across authorities and public sector departments has been squeezed and difficult decisions have had to be
Amey understands the realities of these budget cuts. The challenge is identifying what can be done to ring-fence and maximise the use of these funds while also demonstrating how private investment can help lighten the public sector’s load in future.

A proposal that is “Miles Better”

Gergely Raccuja, of Amey Consulting, made some headway on the idea of a new hypothecated tax directed towards transport investment with his Wolfson Prize-winning proposal, “Paying for road use could be Miles Better”.

This argued that to restore trust between politicians and motorists, fuel duty and Vehicle Excise Duty (VED) should be replaced with a simple and fair distance-based charge that also takes environmental impacts into consideration. Ipso facto, the lighter and cleaner your vehicle, the lower the per mile charge.

This would not only boost investment in the network, but also update the way we run our roads and prepare them for the next generation of electric and autonomous vehicles. Indeed, drivers wouldn’t be asked to pay more overall. Instead they would pay in proportion to the distance they travel each year.

Raccuja proposed that The Office of Rail and Road would oversee the scheme, ensuring that drivers are guaranteed fair treatment by setting the base charge and ensuring a proportion of the proceeds are ring-fenced for spending on both local and national highways. This would be underpinned by a pledge to create a “pothole-free Britain” within five years.

And the Treasury wins too. Currently, rising fuel efficiency and the switch to electric vehicles is hitting the Exchequer through falling fuel duty receipts. With total vehicle mileage projected to grow, under this new plan government revenue will actually rise over time to some £2.3m more each day based on 2010-15 figures.

No monopoly on good ideas

However, such a tax or levy would not, in isolation, give the transport sector the investment it needs to make the improvements to road and rail infrastructure at the necessary pace to match the advancement of electric technologies. So could the private sector assist? The Secretary of State for Transport Chris Grayling appears to think so.

In March, he told Parliament: “Governments do not have a monopoly on good ideas for the railways. I have been clear that I want the knowledge and expertise of investors and local partners to contribute to delivering new connections, more services and better journeys for passengers.”

Presumably the same goes for the road network. As the end of the initial 2015-20 highways investment period approaches, the government has been consulting on its plans for the next Road Investment Strategy – RIS2.

More funds for major roads

Last December, the government launched its “transport investment strategy” setting out a long-term approach for infrastructure spending, targeted investment at projects that help to rebalance the wider economy.

It proposes creation of a new major road network, which would see a share of the annual National Road Fund, funded by VED – the road tax – given to local authorities to improve or replace the most important “A” roads under their management.

The plans aim to improve productivity and connectivity of towns and cities across the country – reducing bottlenecks and traffic jams, and taking away the misery of lorries and through-traffic thundering through rural villages on main roads.

For many years, the UK’s road and rail networks have been some of our most important transport assets, but have also represented an expensive and constantly evolving challenge. Hypothecated taxation, alongside RIS2, could help to ensure assets with added value.

As a major infrastructure asset manager operating in the transport sector, Amey supports and invests in the pursuit of innovative research such as that carried out by Gergely Raccuja.

Our leading consultancy business also supports policies which promote the sourcing of capital from private investors to develop new and valuable infrastructure that is beneficial to everyone. The UK’s transport network is vital to the health of the nation and keeping it in the best shape and ready for the future is critical to our economy.

We’ve made a start, now let’s find the investment and ideas to finish the job.

For more information, please visit: www.amey.co.uk/ameyconsulting
Bus services run by the public sector consistently outperform their private counterparts, writes Jonny Ball. So why have municipal buses been banned?

Can public ownership be profitable?

For anyone who missed the Competition Commission’s 2011 report into local bus services, here’s the big insight it offers: “head to head competition between bus operators is uncommon,” the report found, because of “customer conduct”. The worst, most irrational thing these difficult customers did was to ignore the choice of operators the free market had to offer, opting instead “to board the first bus to their destination that arrives at their bus stop.”

But while the report’s earnest statement of the blindingly obvious is funny, it also reveals a contradiction in transport policy. If the free market is useless to bus passengers who are only interested in getting from A to B, why has competition been thrust upon them?

The deregulation, privatisation, and marketisation of the UK’s buses began in the 1980s but, as the Competition Commission found, there is still no real competition in local bus services. Cat Hobbs, director of the pressure group We Own It, describes a bus service as “a natural monopoly”, and says that where competition is forcibly introduced, “it doesn’t really work”. Since 1986, the year after deregulation was legislated by the Transport Act, bus use across the UK (excluding London) has fallen by 32.5 per cent, while fares have increased 35 per cent above inflation. In London, where TfL has retained control of fares, routes, ticketing policy and the issue of franchises to private operators, passenger journeys have almost doubled in the same period.
The Bus Services Act, pushed through Parliament by Chris Grayling last year, addressed this imbalance to a degree by giving local authorities across the country the same powers as TfL to put routes out to tender to private companies, standardise ticketing, and regulate services. The move was welcomed by transport campaigners. At the same time, however, the Act also barred local authorities from establishing their own municipally owned providers.

The small number of municipal bus companies (there are 11 across the UK) that had existed prior to the Act continue, but their model of ownership is now prohibited by law. The embargo can hardly be based on performance; a municipal company has won UK Bus Operator of the Year for six of the past ten years.

Nottingham City Transport, the largest local authority-owned operator in England, has been found by Transport Focus to have the highest customer satisfaction of any bus operator in the UK. The amount of bus lanes in Nottingham has grown from 200 metres in the year 2000 to 2.4 kilometres today. Nottingham was the first city in the UK to have smart passes, three years before the launch of the Oyster card in London. The majority owner of NCT, Nottingham City Council, receives a dividend of £2m a year from NCT.

Thirty miles to the south is Leicester, about the same size as Nottingham and with about the same number of people (around 320,000). But Leicester City Council, having privatised its bus fleet in the 1990s, now pays £467,000 a year to subsidise a private operator. Nationally, in 2016/17, £2.21bn was paid out in public subsidies to private bus operators. At the same time, Transport for Quality of Life has found that bus operators paid out £2.8bn in dividends to their shareholders between 2003 and 2013.

In Reading, the local authority owns Reading Buses, the second-largest municipal operator in England. Reading Buses invests £3m a year into the bus network by not having to pay dividends, and has, like Nottingham, been repeatedly recognised with industry awards and very high ratings for efficiency, cost, and customer perception.

The largest public bus company in the UK is Lothian Buses, owned by Transport for Edinburgh and three other neighbouring councils. In 2017, Lothian Buses returned £6m to the City of Edinburgh Council, which is reinvesting the dividend in the Edinburgh Trans Project. In the same year, Edinburgh’s transport was ranked among the highest in the world – and second in the UK after London – in the Arcadis Sustainable Cities Mobility Index, beating larger and more heavily invested cities including Barcelona, Geneva, Washington DC and Sydney.

Why, then, are local authorities...
“Foreign states owning bus operators... it’s madness”

prevented from launching more of these services? Mark Fowles, managing director of Nottingham City Transport, says the reasons are ideological. “Municipal bus companies run against the ethos of the ruling party.” And Chris Grayling has himself asked the public, in a column for ConservativeHome, to remember “how badly nationalisation failed key public services”, and to beware what he described as Labour’s commitment to “a socialist-style planned economy.”

A look at the transport in Grayling’s own constituency, however, tells a different story. State-owned operators run more than half of the bus services in Epsom and Ewell, but the crucial distinction, it seems, is that these operators are owned by foreign governments. Most of the profits from bus fares in the Transport Secretary’s constituency, then, are reinvested in French and German public services.

But Epsom and Ewell is not unusual in this. Abellio, Arriva and RATP, which are wholly owned by the Dutch, German and French governments respectively, operate 37 per cent of London’s buses.

“Having other governments running our bus and rail network has always been a strange situation,” Mark Fowles observes. “But when you have an open franchising system like in London, there’s European rules that say you can’t disbar other participants from bidding. Our government can’t change it – it’s a matter of European rules. The big question is: why isn’t there a comparable UK operator that provides that sort of service?”

Fowles doesn’t advocate a return to the days of top-down state management, with buses run centrally by the Department for Transport or even by local councillors; but instead recommends service provision by “an arms-length company that happens to be owned by the state”, run on the model of the German Deutsche Bahn, owners of Arriva, or the French government’s RATP Group.

For Cat Hobbs of We Own it, “foreign states owning bus operators while local councils are barred from doing so highlights the absurdity of this ideological commitment to privatisation at all costs. The fact that the government is not allowed by law to run a railway, except as an operator of last resort when things go wrong, and the fact that local councils aren’t allowed by law to set up new municipal bus companies, while we’re happy for publicly owned companies from other countries to run our services, it’s a kind of madness.”

Chris Grayling’s statement that he wants to “retain the strengths of the private sector”, seems contrary to the fact that much of the transport network is already run, and run profitably, by foreign states. His distaste for local authority ownership wilfully ignores the successes of the 11 remaining municipal bus operators across the country that survived the Thatcherite clearings of municipal assets. “Local authorities have other priorities today,” Grayling told Parliament, “and this is about partnership between the private sector and the public sector.” The private sector, he said, “delivers better and newer buses, providing jobs”, whereas the public sector provided “indifferent services that cost the taxpayer” – this is in spite of the fact that Lothian, NCT and Reading Buses collectively made £11m in profits last year, all of which were paid in dividends to their respective councils or reinvested in the network.

With bus use, passenger satisfaction and other metrics pointing to the successes of municipal models, such a commitment to privately run public services looks less like an evidence-based piece of policy and more like a very expensive piece of ideology. And regardless of the Transport Secretary’s unshakeable belief in the benefits of competition and the market in providing public services, and no matter whether buses are owned by private companies, local councils or foreign states, passengers will continue “to board the first bus to their destination that arrives at their bus stop.”
Transport and housing planning go hand in hand

James Harris, policy officer at the Royal Town Planning Institute, explains why public transport links must be a central consideration for all housing developments

In last year’s Autumn Budget, the Chancellor pledged to tackle the rising cost of housing with the construction of 300,000 new homes per year in England. To aid this, the government has carried out another major overhaul of national planning policy and set ambitious housing targets for many councils. So what impact will these changes have on the ground?

The government has stressed that it wants to see housing “in the right places”. But planning departments are under pressure to find sufficient land to meet short-term housing targets, and constrained by local opposition, a lack of resources and protected areas like floodplains and green belt land. House builders often prefer greenfield sites in peripheral locations which are cheaper and quicker to develop. The high cost of land in desirable areas reduces the amount which can be invested into infrastructure. These factors can direct development to poorly connected locations, far from jobs and services. Over time, this creates sprawling and dispersed patterns of development. Our research shows that this increases infrastructure costs, undermines the economic productivity of towns and cities, and makes it harder to tackle climate change and air pollution.

An absence of proper monitoring makes it difficult to see housing “in the right places”. But planning departments are under pressure to find sufficient land to meet short-term housing targets, and constrained by local opposition, a lack of resources and protected areas like floodplains and green belt land. House builders often prefer greenfield sites in peripheral locations which are cheaper and quicker to develop. The high cost of land in desirable areas reduces the amount which can be invested into infrastructure. These factors can direct development to poorly connected locations, far from jobs and services.

Recent changes are making this easier to achieve. Metro mayors have the powers to create integrated strategies for housing and transport at the city region scale, and are exploring innovative new ways to fund infrastructure through land value capture. Councils are playing a greater role in coordinating bus networks, while smart ticketing and real-time information makes them more attractive. New modelling and appraisal tools are showing the wider costs and benefits of transport options, helping to direct investment towards sustainable infrastructure. And the government’s National Infrastructure Commission is considering how major infrastructure schemes can unlock housing and employment growth between Oxford and Cambridge.

The RTPI is championing these positive models of transit-oriented development through our project on smart city regions. For more information, please visit: www.rtpi.org.uk/smartcityregions

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Air pollution: a novel solution

Another year, another announcement that the UK has breached legal air pollution limits. As a result, our government now faces legal action in the European Court of Justice. The situation is bleak: air pollution is one of the UK’s (and the world’s) biggest killers. The evidence shows that it has a strong causal association with coronary heart disease, stroke, lung cancer and childhood asthma, and is responsible for around 40,000 early deaths a year in the UK alone. What’s more, the cost of air pollution is estimated to be around £20bn in the UK. Clearly, it’s a significant problem that requires urgent action.

The phasing out of diesel cars and the push for hybrid and electric vehicles by the UK government is a welcome step in the right direction. However, it will be many years before our roads are 100 per cent electric, and car pollution is a serious problem now. One solution that could seriously reduce this pollution – and also reduce congestion and cut fuel costs – has scarcely been considered. And it’s hardly surprising as it requires behaviour change, which can be a scary prospect.

Many people don’t realise that drivers are at least as responsible as inefficient engines for producing excess emissions. An old, inefficient engine driven smoothly and carefully will produce fewer harmful emissions than a modern vehicle driven by someone with a heavy right foot. It’s simple. Yet the government and the wider car industry is currently providing no incentivisation to encourage a more efficient style of driving.

In reality, there doesn’t seem to be a clear plan for how we’re going to tackle the problem, beyond phasing out diesel vehicles by 2040 – 22 years from now. As far as the team here at Lightfoot is concerned, one of the issues is that drivers are being positioned as one of the problems, rather than a potential solution. After all, a smoother driving style can reduce fuel consumption by up to 30 per cent – and, as a result, reduce emissions by the same amount. Imagine if even half of the drivers in the UK could make this change. If everyone changed their driving style, the difference would be enormous. It would make a real difference – the kind of difference, in fact, that could mean that the UK sticks to legal air pollution limits, rather than exceeding it in its first month, as was the case this year.

But how do we do it? Simple. With a carrot – not a stick. Here at Lightfoot, we’ve learned that incentivising drivers to adopt a smoother, more efficient driving style is critical. Our technology enables us to monitor the results and coach those who need a little guidance, but it is our platform of rewards and incentives that allows Lightfoot to have such a profound impact on its users’ driving styles.

And we can’t help but wonder whether the government should be looking to incentivise better driving, in whatever form that might take. After all, if it can incentivise cleaner engine technology, why not also look to reward the drivers who are doing the right thing behind the wheel?

At a time when air pollution is a hot topic, amid scandals that prove we can’t always trust what we’re told about engine technology, we have to put our trust in people. Empower drivers to self-improve. It’s simple.
TRANSPORT: INDUSTRY MOVEMENT

The latest contracts and vacancies

THE FIVE LARGEST PUBLIC SECTOR CONTRACTS NOW OPEN FOR BIDS

These contracts are now open for tenders.

1. Department for Transport
Specialist Technical and Commercial Advisory Services for Rail and Other Transport Modes
Bid deadline: 15/06/2018
Tender value: £110m
The DfT is seeking consultancy partners to advise on technology, investment in infrastructure, marketing and customer interaction over the next four years.
Contact: star2enquiries@dft.gov.uk

2. Portsmouth City Council
Portsmouth City Centre Road Redevelopment – design and build contract partner
Bid deadline: 15/06/2018
Tender value: £70m
Portsmouth City Council is looking for a building contractor to design and deliver new road and highway infrastructure.
Contact: procurement@portsmouthcc.gov.uk

3. Strathclyde Partnership for Transport
Specialist Support Dynamic Purchasing System (DPS)
Bid deadline: 21/06/2018
Tender value: £30m
The SPT is inviting bids for construction and maintenance work for pipelines, communication and power lines, highways, roads and railways to serve the Strathclyde area of western Scotland over the next ten years.
Contact: procurement@spt.co.uk

4. South Gloucestershire Council
Passenger Transport Services Framework Agreement
Bid deadline: 02/07/2018
Tender value: £30m
South Gloucestershire Council is looking for partners to provide a variety of public transport services, including bus runs and coach hire, as well as a special purpose taxi service for disabled people.
Contact: david.wigram@southglos.gov.uk

5. Port of Dover
DWDR – Stage 3A Highway and Infrastructure Works
Bid deadline: 15/06/2018
Tender value: £10m
The Port of Dover is seeking construction partners to build and maintain infrastructure around the town’s marina.
Contact: DWDRProcurement@doverport.co.uk

THE FIVE LARGEST PUBLIC SECTOR CONTRACTS OPEN FOR BIDS SOON

“Pre-Information Notices” give advance warning of contracts that will soon be open for tenders.

1. Network Rail
Network Rail will be seeking suppliers for track work contracts over the next ten years. The focus of construction will be on switches and crossings.
PIN value: £5bn

2. Network Rail
Network Rail will invite bids from suppliers to supply new infrastructure technologies, such as signalling, alongside the East Coast Mainline.
PIN value: £900m

3. Lincolnshire County Council
LCC will invite bids for new construction and maintenance partners to oversee the development of the county’s motorways and road infrastructure.
PIN value: £762m

4. Tyne and Wear Passenger Transport Executive, MetroFutures
Nexus Tyne and Wear wishes to procure a new fleet of light rail electric trains to replace its existing fleet.
PIN value: £500m

5. Network Rail
Network Rail will be looking for a provider to partner with who will oversee the company’s staff training, culture and safety of the passenger experience.
PIN value: £450m

TRANSPORT JOBS NOW OPEN FOR APPLICATIONS

Lecturer in energy and transport, University College London
Salary: £38,581-£41,864 per annum
Location: London
Closing date: 10 June
UCL’s Bartlett School of Environment, Energy and Resources is seeking a full-time lecturer to further its research and teaching on shipping, greenhouse gas reductions and other transport-related issues.

Head of commercial, Eurostar
Salary: Competitive plus benefits package
Location: London
Closing date: Ongoing
Eurostar is looking for an experienced manager to oversee its revenue generation from non-ticket sources, such as baggage handling, advertising, onboard food and in-station facilities.

Head of developing data unit, Department for Transport
Salary: £62,519-£70,859
Location: London
Closing date: 11 June
The DfT is seeking an experienced data analyst to head its new central data unit, which aims to collate data on various aspects of the transport sector, including expenditure and safety provisions.
Spotlight

Read more in-depth interviews and features and download full policy reports at: newstatesman.com/spotlight