

ARUP

The rail and urban transport review

An assessment and ambition for a new government



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I am delighted to have been asked to lead this independent review, to help the UK deliver the rail and urban transport infrastructure fit not just for the next five years, but the next 50.

We have an important moment to reimagine a better connected, more affordable and high-capacity UK transport network of the future. To deliver transport infrastructure that will better connect people to new skills, career opportunities and essential services like healthcare, education and leisure. Transport networks should and will drive significant economic benefit and reduce the carbon footprint of the UK.

We need to grasp this moment and create a major paradigm shift over the coming decades. The new Labour government has a real opportunity to do just that. Policy makers need to shape a transport network that is greener, more inclusive and provides more choice. The transition to electric vehicles will bring benefits to carbon emissions and reduce wider particulate emissions harming our health and natural habitats. To create a more productive, greener transport system, public transport must offer better, well-integrated services to give people genuine alternative choices.

During this review we heard evidence from hundreds of businesses, academic and civil society leaders from across the UK's transport sector. Three messages were loud and clear:

- 1 The opportunity public transport presents in terms of economic growth, greening UK passenger travel and freight, and boosting social mobility is massively underestimated.
- 2 There is no long-term plan, especially beyond parliamentary terms, and the recent unprecedented level of policy 'chop and change' has created significant ambiguity in the sector, raised costs and held back investment.
- 3 Despite the lack of a plan and current low confidence levels in our transport sector from both investors and passengers, there is a strong desire and a willingness within the sector to do significantly better.

The proposals set out in this review are aimed at helping the Labour Party, now it is in government, to seize this moment with bold ambition and zeal. At the same time, it suggests some initial pragmatic steps to begin taking the UK on a new journey towards a longer-term national transport strategy.

Only by delivering what is promised can we restore confidence.

We can't expect communities across the UK to be as enthusiastic about the poor service currently offered on our most overcrowded routes, like those across the Pennines. A new, modern east to west connection between the key cities in the North - like that experienced in London and the South East - cannot come soon enough. We can't expect investors to have confidence if they continue to see key project plans change without much notice or consultation. Also we can't leave the West Coast Main Line, and in tandem the M6, to collapse following the cancellation of High Speed 2 (HS2) north.

I am optimistic that, with new ambitious plans and the certainty this will create, together we can provide a once-in-a-generation opportunity to deliver much more local value in terms of jobs, technology and innovation. This can re-create a thriving UK transport sector, creating many more well-paid career opportunities in local communities. This will require the creation of a long-term transport strategy, which should align with the promised Industrial Strategy Council. This report marks the first steps to getting this right in the long term.

I am delighted to have had the support of industry experts on the Expert Panel. I know there is much more to do, but I am confident we have the skills and ingenuity to make a sea change in transport policy. I want to say a huge thank you for the Expert Panel's knowledge and enthusiasm as we have worked together. I would also like to thank the many hundreds of you who took the time to submit to our call for evidence.

I know that we are all very excited about the opportunities ahead, if we are brave enough to seize them.



Juergen Maier CBE

A handwritten signature in black ink, appearing to read 'Juergen Maier', with a long horizontal line extending from the end.

Review panel

Rail and urban transport



Tai Chong Chew
Director and Global Rail Leader,
Arup



Allan Cook CBE
Allan Cook CBE, former Chairman of Atkins and recently HS2,
Member of J.F. Lehman Advisory Board,
Director of the National Manufacturing Institute Scotland, and
Chair of the Henry Royce Material Innovation Leadership Group



Bob Morris
Rail and urban transport industry expert,
former Chief Operating Officer,
Transport for Greater Manchester



Henri Murison
Chief Executive,
Northern Powerhouse Partnership



Anne Shaw OBE
Executive Director, Transport for West Midlands and
Deputy Chair of the Urban Transport Group



Laurent Troger
Former CEO, Bombardier Transportation and
strategic advisor in public transportation



Emma Porter
Managing Director,
Story Plant Limited



Nicola Smith
Head of Economics,
Employment Rights and Social Affairs,
the Trade Union Congress



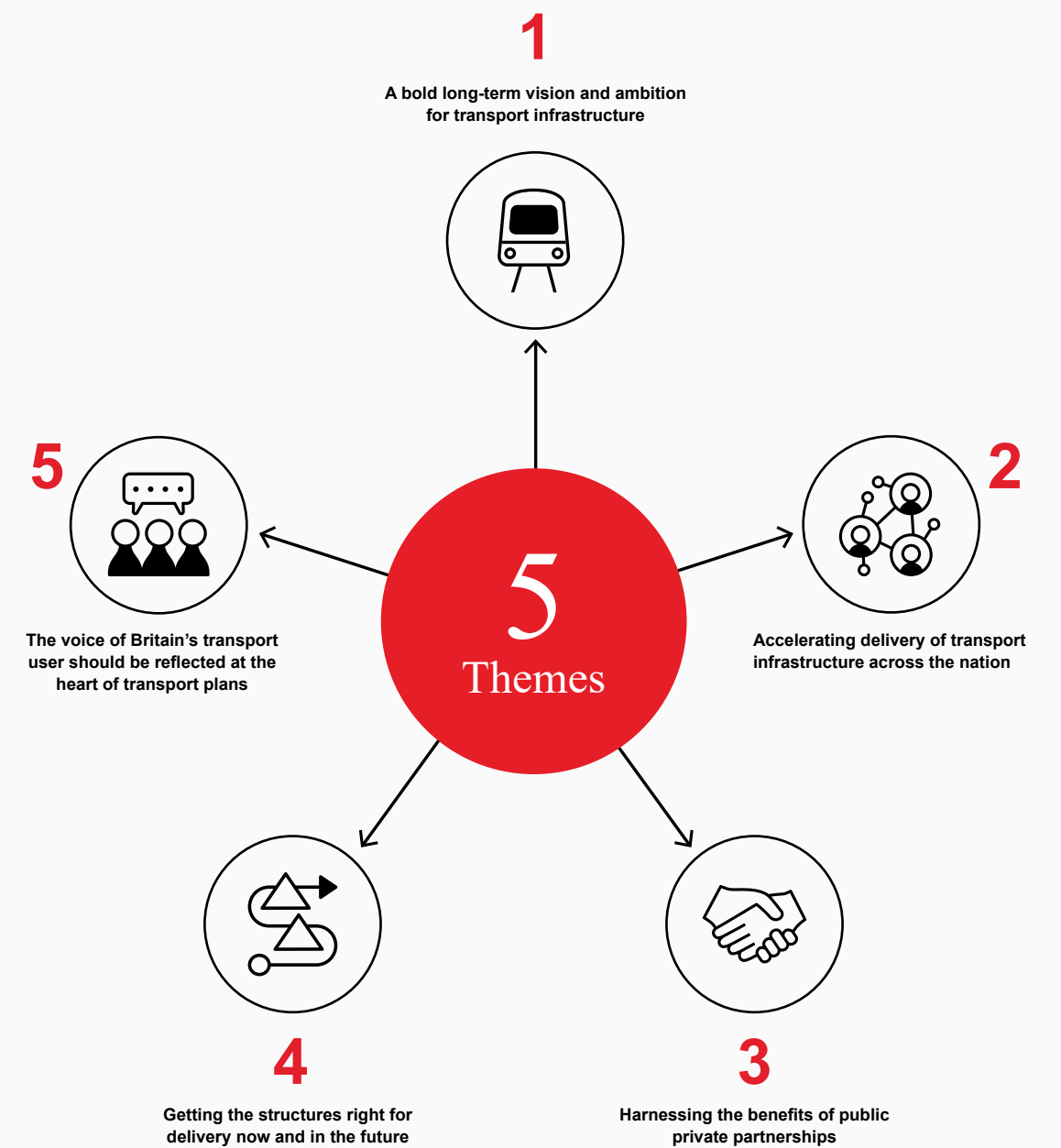
Will Wilson
Former CEO, Siemens Mobility UK
and long-standing industry expert

Summary of our key findings and recommendations

This report provides an assessment of rail and urban transport in the UK, an ambition for the future and key proposals to achieve that. Our findings are based on the significant evidence we received from a wide range of stakeholders from this important sector.

The rail and urban transport review panel overseeing this report has listened intensely to the evidence, has laid out what is required for a longer-term strategic plan for public transport, and is confident that the findings and recommendations in this report will ensure that public transport is a much more significant enabler of a greener and more prosperous UK.

We have distilled our findings into **five key themes** and identified a set of policy recommendations that the new Labour government can begin work on within the first parliamentary term, following the general election on 4 July 2024. We recognise that many of these proposals will take at least two parliamentary terms to have their intended impact.



1 A bold long-term vision and ambition for transport infrastructure

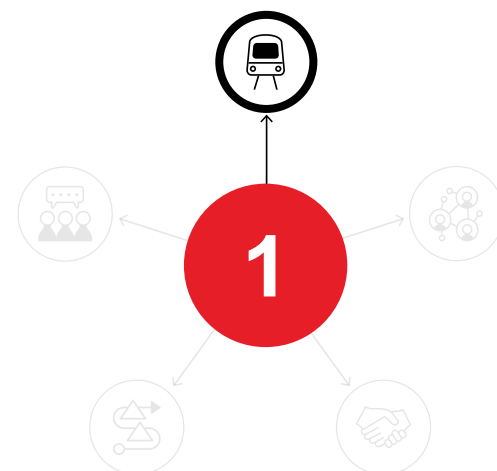
Recognising the role urban transport (bus, light rail, mass transit, active travel) plays in economic growth, social inclusion and decarbonisation, we recommend the government sets an ambitious goal for journeys made by public transport, walking and cycling by 2035, with regular and transparent reviews and progress updates. As part of a strategic approach to transport the government should set an ambitious goal to double the mode share of rail in a decade. This approach reflects and builds on the setting of a growth ambition in the rail freight sector between now and 2050. We believe this is achievable as the UK managed to double the number of miles travelled on our railway in the decade before Covid.

We propose the government urgently sets out a bold national vision for transport. The medium-term objective should be an integrated Transport Strategy for England (TSE), with a framework for cross-border links to Scotland and Wales (with ferries to Northern Ireland), as well as with the Republic of Ireland and continental Europe.

Government should clearly set goals around a modal shift from roads to public transport, to increase decarbonisation and reduce congestion, improving productivity, as well as social and health outcomes. It should do so in a way that is fair and pragmatic, and when public transport can support this shift.

We propose that transport policy is directly linked to the outcomes of a long-term UK Industrial Strategy and the delivery of new homes. This would embed a coordinated approach across government departments and wider policymaking. It would also create certainty in the market and encourage the private sector to invest significantly more in innovation and skills for the sector, building highly innovative supply chains and careers for people across the country.

We recommend that the Minister of State for Rail carries the explicit responsibility for helping develop rail supply chains. This would also work in partnership with business, especially tier 1 suppliers and major contractors, to take a greater responsibility in supporting the establishment of local supply chain capability.



2 Accelerating delivery of transport infrastructure across the nation

By accelerating delivery of transport infrastructure through strengthened governance and greater devolution of decision-making powers, we propose government adopts a transformative approach to get infrastructure delivery moving ‘Greener, Faster, Cheaper’. This would further speed up infrastructure project delivery, reduce costs and enhance environmental outcomes. The approach, developed by Arup, sets a target for reducing the cost of project delivery by 20% and to deliver them 25% faster. This will also reduce carbon emissions.

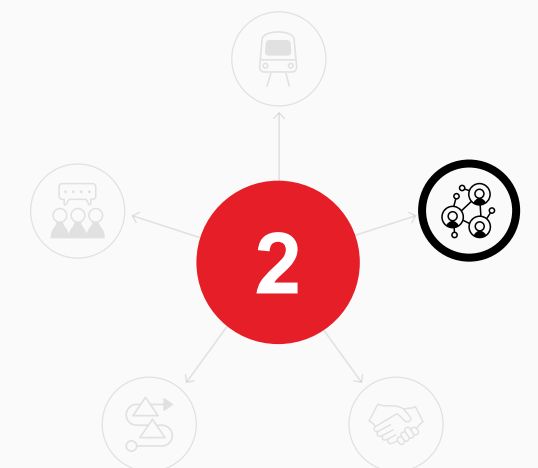
To catalyse growth by locking in transport devolution across the country, we propose building on the success of devolution by delivering multi-year funding settlements with sufficient flexibility and revenue funds to places with devolution agreements and the capacity to deliver against their local plans. London should also see the return of a multi-year funding settlement. We propose government works with Combined Authorities to investigate and facilitate financing mechanisms and funding sources that could support further fiscal devolution, including business rates retention, forms of land value capture and partnering with the private sector. For all other local transport authorities, a transparent, fair and needs based long-term integrated transport settlements (spanning transport modes and combining revenue and capital funding) should be pursued, allowing decision-making to take place closer to the people affected.

We recognise that every corner of the UK has its own set of unique circumstances and regional transport strategies. However, there is a need for greater collaboration across regions, such as enhancing the rail network between England and Scotland, creating additional capacity options between Manchester and Birmingham, and enhancing regional connectivity between the West and East Midlands.

Central government should ensure that the right forums are in place, providing leadership between UK government, Metro Mayors and devolved administrations collectively to ensure the regional entities involved share a common view on the aims, objectives and benefits of collaboration.

The current model of sub-national transport bodies leads to the production of transport strategies that reflect significant work by places and business communities, but do not have adequate influence on the prioritisation of future enhancements.

We recommend reforming sub-national transport bodies. There should be a clear pan-regional level transport and spatial focus - supported by appropriate governance. Their work should be informed by local growth plans developed and delivered at a regional level by Mayors and Combined Authorities through their further devolved responsibilities and other regional authorities. This will enable the focusing of resources on those improvements which will deliver transformative economic growth over the coming decades.



3 Harnessing the benefits of public private partnerships

Greater certainty of investment in our transport infrastructure, including through public private partnerships, will increase skills, jobs and growth in the sector. We recommend working in partnership with the unions and the industry to set a bold Industrial Strategy for the rail and urban transport Sector, as mentioned in section 1. This should include an ambition for increasing the number of jobs created in the UK's rail and transport industry. The TUC commissioned some work on this from the National Skills Academy for Rail (NSAR), which could be included as part of this thinking¹.

Major transport infrastructure projects will likely require a mixture of public and private investment, where the public sector proactively drives stability and confidence in private sector investment. So, we need a new integrated partnership approach between the public and private sector. This will allow more infrastructure to be delivered, and to shorter deadlines, by leveraging private investment and alternative delivery models.

We propose that HM Treasury adopts a new openness towards partnering with the private sector on major transport projects, supporting the country to fulfil its economic and productivity potential by unlocking significant financial investment.

Such an approach should be supported by the development of an infrastructure investment playbook, which sets out the available approaches, right arrangements and roles that the public and private sectors can play in facilitating the investment. This approach must consider what happens if these projects don't progress, and the UK cannot subsequently deliver on its potential for growth. Delivered in the right way, this would send a strong signal that the UK is open for business and has the potential to deliver substantial improvements across our national and local transport infrastructure and provide jobs, long-term careers, skills and social mobility in communities across the UK.

In our assessment we recommend that the British Infrastructure Council brings together key actors from the public sector and investors to develop a new approach to private finance, including considering the implications on public sector net debt. Its aim should be to report to the Secretary of State for Transport and the Chancellor by the end of 2024.

As mentioned in section 1, an integrated TSE should be created. This will build necessary confidence in the investor community and encourage investment in more vibrant and innovative local supply chains, so they become strong engines of our local manufacturing economy driven by increasing export opportunities. This should bolster a strong skills supply strategy for apprenticeships and careers in this sector that could grow significantly over the next decades.

This strategy would also underpin new project-specific approaches to enhancing inter-regional connectivity and building capacity for both passengers and freight. An example would be the Midlands - North Rail Link that will connect to Leeds and Bradford. To signal a return to investor confidence, this government should immediately commission a feasibility study for the route now that HS2 in the north has been cancelled.



4 Getting the structures right for delivery now and in the future

We propose that the government continues at pace with proposed reforms to the Nationally Significant Infrastructure Projects (NSIP) and Environmental Impact Assessment regimes to enable faster and more effective delivery for major projects that are currently pre-consent. The implementation of the existing NSIP Reform Action Plan should be accelerated, including fast-track routes, enhanced pre-application support (for statutory environment and health bodies, as well as Local Planning Authorities (LPAs)) and Environmental Outcomes Reports. Additional reforms to the Transport and Works Act regime covering regional rail/mass-transit projects, and Highways Act consents covering road projects, should be adopted (for example, time limits as in the Development Consent Order (DCO) process)). Changes to the thresholds for entry into the NSIP regime are necessary and these reforms should be accelerated in the next Parliament. Also, processes should be streamlined to enable fast-track routes for DCOs in the first part of a new Parliament, and these should replace Hybrid Bills as the default for new railway development projects. National Policy Statements should be mandated to be updated every five years and the National Planning Policy Framework needs to be updated to strengthen the link between transport and land use.

We propose the new National Infrastructure and Service Transformation Authority (NISTA) has a clear supporting role advising national and regional partners how to deliver transport infrastructure more effectively.

This accountability to ensure effective decision-making will require greater powers all government departments are effectively working together to deliver local needs. This ‘arbitrator role’ would include the ability to hold each relevant delivery partner accountable to ensure appropriate speed of programme delivery, reducing costs and providing value for money.

As part of Labour’s plan to create a NISTA, we recommend the expansion of the newly proposed Industrial Strategy Council to include the supply chains and workforce requirements for key national infrastructure, including transport. The Industrial Strategy Council, which will be in statute and independent, should be given the mandate to develop plans to ensure the deliverability of NISTA’s infrastructure priorities. These should also reflect the industrial strategy priorities set by the council, such as the demands of just-in-time supply chains for freight. The council should include representation from the workforce and should provide a forum for unions and employers to jointly discuss strategic considerations for the industry.



5 The voice of Britain’s transport user and the transport workforce should be reflected at the heart of transport plans

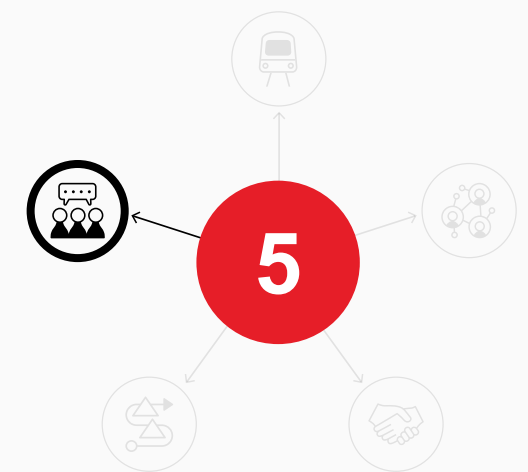
The user should be at the forefront when considering transport infrastructure. In line with previous Labour policy announcements, we recommend that the customer-focused elements of the Office of Road and Rail (ORR), the Rail Ombudsman, and the Bus Users and Transport Focus should be folded into one organisation, using existing powers to avoid delay, to ensure there is a relentless focus on improving the experience of transport users. The regulatory powers of the ORR, as the overseeing regulator of health, safety and performance in the road and rail industries, should remain separate.

Though fares and ticketing are not in the scope of the review, we do recommend that government explores how a more equitable solution can be achieved on the transport network. We must incentivise greater use of public transport to meet decarbonisation goals and this can only be achieved if we create a fairer and more affordable network.

We propose that a transport citizens panel is introduced (or equivalent engagement forum) as part of the consultation process. This would ensure transport infrastructure is designed inclusively, strengthen the role of the existing Disabled Persons Transport Advisory Committee, consider the needs of all users and ensure rail and urban transport networks are accessible for all, in particular addressing the barriers disabled people face when travelling independently. However, there must be sufficient governance and a strong stakeholder strategy in place to ensure it is successful.

We also recognise the importance of constructive industrial relations across rail and urban transport infrastructure, and the vital role a skilled and engaged transport workforce must play in delivering our ambitions. All the evidence shows that when people are treated with respect at work, it leads to greater trust, higher productivity and increased service reliability.

As our transport infrastructure expands, we should ensure employers work together to deliver the high-quality, high-skilled jobs that are essential for effective delivery. We must also make sure the experience and expertise of transport workers informs successful infrastructure growth.



Introduction

Rail and urban transport

A vital assessment, at a critical time

Rail and urban transport are the lifeblood of our towns, cities and regions. They stimulate economic activity, support climate goals and facilitate social inclusion. This independent assessment, commissioned by the Labour Party while in opposition, explores how the new government could accelerate the delivery of improved connectivity within and between the UK's towns and cities to harness these vital benefits and power us into the decades ahead.

This assessment has sought to identify recommendations to accelerate and amplify the huge benefits that rail and urban transport infrastructure unlocks. In doing so it has identified practical steps to reform the planning, funding and delivery of rail and urban transport projects.

This review was commissioned to provide independent input to the Labour Party's thinking on transport strategy and policy. After the general election, and with Labour now in government, we hope this assessment and its recommendations will drive a strong basis for transport policy going forwards and reap the very tangible benefits for our nation.

Scope of this report

This report focuses on rail and urban transport in the UK. However, we recognise that transport is a devolved issue so we have focused, in some instances, on the need for interventions specific to England, as well as greater integration between England and the devolved nations.

Its scope does not cover aviation, although it does acknowledge the economic and other benefits that rail and urban transport connectivity has in enhancing growth in the sector.

Fares and ticketing reforms for the broader bus² and rail reforms announced by Labour³ in recent months, are also not included. However, although these policies and reforms are not covered in detail within this report, the panel acknowledges the positive intent of the recommendations and that to achieve a transport network that is fit for the future, it needs to be inclusive and affordable.

In addition, during the evidence sessions, we heard about lots of innovative solutions that can improve delivery of infrastructure and passenger experience. These range from faster roll-out of digital signalling to enhanced Wi-Fi and communications. While this wasn't a key part of the review's scope, we do recommend that government consider conducting a separate study on the barriers to adopting such technologies faster, to reduce cost and improve productivity.

The findings and recommendations within this report aim to reflect these views and the evidence presented to the panel throughout the review process.

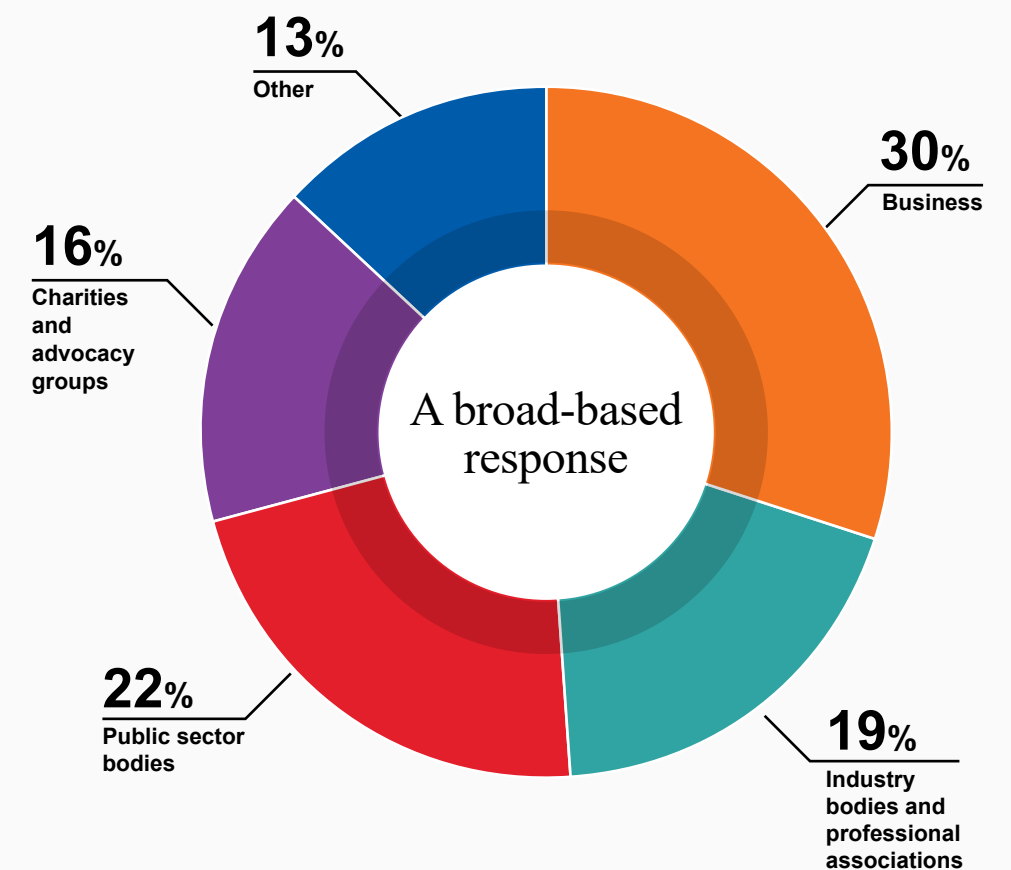
Findings informed by cross-sector engagement

The process began with a call for evidence in December 2023, which attracted 110 written submissions and 28 pieces of supplementary evidence. Responses came from across the sectoral spectrum.

An extensive engagement programme supplemented this wealth of written evidence, and included in-depth discussions with leaders and experts across sectors that collectively span our economy. We also engaged with trade unions and user groups to ensure all passenger issues were understood. In all, we conducted:

- 5 evidence session panels in which senior experts gave oral evidence.
- 16 one-hour one-to-one sessions with CEO-level experts.
- 14 engagement sessions with industry experts.
- 5 thematic roundtable sessions.

A full list of organisations that provided input and evidence to the review is shown in Appendix 1.



Critical role

Rail and urban transport

Travel is a fundamental part of life – transport makes it possible

The need to travel is so central to the way we live our lives and the way our economies work that it can almost go unnoticed. As individuals we travel to go to work, to learn, to meet our daily needs, to maintain social and family connections, and to take part in, and contribute to, the cultural life of the country. It is critical to a more effective social infrastructure. Our businesses and institutions travel to move goods, forge new connections, create opportunities and generate wealth.

This means that when the need to travel is not adequately supported, it directly impinges on the social, environmental and economic outcomes we can hope to achieve as a country. A huge proportion of the journeys we need to make take place within and between our towns and cities, and our economy depends on the performance of these urban areas. Estimates from the Eddington Transport Study suggest that a 5% reduction in travel times would be worth the equivalent of approximately 0.2% of UK annual GDP⁴. Rail and urban transport are central to the challenge of driving economic growth and enhancing productivity for the whole country⁵.

The way we travel matters too. A disproportionate reliance on private transport (60% of all trips in 2022) undermines the environment, individual health outcomes, social inclusion, urban amenity and quality of life⁶. Heavy Goods Vehicles emit over 60% more carbon than diesel-hauled trains, and this figure rises to almost 100% when compared to electrically hauled trains powered by renewable or nuclear

energy⁷. This means that the right infrastructure, delivered in the right way and with the appropriate context, is key to nurturing a green economy.

But our rail and urban transport systems are failing to support and foster the inclusive, green, productive economy we need. Dispersed development, weak transport links and low-density housing have contributed to productivity challenges in many UK cities. While there has been a concerning decline in public transport use over the past few decades, the pandemic and the cost-of-living crisis have caused major shifts in how, why, and when people travel. Public transport, particularly in England's city regions, is in a precarious state as fewer people are travelling compared with a decade ago, and the car still heavily dominates how people move⁸.

As highlighted by the City Growth Commission over a decade ago, the poor connectivity within city regions is mirrored by the lack of scale across the North and Midlands, with labour markets too small to create a proper counterweight for London⁹. The UK, once a pioneer of economic growth, now finds itself trailing behind. We must address this urgent need for our cities and regions to thrive.

This assessment comes at an opportune moment. Following the general election we have an opportunity for a major reset, which as rail and urban transport in the UK stands at a tipping point is precisely what is needed. And with the 200th anniversary of the railway next year, there is no better time to boost our rail and urban transport networks and set a clear and meaningful path towards inclusive economic growth and decarbonisation.

The challenges and opportunities

The evidence and feedback received has identified a series of key risks and issues that are impacting our ability to deliver transport that meets the needs of our economy, society and environment.

These are:

1. The absence of an underpinning strategy, which is undermining confidence, competitiveness, efficiency and long-term thinking.
2. A failure to get some of the basics right and to put the customer first.
3. Severe regional inequalities in provision that lead to a two-speed economy.





Challenge 1

Lack of an underpinning strategy for transport

Among the issues raised by experts who responded was the near-universal view that the absence of a coherent strategy for transport, and a lack of policy certainty, are critical barriers to progress.

While the Roads Investment Strategy and Rail Network Enhancements Pipeline (RNEP) processes provide some certainty, they are modally specific (and in the case of RNEP, not updated), and the Local Transport Plans suffer from funding uncertainty and a lack of guidance. Together this creates a patchwork of strategies, often working on different timescales. And while transport does not neatly fit within geographic boundaries, the absence of a unified vision for investment means there is a lack of cohesive UK-wide thinking, which often leads to short-term political approaches being applied.

In turn, the lack of a golden thread that identifies the value individual projects contribute to a wider whole, and links them together, means that each proceeds on the basis of its own immediate merits, rather than being woven into a comprehensive programme tailored to achieve strategic objectives.

The effects of this vacuum are seen across the system. There is continual escalation in infrastructure delivery costs, which have a negative impact on projects and cause hesitancy from private sector investors. There has been a failure to address higher freight and passenger growth and an inability

to nurture and maintain a supply chain that is consistently capable of delivering efficiently. It also prevents promoter organisations from developing the expertise they need to effectively identify, commission, and steer their projects.

Collectively, this situation has inevitably led to fragmentation in capacity, ambition and delivery between regions. As we have seen, it also makes some of our most strategically important projects (such as High Speed 2 and the Lower Thames Crossing) vulnerable to political shifts. The inability to place confidence in the reliable delivery of projects of this scale and importance is an absolutely critical problem for an economy in desperate need of investment and productivity gains.



Challenge 2

A failure to get the basics right and put the customer first

Many of the experts who informed the development of this report shared a sense that transport provision in the UK is at risk of failure and does not meet the needs of all users.

Following bus deregulation in the 1980s and the privatisation of rail in the 1990s, urban transport in the UK has become increasingly fragmented¹⁰. Our transport systems often do not integrate well – especially the connections between inter-urban rail and urban public transport – and services are generally viewed as unreliable and expensive. Regional UK cities consistently underperform leading continental European cities across a range of indicators, including integrated ticketing and fares, integration with public services and integration with authorities¹¹.

Poor coordination across transport networks is negatively affecting our cities' labour markets and weighing down on investors' perceptions. Several initiatives and White Papers, including the 2004 White Paper on rail reform by Alistair Darling¹² and the Williams-Shapps Plan for Rail,¹³ have been drawn up by successive governments aiming to implement an integrated transport policy. However, a range of barriers have stood in the way of achieving greater integration. The new government needs to be empowered with the right tools to overcome these barriers and shape future transport services in a way that meets our cities' economic needs.

At a more nuanced level, decision-making mechanisms are also considered to systematically overlook the views and needs of significant proportions of the population (often the most vulnerable), which has undermined the standard of delivery experienced by many users. Since rail and urban transport are critical enablers of inclusiveness both in society and the economy, this is a matter of real concern.

Some of the responses captured throughout this process described both a bus and a rail network that is being run in crisis-mode – reminiscent of the Covid era – with services delivered on a patch-and-mend basis rather than creating more efficient structures that are sustainable over the longer term.

It should be noted, however, that there is a consensus that a move towards greater devolution, especially across our urban areas, will have a positive effect on turning the tide for transport at a local level.



Challenge 3

A deep and growing productivity gap

Finally, respondents drew repeated attention to the huge disparity between different regions of the UK in terms of workforce productivity, living standards and educational attainment, and the vital role that rail and urban transport must play in addressing this.

Figures from the Office for National Statistics (ONS) demonstrate that, in 2022, London was 26% more productive than the UK average, far in excess of any of the sub-regions of the North, which were all well below the national average. Although Greater Manchester has achieved 26.4% growth, argued by MetroDynamics last year to be in part a result of improvements in mass transit with its tram network, there is still a huge amount more to do before even this high achieving northern region can close the current gap. Analysis of ONS data by the Northern Powerhouse Partnership has found stubborn resulting wage gaps between North and South. In 2021 the median full-time salary for people living in London was £37,500 – more than £8,400 higher than in the North (£29,096).

The causes of these outcomes are multi-faceted, but the industry feedback drew particular attention to the way transport investment signals confidence and serves as a focal point for investment and action across many sectors, making it a pre-eminent ingredient to stimulating productivity.

However, although London remains high in terms of overall productivity, ONS figures show that its productivity growth has slowed, with a 0.9% annual reduction estimated for the 2019-22 period¹⁴. Centre for Cities¹⁵ found that over the past 15 years, London's productivity growth has both trailed its international competitors and has been the main cause of the UK's productivity struggles, costing the national economy tens of billions of pounds a year.

High quality and affordable transport is essential for unlocking higher productivity¹⁶. Integrated and reliable networks enable expanded access to labour pools, attracting a greater proportion of high-skilled workers to cities and unlocking inward investment in knowledge-intensive industries. They enable deeper market integration and supply chain expansion, generating knowledge spillovers and agglomeration impacts to unlock the productivity benefits inherent in large urban cities.

The productivity impact of stronger connectivity is evident by the levels of economic growth that have been achieved in various European secondary-city regions through the introduction of inter-city high speed rail. In Germany's Ruhr-Rhine region for example, faster and more reliable high-speed rail links have supported the transformation of cities like Düsseldorf, Cologne and Bonn and provided benefits. These cities now attract a high concentration of advanced producer service firms and knowledge-based companies¹⁷ and are leading their respective national economies with productivity levels that are significantly above country levels¹⁸.

The UK's urban transport networks lag the performance of leading European cities across a range of connectivity metrics, including city centre accessibility. Measured by the share of population that can access the city centre in 30 minutes, accessibility to Britain's secondary cities is currently well below the European average for similar places. The National Infrastructure Commission cites transport as a key factor in the relative underperformance¹⁹.

The lack of strategy described above is also relevant, because it contributes to a growing tide of skills and expertise leaving the UK for regions where the benefits of rail and urban transport are better recognised – in particular the Middle East and parts of Europe. This means we are losing valuable assets to our global competitors that could be contributing to the strengthening of our own economy.

A changing context: change brings new needs, challenges and opportunities

Alongside the challenges facing the transport sector, respondents also emphasised the importance of recognising the significant change that our economy is experiencing. These economic impacts will shape both the sector's needs and its capabilities in the decades to come.

Prominent among these are the energy transition and the defining global challenge of decarbonisation, the increasing scale and pace with which jobs and services are digitised and augmented and replaced by AI, the continued growth and diversification of our freight network, an expectation of increasing levels of leisure time, and an ageing population. Without investment, transport decarbonisation will be focused on enabling the transition to private electric vehicles. While this is important, it does not address traffic congestion, limiting the agglomeration benefits that underpin urban productivity. Public transport is also needed to unlock the densification in housing that supports lower carbon lifestyles beyond transport.

Within this context, the need to put the customer first (particularly groups that have been historically neglected and discriminated against), rebalance and reinvigorate the economy, and above all underpin these efforts with a coherent strategy that directs and harnesses the power of individual investments, has never been more important.

A realistic, positive vision of the future

Reflecting on these challenges and opportunities, and drawing on the wealth of insight offered by respondents who provided feedback to the Panel, we have developed a compelling vision of change.

This vision is centred around a bold but realistic aspiration for higher economic growth and inclusive, green prosperity.

For those who use the transport networks within and between our towns and cities, it will mean more reliable, more convenient, more frequent services, which are more affordable and better tailored to their needs and desires. Recognising and responding to the strengths of our cities and towns, the transport system will more effectively support their specialisms and local policy aspirations. It will facilitate better movement of goods between rail, road and sea. And it will see the UK reclaim its position as a centre of excellence in the planning, delivery and operation of rail and urban transport.

To reach decarbonisation goals, we will also need to double rail mode share. This appears an audacious goal, but we have done it before. Over the second decade of this century, rail patronage in the UK doubled. This trend was abruptly halted by the Covid pandemic and – reflecting the challenges we have identified – that great momentum has not recovered. This is in contrast with some other European countries where rail and urban transport use has recovered significantly since the pandemic. In those cases it was supported by policies, such as fixed-fare, monthly or yearly tickets to incentivise users. In France, passenger rail transport has recovered strongly with numbers already 2% higher than pre-Covid levels by the end of 2022²⁰.



A bold long-term vision and ambition for transport infrastructure

What we heard

As evidenced in the previous section of this report, a key theme emerging from our engagement has been the need for a clear vision and strategy for the transport sector, and an associated pipeline for investment.

Challenges

The critical challenges revealed through our analysis of submitted evidence and industry expert engagement are:

- A gap in strategic thinking at national and multi-modal levels, and a corresponding lack of consistency between policies and strategies within the transport sector. This despite the reality that many journeys involve more than one transport mode, and longer-distance trips frequently cross numerous sub-national boundaries.
- A lack of consistency in policy and strategy between transport and other sectors. Transport policy is intrinsically linked with health, socioeconomic, energy and land-use planning. This is not, however, reflected in the way policies or teams work with each other. This impacts investment and delivery of nationally significant infrastructure.
- No clear line of sight from strategy through to delivery, with no consistent golden thread to link individual projects to the delivery of consistent strategic objectives.
- No reliable or current source of information regarding investment pipelines. For example, the Rail Network Enhancements Pipeline was last updated in autumn 2019, and this will limit the usefulness of other aggregated sources of information, such as the National Infrastructure and Construction Pipeline.
- The absence of clear outcomes, quantified objectives and targets against which success can be measured, reflecting the potential for transport to support the delivery of a broad range of socio-economic objectives.
- The lack of clarity in delivery roles across central government, creating inefficient and disjointed transport strategies.





© HS2

Case study

HS2 Phase 2 cancellation demonstrates a lack of long-termism and strategic approach

The decision to cancel HS2 Phase 2 reflects the critical challenges facing the UK's transport sector in maintaining a clear vision for investing in, and delivering, infrastructure. HS2 was expected to create transformational change in the quality, capacity and reliability of intercity transport across the country, but the cancellation of the latter stages of the programme has resulted in a scheme that now offers very poor value for money, with £2.2bn sunk costs already incurred on the cancelled stages²¹.

The HS2 programme has been persistently mired by cost overruns, cancellations and delays since it was proposed in 2009. While these factors reflect the inherent challenges associated with delivering mega-projects, HS2's complications reveal the deeply entrenched strategic challenges constraining the UK's infrastructure delivery capability. Without an integrated strategy for transport, and with no clear line of sight to guide the project from strategy through to delivery, the scheme has succumbed to short-term pressures, rushed decision-making, significant changes of scope and laborious legislative and planning procedures, which have made it impossible to deliver the scheme on time, to budget and in line with the ambitions and strategies of other sectors.

The absence of a strategic approach produces problematic outcomes. Respondents cited inconsistent levels of transport investment across the UK reflecting national political priorities, as well as differing levels of devolution and depths of strategic thinking. They also flagged the impact of both national and local politics on transport projects and how this often drives inconsistent decision-making – this can range from ‘pet projects’ being brought forward to schemes located in ‘target seats’ being approved for politically advantageous reasons. Or conversely, controversial schemes can be halted due to local community representations and the impact that has on local political dynamics.

There are also more systemic impacts. In particular, a lack of long-term certainty deters long-term investment and development of expertise. The crucial factors that will unlock private sector investment are trust and confidence. Cancellations and changes to major infrastructure projects leave little trust from the private sector in the ability of the UK state to deliver the infrastructure it says it is going to build. This creates an atmosphere of scepticism and reluctance from private investors and drives them to look at investing in more stable projects outside the UK, for instance in Europe and Australia.

Finally, respondents noted that the inconsistency in investment leads to skills shortages and increased costs, as the supply chain cannot sustain skilled, experienced teams to deliver the work needed²².

The experts we spoke to identified that a more robust strategic approach should:

Take a long-term view

This is due to assets in the transport sector having lifespans of 30 years or more, as well as long lead times.

Clarify the case for individual investments

Providing clarity on the social, economic and strategic case for specific projects, and how they fit into a wider transport vision, will ensure the rationale for delivery is clear and all subsequent project decision-making is effectively routed back to this strategic investment case.

Provide more certainty to investors and the supply chain

Investors and suppliers need a level of certainty to encourage them to engage with the transport sector, especially as the UK is competing internationally for this investment.

Support greater coherence across sectors, providing certainty for policymakers

Across a wide range of sectors, for example health, the complex ways in which transport intersects with other sectors and outcomes mean that clarity of investment in transport is fundamental to a clear assessment of what is needed to deliver against other policy priorities.

Policy recommendations

A clear strategy vision for transport infrastructure

National government should **define a cross-sector, pan-UK vision for transport**. This is needed to consider strategic issues such as governance and long-term funding, decarbonisation and resilience, technology and innovation, as well as aviation and maritime, which are strategic and international in nature.

Delivery of the vision will be facilitated by a national TSE. This will provide a simple, clear explanation of the strategic direction of the transport sector across England, and cross-border connections to the devolved nations, the Republic of Ireland and continental Europe, plus the high-level objectives and outcomes it is seeking to achieve. It should include clear strategic objectives – most obviously around the need to decarbonise, support housing and encourage modal shift to public transport – as well as an illustration of the core purpose of each of the UK’s transport networks.

Corresponding **sub-national strategies for transport** should then be established by regional bodies. These should be consistent with the TSE but at a geographical level, acknowledging progress made on devolution, to consider the interaction between transport and land use planning. To ensure this interaction is effective, an economic and spatial plan should be produced before the transport strategy. This should set out where economic and housing growth is needed, to ensure investments included in the transport strategy are able to drive

this growth. This reflects the successful model in London, where the Transport Strategy acts as the enabler to the wider London Plan.

The cross-sector TSE should be reflected in a consistent **update to the National Policy Statements**, which will provide decision-makers in the planning system with a clear and consistent framework for making individual planning decisions based on policy. The statements will be clear on the policy objectives they are aiming to deliver, including outcomes related to economic growth and net zero.

The TSE should be published as part of a **10-year infrastructure plan** locked in by a parliamentary debate that ensures a transparent long-term strategy and pipeline for infrastructure projects overseen by the NISTA. This will give the private sector the certainty needed to invest.

National, sub-national and regional bodies developing transport strategies should **define clear time horizons**. It is common practice for HM Treasury Green Book-compliant business cases to use a 30-year time horizon when evaluating capital investment. For rail, this aligns with the longest time horizon of most demand forecasting. Such a timescale also allows plans to be made now that progress towards net zero requirements in 2050, which should be a key objective of any UK transport strategy.

Developing a pipeline for investment

Each part of the system needs to be aligned to deliver the same goal and to ensure priorities can be delivered. Central government should be accountable for policy formulation, funding allocation and legislation/regulation. Along with devolved governments, it should be accountable for setting key objectives, such as the current Strategic Objectives for Rail²³ or the RIS objectives, both owned by the Secretary of State for Transport. This thinking has been reflected in the recent reforms to the rail network announced by Labour²⁴.

Government should then allow suitably empowered delivery agencies to **define a pipeline of investment and accompanying business plans**. This will enable the delivery of their respective strategies within agreed constraints, such as funding, as they see fit, based on their own expertise and objective analysis. A strategy has the greatest impact when organisations accountable for its delivery are formally involved in its specification and have the necessary means to achieve it.

Project pipelines should be published, with a clear link to the National Infrastructure Plan, to increase confidence among domestic and international investors. A detailed national pipeline should be published twice a year and be easily accessible, containing sufficient detail to allow the private sector to make investment decisions. This would enable continual upskilling of the workforce, with lessons applied after projects are delivered.

The inclusion of schemes in the pipeline should be determined by delivery agencies on the basis of **objective analysis**. **This should include transport scheme appraisals and evaluations considering strategic cases**, alongside the other four elements of the business case, aligned across national, regional and local transport strategies. All assessments and appraisals should be carried out against a reference case or baseline scenario.

Funders should **allocate the funding required for delivery agencies to develop and deliver the pipeline**. This would see a move away from fragmented pieces of funding, narrow spending scopes and competitive public sector bidding. A fairer approach would grant consistent levels of development funding to agencies tasked with formulating and taking forward a pipeline of projects.

It would commit to funding projects which have proven, throughout their development process, to achieve a strong business and to meet predetermined strategic objectives. Devolved five-year budgets, as a minimum, would provide the certainty needed to enhance our transport networks.

Within the rail sector, we endorse the commitment announced by Labour earlier this year²⁵, to create **Great British Railways**. We broadly support having a robust governance structure in place that is accountable to the public, the UK and devolved parliaments; and operates within a long-term strategy for services and infrastructure that is determined by the Secretary of State. By bringing finances together within a single body, it will enable long-term decision-making to increase patronage and deliver improvements for passengers and freight without the micromanagement of the current system, or of British Rail. However, it will remain accountable to

the Secretary of State, whose agreement will be required for significant decisions around services and infrastructure.

We recommend that the Minister of State for Rail carries the explicit responsibility to help develop supply chains for the sector. This would work in collaboration with the Department for Business and Trade Minister's responsibility for industrial strategy supply chains, and work in partnership with business, especially tier 1 suppliers and major contractors, which should take greater responsibility for supporting the establishment of local supply chain capability.

“Rail and urban transport projects take many years to develop and deliver, and major projects such as the Elizabeth line or HS2 will span several political administrations. The rail industry needs longer-term certainty of the policy framework and consistency of funding to plan and have sufficient confidence to invest. There are many international opportunities for investors and contractors and they will tend to focus on those where a consistent policy and funding framework provides them with less risk for their investment.

This can be seen in those countries that have developed a clear pipeline of investment, such as the high-speed rail programmes in France and Spain, which have reduced construction costs over time, with Spain now reporting high-speed rail construction costs per kilometre that are a fraction of those experienced on HS2.”

Ensure transport fulfils its role in driving economic growth, delivering decarbonisation goals and positive social outcomes

A TSE should be developed within the context of a new UK Industrial Strategy, framed around meeting intrinsically linked outcomes. This would reflect the fact that transport is a key enabler of industrial growth and productivity. To facilitate this joined up approach, the right forums should be determined, for example between transport, land use planning, public health and other related strategies, and established within the machinery of government as appropriate.

The coordinated transport and wider strategies should form part of a broader effort to refocus national attention around the **joint effort to meet the commitments within the Climate Change Act**, and our Nationally Determined Contributions at an international level. Great strides are being made towards decarbonisation in locations including Scotland (with Strategic Transport Projects Review (STPR2)), and parts of England, with major programmes such as Manchester's Bee Network and the West Yorkshire Mass Transit. However, establishing a clear UK-wide vision will ensure we are investing in the aspects that will drive the most significant decarbonisation. This vision should commit government to a target regarding public transport's contribution to climate change and decarbonisation.

The coordinated transport strategies should similarly be set out with an appreciation of the transport sector's role in delivering other broader objectives. Central government should pay particular attention to how transport can

play a significant role in social inclusion and social mobility.

As part of a new bold vision and strategy for transport, the new government should enact reforms to the bus and rail sectors, as soon as practically possible, that would help accelerate urban transport delivery. This would help both sectors fulfil their potential, unlocking modal shift, addressing transport and social exclusion, and boosting local and regional growth.

An integrated approach of this kind should place renewed emphasis on the need to encourage dependency away from private vehicles towards public transport, walking and cycling, since these modes actively support greener travel and have positive impacts on social mobility and public health. Efforts should continue to **create the required capacity**, especially on local commuter routes, through investing in future capacity and connectivity with a new, modern east to west connection between the key cities in the North.

Measures could also be considered to **encourage and promote Transit-Oriented Development (TOD)**²⁶, through better alignment of transport and spatial planning. TOD puts public transport front and centre enabling the delivery of wide-ranging benefits, including to local economies; air quality and carbon emissions; social inclusion, employment and skills; health; and public transport patronage. It has the potential to support agglomeration economies and meet housing demand without making traffic congestion and air quality worse. The aim should be to encourage mixed-use developments, affordable housing and

vibrant commercial spaces near key transit nodes, with the ultimate aim of stimulating economic growth around transport hubs. This strategy could promote and champion the socio-economic benefits of built environment and transport developments, and provide a positive narrative as a counterbalance to existing blockers on construction.

The current model of sub-national transport bodies leads to the production of transport strategies that reflect significant work by places and business communities, but do not have adequate influence on the prioritisation of future enhancements.

We recommend reforming sub-national transport bodies. There should be a clear pan-regional level transport and spatial focus - supported by appropriate governance. Their work should be informed by local growth plans developed and delivered at a regional level by

Mayors and Combined Authorities through their further devolved responsibilities and other regional authorities. This will enable the focusing of resources on those improvements which will deliver transformative economic growth over the coming decades

Logistics in the UK is a strong contributor to Gross Value Added. (GVA). This was £185bn in 2022 compared with £160bn in 2021,²⁷ despite a challenging economic environment and limited business growth due to geopolitical tensions, new trade processes after Brexit, a financial recession after Covid, and new climate-related requirements. To tackle the future capacity and decarbonisation

challenges in the sector, we recommend the new government sets an ambitious goal for freight that builds on the current proposals to increase rail freight by 2050. Although this is positive, it does only represent a 2% rise per year. This will be insufficient to face both the challenges of freight traffic growth and decarbonation goals. Government should establish a monitoring and review regime through the NISTA to assess the delivery of the transport strategy against a broad range of goals, particularly around decarbonisation, and including an assessment of scheme-level benefits. The need for action to ensure decarbonisation goals are met should be reviewed annually, and all relevant information should be made public.



Case study

Midlands Rail Hub – Unlocking the rail network

Midlands Rail Hub (MRH) is a transformational project of national significance that is key to meeting economic, environmental and social mobility objectives in a sustainable manner.

MRH unlocks the national rail network's capacity bottleneck in central Birmingham, improves access to HS2 and delivers faster and more frequent rail connections both across the Midlands and between four of the UK's 11 core cities (Birmingham, Bristol, Nottingham and Cardiff).

Improving links between core cities, existing regional centres and future growth areas through MRH will facilitate greater business-to-business interaction, expand employer access to larger skills markets, attract inward investment, stimulate job creation and unlock potential for significant sustainable growth in the housing sector.

The national significance of MRH, which creates a major new public transport interchange at HS2 Curzon St and Birmingham Moor St stations, was recognised by the Department for Transport (DfT) taking the Lead Sponsor role for the project from the outline business case stage onwards. As MRH has moved on to the full business case and detailed design phase, DfT has recognised the value in bringing the regional rail body, West Midlands Rail Executive (WMRE) on board as a formal 'client partner' alongside the Midlands Connect Sub-national Transport Body. WMRE represents both the West Midlands Combined Authority/Transport for West Midlands area and surrounding shire and unitary authorities, and therefore provides a local democratically accountable 'voice' in decisions on this nationally significant project. This aims to deliver a better rail customer experience, improved performance and reliability, seamless integration with other modes and maximise regeneration and other development opportunities.

Accelerating delivery of transport infrastructure across the nation

What we heard

In recent years we have witnessed a series of changes and cancellations to major infrastructure projects, which when coupled with the hurdles to delivery that exist, is causing delivery to slow and costs to increase.

Feedback from industry emphasises the lack of long-termism and this slow delivery is making UK transport schemes more expensive. Data from Britain Remade shows the scale of the project cost difference between the UK and countries on the continent. It found the average cost-per-mile of the 10 most expensive rail projects was £397m for the UK compared with £306m for Italy and £221m for France²⁸. Public money is often spent on patching up and keeping failing infrastructure that should be replaced rather than maintained. Equally, long-term maintenance of valuable transport assets is consistently underfunded.

We also heard from our respondents that perceptions of the planning process can be negative and it is in need of reform. Engaging communities on publicly funded transport projects is critical to ensure they understand the impacts for their area and to make sure local concerns are addressed in the scheme development, where possible. For NSIPs,

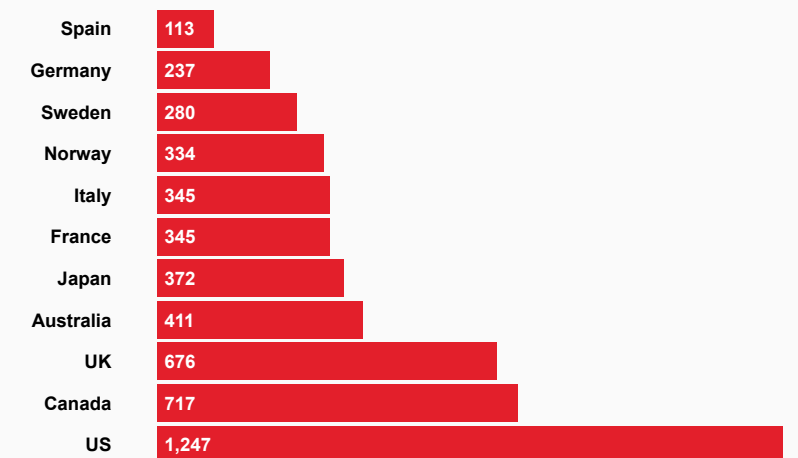
the public engagement process should communicate the national and regional benefits the scheme would bring to the economy, housing and social mobility. The right local incentives must be in place to ensure delivery of the scheme is not impeded.

Speeding up and reducing the cost of delivery is critical to improving economic growth and connectivity, and bringing the benefits of these to communities. Changes are required to address the challenges that exist in driving infrastructure delivery.

It is critical that delivery organisations are set up for success and the new government enables the delivery of programmes and projects. Systems, processes and delivery approaches need to adapt to reduce costs and time, with a confirmed, clear portfolio. The short-term approach adopted of late has led to increased project and renewal costs.

Underground construction costs

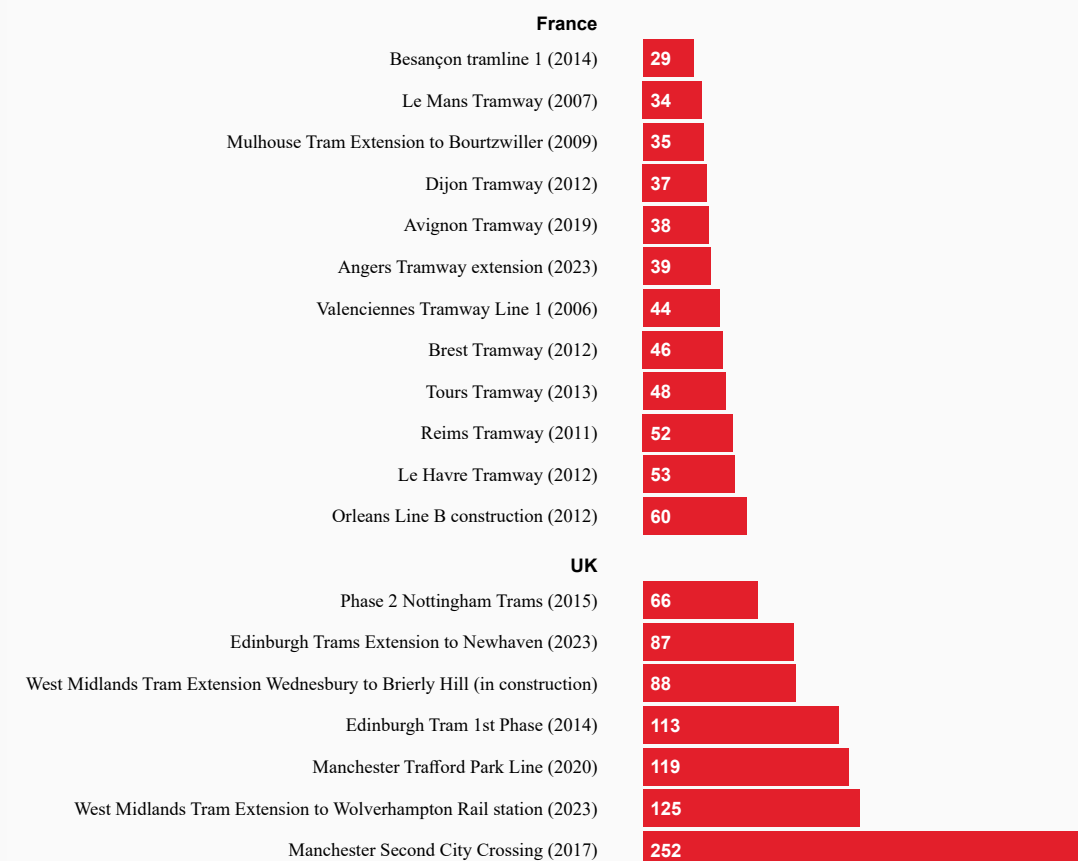
Average per mile cost of new underground/metro lines in 2023 GBP (millions)



Source: Britain Remade

Tram construction costs

Per mile cost of new tramway lines in 2023 GBP (millions)



Source: Britain Remade



© Siemens Mobility

Case study

Siemens

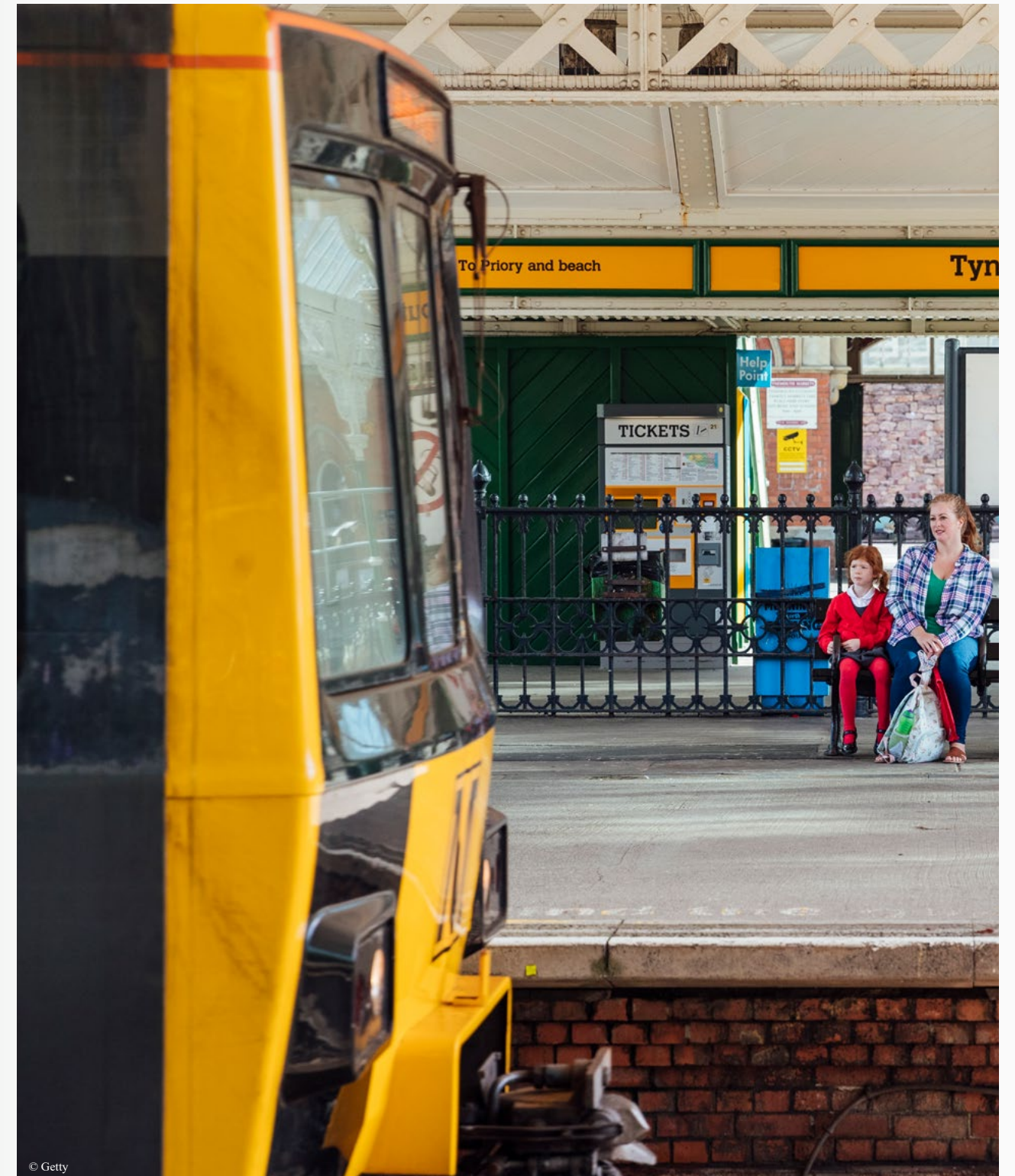
Discontinuous electrification of our rail network to reduce capital and operational costs and support decarbonisation.

Electrification of the railways has stalled in the past decade, with concerns about the costs of installing wires along the network forcing operators to continue to rely on diesel trains. A study by Siemens found that £3.5bn could be saved over 35 years by using battery trains and electrifying short sections of the line through an approach known as 'discontinuous electrification'.²⁹ As well as reducing capital investment and enabling significant operational savings, modelling undertaken by Siemens suggests that switching to battery trains could reduce CO₂ emissions by 12 million tonnes over the 35-year life of the trains. Battery bi-mode trains can therefore be a key part of the answer to how we decarbonise Britain and cut the costs of the railways.

Challenges

Engagement with industry stakeholders and the call for evidence during the development of this report identified a number of trends and challenges that underpin the issues hindering the ability of government and infrastructure projects to deliver faster and at a lower cost.

1. The role of devolved government has increased in recent years, as has the nature of the responsibilities and accountabilities that have been devolved. This includes greater local ownership of development, delivery, operation and renewal of transport. With this changing landscape, central government has not adapted itself to enabling the landscape to successfully fulfil its responsibilities. Complex funding arrangements, with central government directing and controlling projects and the shape of local pipelines, reduces the ability of these authorities to deliver effectively and at pace.
2. Despite these constraints, urban centres are seeing greater localised coordination and delivery of services as a result of devolution. This should be bringing benefits to local communities, with services specified to meet their needs.
3. Nationally, failures in the delivery of transport infrastructure are causing either delays or slowed delivery. This increases costs and inflationary impacts further exacerbate cost pressures.
4. The lack of clarity on project pipelines, indecision nationally on progressing projects, and changing fiscal decisions leading to cancellations, shifting priorities plus rescoping and descoping of projects, has led to chaotic and slower delivery of infrastructure that is critical to securing economic growth and connecting communities to employment, education and health services.
5. Disproportionate barriers and delays due to government decisions on funding are seen as common. The control asserted from the centre of government and the desire to hold on to the sponsorship of projects is indicative of central government not trusting local delivery organisations, nor wanting to cede control or oversight.
6. The planning system has been held up as the barrier that, if solved, will unlock delivery. However, the reality is more complex. Planning reform is a necessity and a clear, consistent regime is required to enable projects to achieve consents at a faster pace.
7. Maturity of capability and depth of capacity in the supply chain across the country is a common challenge to delivery, as is the ability for regional and other authorities to strengthen their clienting function.





Case study

Manchester Airport and the need for an integrated industrial strategy to support its contribution to the Northern economy

Manchester Airport is a powerhouse of the Northern economy. It serves nearly 30 million passengers and nearly 70 million tonnes of cargo a year, and over 20,000 people work onsite. But while the airport boasts some of the best rail connections of any UK airport, over 75% of passengers still drive there due to the low frequency and poor reliability of trains on the Northern rail network. Reliance on private vehicles in lieu of efficient public transport stifles international travel demand. It also holds back growth across several sectors of the UK economy, including financial and professional services, creative industries and real estate, which are particularly reliant on air connectivity.

Recognising greater connectivity with the rest of the world as the best way to stimulate growth and innovation, an integrated industrial strategy is needed to ensure aviation is acknowledged as a strategic enabler of other high growth industries that the UK relies on. Research by Arup found that, with the right investments in transport infrastructure and a supportive policy environment, Manchester Airport could generate an additional £10bn in GVA by 2050, tripling its contribution to the Northern economy and supporting wider economic growth, particularly across knowledge-intensive sectors.

Tackling these challenges underpins the recommendations outlined below.

Policy recommendations

Delivering our transport infrastructure projects Greener, Faster and Cheaper Government should adopt a transformative approach to get infrastructure delivery moving. Arup has created a framework for this: ‘Greener, Faster, Cheaper’. This recommended approach is designed to address the perennial challenge of infrastructure projects being delayed and over budget, while also ensuring priorities on net zero and sustainability are achieved. The primary objectives are accelerating infrastructure project delivery, reducing costs and enhancing environmental, including social, outcomes.

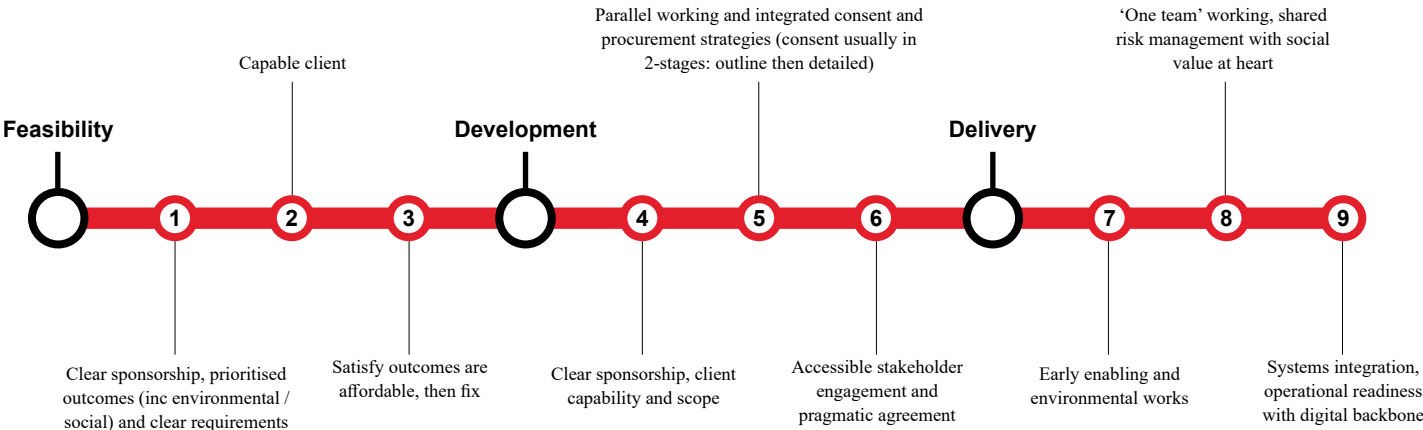
An holistic, end-to-end approach to infrastructure development should be introduced, recognising that there is

no ‘silver bullet’ solution to speed up delivery. The Greener, Faster, Cheaper approach has identified the best existing practices. It emphasises early planning, outcome-based programmes and strategic reforms, contrasting with traditional asset-focused, process-driven approaches. Lessons learned from slower and delayed projects will inform it, ensuring past mistakes are not repeated.

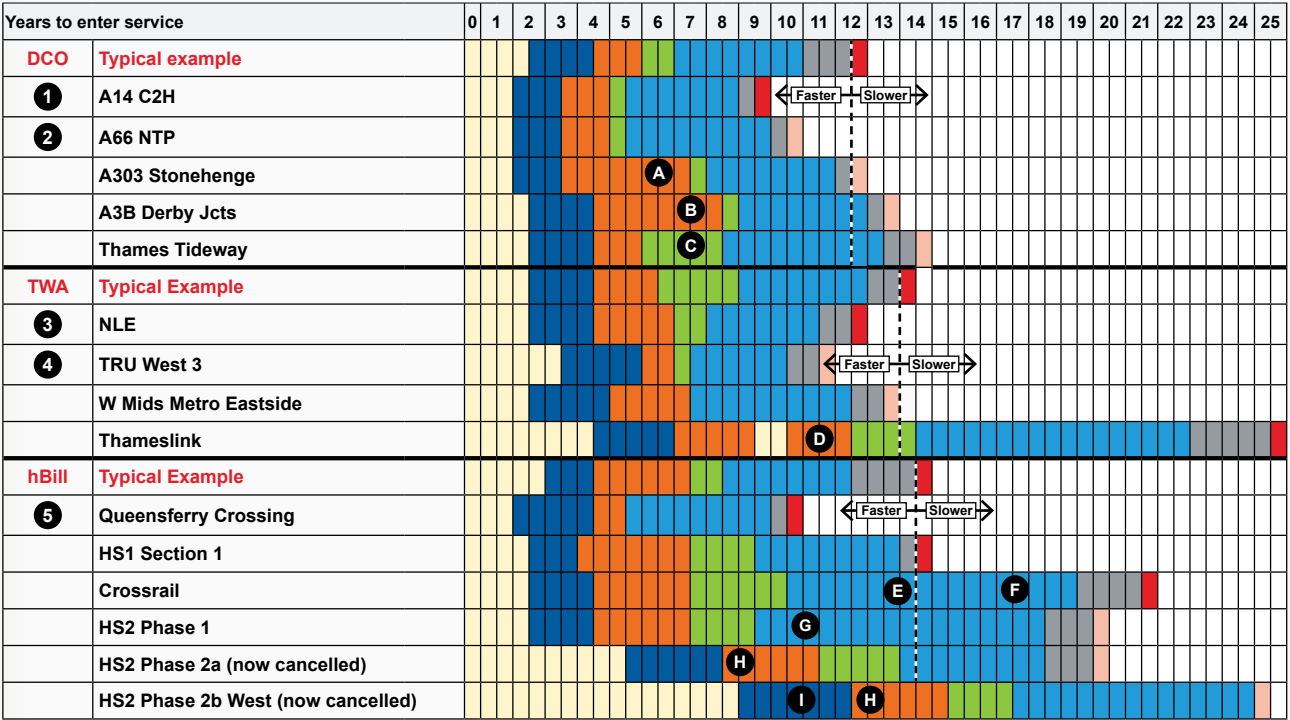
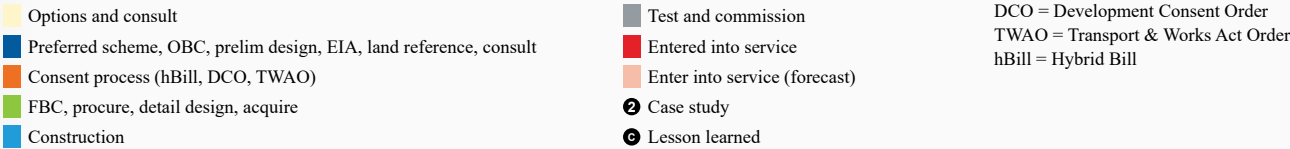
There are opportunities to enable faster and lower-cost delivery from policy, process and system changes led by government. The nine steps shown below should be introduced to enhance delivery.

A review of transport infrastructure projects undertaken by Arup against these nine steps has shown projects can be delivered 25% faster, 20% cheaper and 10% greener. Further details on this approach are outlined in the infographic below.

Greener, Faster, Cheaper
Nine common steps for delivering what has been achieved before



How to speed up delivery and reduce costs
Faster delivery is achievable across consenting regimes – transport examples





Case study

Queensferry Crossing

Faster: How was it accelerated?

- 25% faster using nine keysteps
- Government driven
- Scope simplification
- Hybrid Bill (Scotland), Royal Assent in 13 months, only one 11-day public examination by appointed assessor
- Full business case and procurement in parallel with the Bill
- Act provided for 24/7 working with strong environmental safeguards, some environmental approvals replaced with faster processes without impact on outcomes
- Government representative (with advisors) led delivery and approved detailed design and environmental consents
- Digital twin to maximise availability and optimise maintenance

Details

- 1.7-mile new crossing
- 2.5 miles of new link roads
- Opened in 2018
- Fastest Hybrid Bill project delivered

Cheaper

- £1.4bn budget reduced from original £2.3bn by scope challenge and clever engineering
- Delivered at £1.1bn, 18% cheaper than budget

Greener

- Environmental outcomes defined by Act
- Award winning design and performance

Throughout this work, Arup found the most opportunity for acceleration, cost reduction and improved outcomes was identified during the first 10% of a project's lifecycle. These early-stages offer the most opportunity to drive Greener, Faster, Cheaper delivery. Ensuring the initial stages of project planning are robust and innovative, sets the foundation for success. Defining and driving programmes based on operational outcomes, not just the asset, leads to greater buy-in and support.

The scale of opportunity for acceleration and reduction in costs diminishes as the project progresses, but there are still opportunities available throughout the lifecycle, including during delivery, that could be realised. Governance and oversight from central government should adapt accordingly to reflect the opportunities available for acceleration and cost reduction.

Catalysing growth by locking in transport devolution across the country

Government should remove itself from decisions and control where it is not appropriate, such as where the responsibility and accountability has been devolved. With the right capabilities and a clear programme, those devolved bodies should be enabled to deliver their priorities without hindrance or delay from the centre of government. As local authorities are given greater responsibility, this should be matched with investment in local skills and capacity. Roundtable discussions have stressed the particular need for more skilled planning and funding capabilities in combined and local authorities. There is the opportunity for more formalised sharing of best practice and skilled

resource to ensure all Authorities deliver against the recommendations set out in this report. The need for consistent Mayoral powers, similar to the London Mayoral model, to better integrate Transport and Planning for Combined Authorities across England was also noted.

There are numerous fora that are considered responsible or accountable for overseeing and assuring projects. These include delivery body project governance, departmental internal investment governance and/or programme board and joint boards with delivery bodies, informal HM Treasury (HMT) reviews, Infrastructure and Projects Authority gate reviews, Cabinet Office commercial reviews, HMT's Major Projects Review Group, HMT investment approvals). This creates a burden on projects and can generate an expectation that progression will only be achieved at 'green' rating. In aggregate, processes are not value adding and can hinder the ability to accelerate and reduce costs. There needs to be clear delegation of responsibility and a refinement to the 'lines of defence' model to reduce duplicative activity. This current model provides three lines of defence. Firstly, internal project management controls; secondly, internal governance such as centres of excellence and thirdly, those external to the organisation – these multiple touchpoints can be refined to clearly set out roles, responsibilities, accountabilities and expectations for each element of assurance and investment governance.

Consistently articulating success

Communicating what has worked enables lessons to be rapidly learned and applied on other projects and across the supply chain. This is vital to realising greater cost and time savings across infrastructure delivery. It also creates confidence in delivery and demonstrates where approaches are successful. Successes and lessons learned should be released by projects and made publicly available.

An appraisals system fit to recognise transport's social benefits

Faster and reduced cost delivery require earlier spending in the project lifecycle. To realise some acceleration opportunity, capital expenditure is required ahead of final investment decision. The business case process can be time consuming. It can be condensed by bringing forward elements of development and streamlining the decision making process to enable faster progression to final investment decision, contracting and start of works. This can be achieved while maintaining oversight of value for money and ensuring confidence in delivery.

A review of the current Department for Transport's project appraisals guidance should be carried out to recognise transport's far-reaching social benefits, with the goal of moving beyond cost benefits and journey time optimisation.



Credit: Welsh government

Case study

Welsh Government Appraisal Methodology

There is valuable learning to be gained by exploring the approach taken by the Welsh Government, which, following the release of its Transport Strategy, implemented a new appraisal methodology. The new methodology places less emphasis on the use of Benefit-Cost Ratios (BCRs), and more on wellbeing appraisal based on the ambitions and targets in the Wales Transport Strategy. In its updated guidance, the Welsh Government states that “transport planning is not an exact science. It is about designing good programmes and projects that meet the needs of people in Wales, not just adding up costs and benefits”.

The guidance states that all programmes and projects must support their business case with an integrated appraisal to ensure that wellbeing considerations are designed into the programme or project from the outset. The appraisal should answer four simple questions – is the programme or project good for people and communities? Is it good for the environment? Is it good for the economy and places? And is it good for culture and the Welsh language?

These are based on the four ambitions in the Wales Transport Strategy and aligned to the Well-being of Future Generations (Act) Wales 2015. The answers to the questions should be supported by robust qualitative and quantitative evidence, including how the programme or project will contribute to modal shift targets. WelTAG 2022 includes a framework of measures to help do this, which incorporate key information from statutory and regulatory impact assessments.

Proceeding with projects at 'managed risk'

Sponsor/client organisations and delivery bodies should operate differently in their attitude and approaches to managing risk, contingency, change control and the interactions with the wider delivery ecosystem, for example, HMT and the Planning Inspectorate). Operating at an accelerated pace requires projects to harness progressive assurance and to work at managed risk (i.e. where projects are reviewed and RAG-rated they should be able to work at 'amber' through formal project gateways rather than requiring a green rating). It is likely that the (initial) novelty of accelerated approaches will lead to a higher risk rating, but also the immaturity of elements of an accelerated project can heighten perception of risk. Appropriate mechanisms (e.g. NISTA) to support delivery to target cost and time in this environment is necessary.

Introducing consistent use of high quality, operational readiness earlier in the process

Earlier preparations for commissioning and operation reduces the time from completion to opening, and ensures design and delivery against operational outcomes. This allows a programme to be scoped and specified appropriately, reducing the chance to 'gold plate', which drives up cost and delivery timescales. This ensures the right level of operational involvement is sought to avoid inadvertently encouraging additional 'gold plating'. This should feed through consenting, design and delivery to maintain a consistent scope and specification throughout the project.

End-to-end focus

A clearer direction is needed within government on driving an end-to-end focus on projects from inception to completion. There should be greater focus from departments and the centre of government on those projects that need deeper support to unblock an end-to-end approach through the government's delivery apparatus. The centre of government, through the NISTA, should also drive commercial and procurement reforms to speed up delivery and reduce costs. To ensure focus is retained, guidance should be provided to departments on the expectations in assuring an end-to-end approach via investment boards and governance.

As a first step, the government needs to complete the passage of the Hybrid Bill, originally introduced for Phase 2 of HS2. This includes new line connectivity from Warrington to Yorkshire. There is a clear role for local transport authorities and local government to ensure the route is delivered to enable works to start once a delivery model is finalised.

This can be done alongside upgrades such as improvements to the East Coast Mainline north of York and up through the North East of England. This is in addition to starting work on key elements like a new station in Bradford and Hull electrification, and evaluating the optimum solution for better connecting Birmingham and Manchester.

In the first 100 days of a new government there must be a focus on recovering progress on all elements that have been delayed, including the Hybrid Bill, to instil wider certainty in the programme. This should include pressing ahead at speed to deliver NPR in full, with all the benefits it brings.

Underpinning acceleration we recognise the need to maintain assets efficiently and effectively

A long-term strategy and funding approach is needed, setting out existing asset maintenance and renewal for all urban areas (including London). This would deal with the current backlog and plan for the future, particularly to ensure resilience to climate change and harness advances in technology.

Developing a long-term strategy should involve setting targets to significantly reduce the cost of maintenance and renewal. We have received case studies that the cost of projects for both maintenance and renewal can be reduced substantially. For example, a report by Siemens identified as many as 40 rail routes across Britain that currently use manually operated mechanical or electro-mechanical signalling systems, which could be upgraded with modular systems. Upgrading these routes to modular signalling is expected to reduce capital costs by 25%, reducing operational costs by approximately £4 million per route per annum. This would potentially save the railways £160 million every year compared to today³⁰.



Case study

Connecting towns and cities in the North

A strong commitment to a network of new lines is needed to build capacity across the Pennines.

This review notes the consistent consensus among northern civic and business leaders for a new line from Bradford to Huddersfield and from West Yorkshire to Warrington via Manchester and Manchester Airport. This, along with significant upgrades, will connect Sheffield to Manchester and Leeds; Liverpool towards the east, and Hull to the west and via York to Newcastle and Darlington.

This credible network does not need reviews or further optioneering, with the Integrated Rail Plan and Network North replacement of previous cuts to Northern Powerhouse Rail all having wasted time and effort, as well as significant sums in additional development cost.

Harnessing the benefits of public private partnerships

What we heard

It is critical that we drive greater investment in the UK by improving how we deliver transport infrastructure. By delivering projects more effectively and efficiently, we will improve connectivity across the regions and in turn improve social mobility and boost the economy. The need to create the conditions for this investment was echoed from our engagement with experts and industry stakeholders. Respondents identified that:

1. Major infrastructure projects will likely require a mixture of public and private investment, where the public sector proactively drives stability and confidence in private sector investment.
2. Transport across the country requires coherent operations across geographical boundaries.
3. More government engagement with communities, trade unions and the private sector would be beneficial to ensure inclusive scheme delivery and enable socio-economic benefits to be harnessed.

Challenges

Some of the challenges revealed through our stakeholder engagement include:

- Private sector financing must be supported by public sector funding, rather than being seen as a replacement.
- The mix of funding and finance mechanisms required for modal shifts in transport are not established and clearly codified.
- Forms of private sector financing can have significant implications for UK's net public debt.
- There is a lack of clear thinking around how rail and urban transport is a fundamental part of the UK economy and its plans to decarbonise.



Policy recommendations

There are two distinct ways in which the private sector can invest in transport infrastructure:

- The first is through a delivery partnership, where the private sector helps deliver the project, and therefore needs to make a direct return on its investment.
- The second is an effort to capture the positive externalities that are created by transport investment – by boosting their revenue or asset values.
- We recommend the British Infrastructure Council brings together key actors from the public sector and investors to develop a new approach to private finance. Its aim should be to report to the Secretary of State for Transport and the Chancellor by the end of 2024.
- A playbook should be developed that clearly sets out different acceptable models for leveraging private investment (of both types above).

Some of the options to consider for this new forum include:

Driving investment in our transport infrastructure through a new integrated partnership between the public and private sectors

Particularly with public ownership, franchising and anticipated modal shifts in transport, a new Labour Government should explore **alternative models for funding and delivering transport infrastructure by embracing blended finance** through contributions by both the public and private sector. Though we do this in the UK to some extent, more nations, particularly across Europe and Asia, have embraced Public Private

Partnerships (PPPs) to improve and expedite delivery of major infrastructure projects. Reviews of previous global precedents indicate key factors for PPPs to be successful in delivering infrastructure. These include:

- The transport network occupies a corridor with demonstrated strong levels of travel demand.
- The project design and engineering solutions are straightforward to deliver.
- The project can be split into tranches to reduce debt requirements.
- The parties involved have acquired the necessary land and gained planning permission.
- The infrastructure is reasonably segregated from existing networks.
- The project generates some form of revenue/income to be able to allow the private sector to recoup its investment.

To ensure delivery of infrastructure project using blended finance, rather than introducing this inconsistently across projects, national government should mandate private partners in PPP to arrange special-purpose vehicles to deliver projects. The SPV should require a mixture of debt and equity for the duration of the project, and should receive commensurate funding through, for example, track access charges or availability payments. Project packages outside of the SPV, for example, enabling works, could be procured by the public sector in support of the project.

Alternative models for funding should consider a mixture of public and private sector sources. Public sector funding could include financial commitments from central government, such as grants, demand guarantees, land and enabling

works. It is important to frame these investments as a necessary investment into UK productivity overall, which results in net additional tax receipts flowing back to the HMT.

Exploring approaches to capture the positive externalities that are created by transport investment

Private sector funding sources can be obtained through the economic benefits generated by the delivery and operations of new transport infrastructure. A key revenue stream includes land value capture, sourced from residential property uplift, commercial property uplift and social housing income. Elements of this mixed-funding approach have already been put into practice, for example, the Northern Line extension to Battersea and London's Crossrail. This ringfenced portions of the net-increase in business rates that was attributable directly to the project to repay upfront financing to support the capital works. These ways of capturing land value and other benefits need further exploration and standardisation.

Infrastructure investment playbook

The mechanisms for bringing in private sector funding and financing are complicated. Not all projects are investable propositions, and the ones that are require different solutions to unlock investment. Learning from the Construction Playbook, we recommend a playbook, developed in collaboration between the government, devolved authorities and the private sector could codify a framework and accelerate private investment in rail and urban transport infrastructure. It would set out the approaches the government are open

to being used and clarify all public and private sector actor roles. It would also provide public sector organisations with a guide to how to assess their scheme's viability for these different mechanisms, thereby minimising the public sector funding required. The playbook must be supported and aligned to a transparent project pipeline to grow certainty and confidence.

A document is insufficient to drive the required change alone. Local Transport Authorities must be provided sufficient financial stability and the right levers to unlock local revenue raising powers. This must be accompanied with an upskilling in capability of public sector organisations, including those focused on smaller projects. Formal ways of sharing of best practice and accessing skilled resource would support all authorities to partner effectively with the private sector.

Investing in future industry talent

Through increased certainty of investment in our transport infrastructure, including through PPPs this will increase skills, jobs and growth in the sector. We recommend working in partnership with unions and the industry to set a bold industrial strategy for the rail and urban transport sector, as also mentioned in section 1, and include an ambition to increase the number of jobs created in the industry. The TUC commissioned some work on this from the NSAR, which could be included as part of this thinking³¹.



Case study

HSL Zuid's long-term vision

The state of the Netherlands procured a PPP for the delivery of rail infrastructure as part of the development of HSL Zuid, a 96-kilometre high speed rail line between Schiphol Airport in Amsterdam and the Belgian border³².

Under the PPP agreement, Infraspied B.V consortium were contracted by the Dutch state to oversee the design, construction, financing and maintenance of the high-speed rail infrastructure for 25 years.

The Dutch state pays an annual fee to Infraspied for supplying and maintaining the infrastructure based on the actual level of availability of the infrastructure. This encourages Infraspied to adopt a long-term vision during the design and construction phase and ensures post-construction maintenance remains efficient and optimised.

Getting the structures right for delivery

What we heard

- Devolved powers and authority for local transport infrastructure should be embraced.
- UK transport bodies should work holistically through cross-discipline and cross-departmental collaboration.

Challenges

- Local authorities do not have appropriate devolved power and governance arrangements to deliver local transport infrastructure and capacity.
- Contemporary political issues and the will of contemporary politicians undermine the development and delivery of major infrastructure schemes taking place over multiple political cycles.
- There is not a central engine behind critical projects or a golden thread to link projects together into a comprehensive programme to achieve strategic objectives.



Policy recommendations

Reforming the planning process to speed up delivery of major transport projects

Consenting regime reform

Providing clear guidance on those projects that would be classified as nationally significant and continuing at pace with proposed reforms to NSIPs and Environmental Impact Assessment regimes will speed up delivery for major projects that are currently pre-consent. Further reforms to streamline processes to enable fast-track routes for DCOs and more rapid updating of National Policy Statements should be considered. In transport, further reforms to the Transport and Works Act covering regional rail/mass-transit projects and the Highways Act consents covering road projects should be adopted (for example, time limits as in the DCO process). Changes to the thresholds for entry into the NSIP regime are necessary. These reforms should be accelerated in the next Parliament. Implementation of the existing NSIP Reform Action Plan should be accelerated, including the fast-track route, enhanced pre-application support (for statutory environment and health bodies as well as LPAs) and Environmental Outcomes Reports. Consenting bodies also need to be resourced to support timely delivery (discharge of reserved matters, conditions and environmental licences), as well the primary development consent.

Align priorities, funding, and consenting direction

Each part of the ecosystem needs to be aligned to the same goal to ensure that priorities can be delivered. Where possible National Planning Statements (NPS) and other mechanisms should present a clear path to consenting major projects. Regular updates of the NPS should be aligned with project funding priorities and linked to a clear and comprehensive guide to project development with an agreed direction from the centre of government. This includes a public funding envelope and desired private funding/finance contribution to support delivery. This could accelerate consenting by avoiding ‘need’ challenges. Equally, clear spatial planning and economic strategies linked to the NPS updates are important. The Strategic Spatial Energy Plan (SSEP) proposed in the Winsor Review is a good proposal in this regard. These changes would create a clear pipeline of projects entering consenting regimes and ensure adequate resources, expertise and capacity is available in consenting bodies and to support private sector investment.

Improved governance of transport projects to ensure value for money

We endorse the recommendation from the Major Capital Projects Review led by Darren Jones MP, that government should establish a **new National Infrastructure and Service Transformation Authority (NISTA)**. Central government should give the new NISTA formal guidance to ensure that government, and national and regional partners are delivering transport infrastructure effectively. This accountability to ensure effective decision-making is delivered through a strengthened NISTA with greater powers and accountability would ensure all government departments are effectively working together to deliver local needs. NISTA could sit in this ‘arbitrator’ role alongside the different tiers of government, including HMT, Ministerial Departments and devolved government. From this position it could set out clear mandated roles at each level of government for delivery of a particular infrastructure scheme, while also recognising local community representations and views of groups, such as trade unions, as appropriate. Subsequently as an overseeing body, it could have capability to hold each tier to account for impacting the speed of delivery.

As part of Labour’s plan to create a NISTA, we recommend the expansion of the newly proposed Industrial Strategy Council to include the supply chains and workforce requirements for key national infrastructure including transport. **This Industrial Strategy Council which will be in statute and independent**, should be given the mandate to develop plans to ensure the deliverability of

NISTA’s infrastructure priorities, which should also reflect the industrial strategy priorities set by the council, such as the demands of just in time supply chains for freight.

Additionally, as a leading body, central government should establish a **universal and consistent application of standards and procedures**. Examples include:

- an official repository for collecting complaints and evaluation and monitoring
- a single body to conduct consultations
- a unified definition of accessibility

A universal and consistent approach by central government would be instrumental in providing transport organisations with a simpler and more streamlined approach and make it easier for transport users to interact with it.

The government should support the rail and urban transport industry through NISTA to offer local authorities advice on planning issues, unblocking projects and optimising procurement processes.

Providing greater support for local authorities to deliver

Building on the progress of devolution in England, government should further decentralise and give clear and mandated roles to sub-national transport bodies and Combined Authorities in setting ambitious local transport plans and delivering strategic outcomes.

A national **Transport Strategy for England (TSE)**, as part of a **pan-UK vision for transport**, will provide a simple, clear explanation of the strategic direction of the transport sector across England. It would also provide and cross border connections to the devolved nations, the Republic of Ireland and continental Europe, and the high-level objectives and outcomes it should be seeking to achieve. It should set out clear strategic objectives – most obviously around the need to decarbonise and to encourage modal shift to public transport, as well as a clear illustration of the core purpose of each of the UK’s transport networks.

A key part of this success will be further devolution of powers. **Sub-national strategies for transport** will then be established by regional bodies, consistent with the TSE but at a geographical level more appropriate to consider the interaction between transport and land use planning. To ensure this interaction is effective, an economic and spatial plan should be produced in advance of the transport strategy. This will set out where economic and housing growth is needed,

to ensure the investments set out in the subsequent transport strategy are able to drive this growth. This reflects the successful model in London, where the Transport Strategy acts as the enabler to the wider London Plan.

These local plans should align to regional and local economic strategies encompassing skills, land use and housing.

The transport visions should be **supported by the TSE**, to facilitate the delivery of enhancements, as well as ongoing asset management and operations.

The schemes identified by the TSE will be set out through a **clear pipeline of priority strategic projects with identifiable or proposed funding sources that** will enable the delivery of a TSE.

These project **pipelines should be published every year** and made easily accessible to provide greater confidence from domestic and international investors.

National government should expand the Greater Manchester and West Midlands trailblazer devolution deals to other Combined Authorities with proven project delivery capability and long term devolved budgets to all LTAs. A new government could build on the single departmental settlements for transport, as is currently being implemented for Greater Manchester and the West Midlands, to other Mayoral Combined Authorities with proven and evidenced delivery capability. For all other local authorities, a transparent, fair and needs-based long-term integrated transport settlement (spanning transport modes

and combining revenue and capital funding) could be provided to allow decision making and funding capability to take place closer to the people affected by decisions. This will in turn support clearer management and more effective maintenance of local transport assets. To inform the devolution process, central government should consider the appropriate levels of local governance to develop and implement transport infrastructure.

To help build local authorities’ capabilities, government should **support socially and financially sustainable models of spending and raising funds**.

A clear national agenda, strategy and pipeline is essential to de-risk the necessary revenue-raising requirements of local governments. Clear targets related to the Climate Change Act or Air Quality Action Plans should support places – particularly outside of London – use the full spectrum of policy instruments. Central government will need to support this transition and foster a culture of experimentation, particularly to begin with, for example, match-funding any revenue raised at a local level for transport investment, to incentivise local action towards such schemes. Additionally, central government should explore further revenue avenues for local authorities by expanding local fiscal powers and tools for land value capture.

The voice of Britain's transport users and workforce should be reflected at the heart of transport plans

What we heard

We heard a wide range of views from industry experts on ensuring the needs of transport users are at the forefront when developing transport projects. We also heard from trade unions about the importance of constructive industrial relations, and of ensuring the right structures are in place to ensure the expertise and experience of the workforce can inform delivery. Both are critical in ensuring there is a fair, inclusive and affordable network and that socio-economic benefits are unlocked across the regions. Feedback included:

- Inclusion of expertise and diverse views are necessary for effective development and implementation – this included a wide range of voices from accessibility and equalities groups.
- There is still a disparity between the different regions in England on the quality and connectivity of the transport networks.
- More engagement with trade unions and transport users by government would be beneficial to ensure the effectiveness of future government transport infrastructure plans.
- Consultations are often perceived to be ignored and can feel like a tokenistic exercise.
- Women and disabled people feel disproportionately impacted by unreliability or inconsistency at various stages of their journey on public transport meaning they often have to meticulously plan every section of it. This impacts their ability to access work and is disruptive to their day-to-day lives.
- Constructive industrial relations bring substantial shared benefits for the workforce, their employers and the travelling public.





Case study

Lyon, France – making the network more accessible

In Lyon, France, a €100 million investment made the transit network nearly fully accessible, allowing some 1.7 million people to use it. Every bus in the network is completely accessible and 70% of bus stops were redesigned for those with limited mobility. Nearly all trams and stations are also fully accessible. A service called Optiguide links vulnerable travellers with an assistant, and the public transport app highlights the most accessible routes to a location. This implementation has improved the inclusivity of the transit system and ensures that opportunities are not constrained by travel.³⁶

Challenges

- **Voice of the customer not reflected in design** – the views and needs of significant sections of transport users, often the most vulnerable, are perceived to be systemically neglected through the design, implementation and end-use of transport infrastructure.
- **Consultation processes can be a barrier** – it was noted there were positive attempts to consult with equalities groups, however there were high volumes of consultations (from different companies), and there could be greater coordination from DfT of the different bodies for consistency.
- **Inconsistency of services** – users reflected that transport services were inconsistent in evenings particularly outside of London and this limited opportunities to use public transport.
- **Safety and security is fundamental** - when making choices to use public transport, particularly for women and disabled users where this may deter them from making journeys.

Policy recommendations

Putting the user first when designing transport infrastructure

To facilitate the connection of transport with wider social outcomes, government should determine the right forums are in place to ensure the voice of the user is heard and reflected in the design and delivery of transport infrastructure projects as appropriate. Equally, it is important workforce views within in the transport industry are represented and they are engaged through the appropriate mechanisms when changes to the transport network are introduced.

In conjunction, government should assess the best approaches across the UK regarding urban transport and prioritise instilling a culture and communication system of sharing best practice between individual systems and networks across the UK. There are positive lessons to be taken from various government departments, Combined Authorities and pieces of policy. A government review could bring elements like Wales' Future Generations Act, the approach in Scotland with STPR2, innovative PPP financing models from London, and the emerging Manchester Bee Network to the table to develop a cohesive, UK-wide approach.

Improving consultation and engagement processes to better reflect user views

In developing and implementing policies and regulations, government could ensure that there is greater engagement to ensure greater diversity of views, particularly from groups that have been historically under-represented. The UK Government Office for Science has endorsed the EU's recommendation for wider public engagement with future transport issues to better understand the socio-cultural and structural determinants of future transport demand. They, added that all future mobility landscapes should be subject to a full social impact and equity assessment to understand how mobility interventions will differently impact social groups and geographic locations³³. Methods of incentivising engagement of these groups could include citizen panels, which have been effective in some European projects³⁴ or through creation of 'customer champions'. Deliberations should take place across the entire process of

infrastructure delivery. Providing greater consideration of under-represented views will help modernise infrastructure delivery processes, moving away from outdated or narrow assumptions on how different users of UK transport experience the services.

Integration of robust and comprehensive engagement processes can also reduce overall costs as expensive retrofit measures to address issues once infrastructure has been delivered are prevented. For example, the city of Budapest initiated a public discussion after opening a new metro line to re-orient its ground-level public transport network in an effort to reduce double capacity and save on overall running costs. Seven thousand citizens participated electronically, and the proposals with the greatest public support were eventually accepted³⁵.

Future infrastructure development must recognise the importance of constructive industrial relations across our rail and urban transport infrastructure, and the vital role that a skilled and engaged transport workforce must play in delivering our ambitions. All the evidence shows that where people at work are treated with dignity and respect, higher trust sits alongside higher productivity and increased service reliability. Collective bargaining brings gains for employers and workers, with better jobs, more training, fewer long-hours working and better health and safety. Workplaces with recognised unions also benefit from lower employee turnover, higher innovation and a greater likelihood of high-performance working practices.

A sustainable approach to developing sector skills

As our transport infrastructure expands, we should ensure that trade unions and employers work together to deliver the high-quality, high-skill jobs that are essential for effective delivery and ensure that the experience and expertise of transport workers informs successful infrastructure growth.

The panel recognises that there has been a significant drain and competition for skills and knowledge from other markets and countries. During the evidence sessions we heard about skills being redirected from areas like rail electrification to electricity utilities and similar examples to other sectors.

A more predictable, longer-term plan as laid out in Section 1 of this report will help retain such skills, but we need a sustainable long-term approach to tackling the skills shortage and this needs to be across key infrastructure industries not just in transport. This should include a much more ambitious approach towards training apprenticeships. Though social value is present in procurement contracts, a higher weighting could encourage this.

Harnessing technology for the benefit of users

There are also opportunities to innovate and harness technology, for the benefits of all users. Though not in primary scope of this review, there are simple solutions such as apps to support users to make informed transport choices. For example, making practical decisions on routes that are accessible can make a real difference to the user experience.

Conclusion

We believe this is a crucial moment for the sector, a tipping point. While there is a willingness from the sector to invest and goodwill remains high, we have also heard evidence that some parts of the supply chain are looking at opportunities elsewhere in the world. If we don't act very soon, there is a significant risk that confidence doesn't return and we lose the skills and competence at many levels in government and supply chains, that makes it difficult for us as a nation to deliver our transport plans Greener, Faster, Cheaper as described herein.

The Expert Panel is excited that the proposals in this review can create the economic, social and environmental benefits described in this report. We hope the ambition and vision laid out is enough to set the required paradigm shift and this enables confidence to return to the UK's transport sector.

Time is of the essence, and we hope that this new Labour government will act swiftly, adopt the proposals laid out in this report, and start the prosperous journey in partnership with the UK's transport sector and our trade unions to reap the very significant benefits for our nation.



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Stephanie Howell, Public Affairs Lead, UK
Paul Addison, Associate Director
Sarah Clark, Consultant
Mark Havenhand, Associate Director
Darren Shirley, Transformation and Project Acceleration Leader
Richard Greer, Director, Arup Fellow
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Secretariat for the Review:
Jason Prince, Director Urban Transport Group
Monta Drozdova Policy and Research Advisor
Saila Acton, Business Co-ordinator

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