

# APPGI and ICE Green Paper: Accelerating the delivery of the Integrated Rail Plan

June 2022

## Executive summary

In November 2021, the UK Government published the Integrated Rail Plan for the North and Midlands (IRP). It sets out a core pipeline of rail schemes totalling £96.4 billion to be delivered between the mid-2020s and the mid-2040s:

- completion of High Speed 2 (HS2) Phase One and 2a
- HS2 Phase 2b Western Leg
- various smaller rail schemes in the North and Midlands
- the Transpennine Route Upgrade, including full electrification of the route
- HS2 East Core Network, including the HS2 Eastern Leg, Midland Main Line and East Coast upgrade
- a core Northern Powerhouse Rail network between Liverpool and York.

Work is already underway on some of these schemes, such as HS2 Phases One and 2b. However, there is still no certainty on dates for many projects and most will have to pass a further gateway review before they receive the go-ahead.

The government has also taken an adaptive approach to the IRP, scaling back many of the proposals that had been developed while leaving open the possibility for further projects to be approved outside of the core pipeline.

Public transport has a key role to play in achieving the UK's long-term national objectives, in particular rebalancing the economy to level up underperforming regions and transitioning to net zero. There is little time to lose in delivering the major strategic infrastructure projects needed to achieve those goals.

The All Party Parliamentary Group on Infrastructure (APPGI) and Institution of Civil Engineers (ICE) are therefore launching this Green Paper consultation to gather evidence and views on how we can accelerate progress on what has already been agreed in the IRP. We are seeking to hear from infrastructure professionals, civil engineers and other interested stakeholders regarding three key questions:

**Question 1:** What are realistic timescales for delivery of the individual schemes in the IRP core pipeline?

**Question 2:** What measures can be taken to accelerate the delivery of individual projects in the pipeline and the plan as a whole?

**Question 3:** What principles could be used to determine what could be added to the core pipeline in the future and when?

The consultation will close on **Friday 5<sup>th</sup> August 2022**.

The findings from responses to this paper, alongside further evidence gathering, will be formed into a policy paper with recommendations which will be published in the autumn.

The first part of this Green Paper sets out the background to and rationale for developing the IRP and the decision to take an adaptive approach based around a core pipeline of projects.

The second part focuses on how we can accelerate delivery of the IRP and the key questions being asked in this consultation.

## Background

The IRP brings together a raft of major projects within a single strategy, including High Speed 2 (HS2), the Transpennine Route Upgrade (TRU) and the Midlands Rail Hub. It sets out a £96.4 billion pipeline of rail projects for the coming decades – the largest rail investment ever made by any government. It targets improving both north–south and east–west rail links through a combination of new track and upgraded lines.

However, the strategy alters many of the proposals that had been developed for the future of rail in the North and Midlands. The most notable changes include:

- The proposed Eastern Leg of HS2 will be significantly scaled back. A new high-speed line will connect Birmingham and East Midlands Parkway, from where the upgraded Midland Main Line will allow HS2 trains to reach Nottingham, Derby, Chesterfield and Sheffield. The question of how HS2 trains can best be run to Leeds will be assessed separately.
- The Northern Powerhouse Rail (NPR) strategy developed by Transport for the North (TfN) is reduced to a ‘core NPR network’ focused on improving connections between Liverpool, West Yorkshire and Greater Manchester.
- The TRU has been expanded to electrify the whole route, install full digital signalling and add longer sections of three- and four-tracking.

Recently the government also cancelled the Golborne Link, which would have connected HS2 with the West Coast Main Line north of Manchester to allow HS2 trains to travel between England and Scotland. The government cited the Union Connectivity Review’s (UCR) conclusions that the link would not resolve all the identified issues and alternatives could provide more benefits. The government will consider alternatives for connecting HS2 trains with Scotland.<sup>1</sup>

### Why do we need an Integrated Rail Plan?

In February 2020 the independent Oakervee Review concluded that the government should proceed with the full HS2 Y-network. However, the Review cautioned that HS2 had been designed largely in isolation from the conventional rail network.<sup>2</sup>

It recommended that a wider rail plan for the North and Midlands be developed to ensure HS2 is integrated with other transport strategies, namely NPR and Midlands Engine Rail, which were expected to use sections of HS2 infrastructure. The plan should also help maximise the benefits of transport investment for the regions and optimise delivery by determining the most effective sequencing of projects.

In response, the government announced it would develop an integrated plan for rail in the Midlands and the North. It asked the National Infrastructure Commission (NIC) to assess the rail needs across both regions to inform that plan.

The need to improve transport connectivity and capacity for passengers and freight in the Midlands and the North has been a long-standing infrastructure challenge.<sup>3</sup> The NIC’s Rail Needs Assessment for the Midlands and the North (RNA), published in December 2020, reiterated the detrimental impact of poor connectivity on productivity and quality of life in the

<sup>1</sup> Department for Transport (2022) [Removing the Golborne Link from the HS2 Bill](#)

<sup>2</sup> Department for Transport (2020) [Oakervee Review](#)

<sup>3</sup> ICE et al. (2016) [National Needs Assessment – A Vision for UK Infrastructure](#)

regions. It highlighted limited capacity that had not kept pace with demand, slow journey times between major cities, and unreliable service levels.<sup>4</sup>

HS2 only partly addresses these issues, with its focus on improving long-distance, north–south connectivity. However, the RNA makes clear the benefits of investing in regional, predominantly east–west rail links, which tend to be inferior to long-distance links but have greater potential to deliver wider socio-economic benefits to regions' cities.<sup>5</sup>

Thus, the IRP attempts to address two concerns. First, optimising planning and delivery by coordinating major rail projects in an overarching strategic framework. Second, committing to a pipeline of rail projects to reverse decades of underinvestment and help unlock economic and social opportunities in the North and Midlands.

Realising those socio-economic benefits is key for delivering the government's levelling up agenda. While transport is not the whole solution to regional inequality, the NIC has called it 'the sector with the most opportunity for helping to reduce disparities between places'.<sup>6</sup>

The government's Levelling Up White Paper sets out 12 missions, including a pledge that by 2030 local public transport connectivity across the country will be significantly closer to the standards of London. It highlights the investment outlined in the IRP as a key part of achieving this objective.<sup>7</sup>

The IRP also has a role to play in the UK's transition to net zero. Surface transport is the largest source of CO<sub>2</sub> emissions in the UK, contributing 23% of territorial emissions in 2019.<sup>8</sup> With these deriving primarily from the use of petrol and diesel in road transport, investment in rail is needed to encourage modal shift from private vehicles to public transport. Electric rail is one of the cleanest forms of transport and the Climate Change Committee has called for electrification of 55–60% of the rail network and growth in passenger traffic of 58% by 2050 as part of the pathway to net zero.<sup>9</sup>

### An adaptive approach to rail planning

In the RNA, the NIC called for 'clarity, stability and pragmatism' around future rail planning and warned of the risks of overcommitting to projects. It cautioned that the total cost of all the proposed rail schemes for the Midlands and the North would likely far exceed available funding.<sup>10</sup> Furthermore, the industry would lack the capacity to deliver so many major projects in the envisioned timescale.<sup>11</sup>

As the IRP was being developed, the Covid-19 pandemic drastically reduced public transport usage and created uncertainty about future demand and travel patterns. ICE has argued that the underlying drivers behind future demand growth will remain unchanged, including population growth and the need to decarbonise transport. Nevertheless, the uncertainty strengthens the case for building greater flexibility into the system.<sup>12</sup>

In that context, the NIC recommended taking a targeted, adaptive approach to rail investment. This would mean committing to a core pipeline of affordable schemes, giving certainty for stakeholders, with the possibility of adding further schemes or enhancements subject to timeframes, funding and future demand. Additional projects could also be delivered alongside the core pipeline through other programmes or the normal rail enhancement programme.

The government argues it has heeded this advice, announcing a core network and taking an adaptive approach to projects beyond that. It argues the IRP will deliver similar or faster journey-time improvements than the original HS2 and NPR plans for most destinations. Furthermore, it says many of the benefits will arrive sooner, in some cases up to 10 years earlier, and that value for money is also similar to or better than under previous plans.

<sup>4</sup> National Infrastructure Commission (2020) [Rail Needs Assessment for the Midlands and the North](#)

<sup>5</sup> Ibid.

<sup>6</sup> National Infrastructure Commission (2021) [The Second National Infrastructure Assessment: Baseline Report](#)

<sup>7</sup> Department for Levelling Up, Housing and Communities (2022) [Levelling Up the United Kingdom](#)

<sup>8</sup> Climate Change Committee (2020) [Sixth Carbon Budget](#)

<sup>9</sup> Climate Change Committee (2020) [The Sixth Carbon Budget: Surface Transport](#)

<sup>10</sup> National Infrastructure Commission (2020) [Rail Needs Assessment for the Midlands and the North](#)

<sup>11</sup> Transport Committee (2022) [Oral Evidence: Integrated Rail Plan, HC 974](#)

<sup>12</sup> ICE (2020) [Covid-19 and the New Normal for Infrastructure Systems – Next Steps](#)

## Selecting projects for the core pipeline

The IRP core pipeline is a mix of new track and upgrades. However, by scaling back some of the proposed new HS2 and NPR lines, it shifts the balance towards upgrading existing lines to deliver service improvements. Those changes include reducing the HS2 Eastern Leg and scrapping most of the proposed NPR high-speed link between Manchester and Leeds via a new station in central Bradford.

It appears that ease of delivery and an indicative funding envelope were key factors in deciding which schemes to take forward. The government argues it has sought the best balance between value for money, delivery time and achieving service improvements. It also says that upgrades have a lower carbon and biodiversity impact than new lines.<sup>13</sup>

ICE has previously acknowledged the benefits of a continuous programme of short- and medium-term projects that deliver incremental improvements to complement major projects.<sup>14</sup> However, upgrades alone are unlikely to deliver the transformational changes to capacity and connectivity required to achieve the UK's wider socio-economic and environmental goals.<sup>15</sup>

New, segregated high-speed lines can achieve the greatest capacity improvements by allowing more intercity services while releasing capacity on existing lines for more local, regional and freight services. Under a mainly upgrade approach, intermediate stations may see little or no benefit if the existing network has to accommodate more high-speed services.

The government's own analysis suggests the options prioritising new track would deliver the greatest increase in capacity and connectivity, albeit while scoring lowest on affordability and value for money.<sup>16</sup> An upgrade-priority approach also constrains the network's ability to respond to substantial growth in demand.<sup>17</sup>

## Accelerating delivery of the IRP

### When could the IRP be delivered?

Some projects outlined in the IRP are already underway. The TRU and Midland Main Line electrification both predate the strategy, while construction on HS2 Phase One commenced in 2020.

The hybrid Bill authorising construction of HS2 Phase 2a, which will deliver an extension from Birmingham to Crewe, gained Royal Assent in 2021. Phases One and 2a are both scheduled to open between 2029 and 2033.<sup>18</sup> The hybrid Bill to grant the powers required to deliver HS2 Phase 2b between Crewe and Manchester recently passed its second reading in Parliament.

Nevertheless, the broad timeframes in the IRP mean delivery dates are still unclear. The government claims passengers could see some NPR services running this decade, significant improvements in the Midlands and South Yorkshire by 2030 and for Leeds and the North East during the 2030s.<sup>19</sup>

However, most schemes still face further gateway reviews to manage costs and value for money before they can receive the go-ahead.<sup>20</sup> Further legislation is also required for parts of the plan, including a Bill for the HS2 Eastern Leg. This means some schemes could only be delivered by the early 2040s.

The IRP is expected to contribute to achieving the Levelling Up missions, which have a 2030 target, and the legally binding target of transitioning to net zero by 2050. Given the delays already preceding publication of the IRP, there is little time to lose to make the required progress towards those national objectives.

<sup>13</sup> Department for Transport (2021) [Integrated Rail Plan for the North and Midlands](#)

<sup>14</sup> ICE (2020) [ICE Response to the National Infrastructure Commission Rail Needs Assessment for the Midlands and the North](#)

<sup>15</sup> National Infrastructure Commission (2020) [Rail Needs Assessment for the Midlands and the North](#)

<sup>16</sup> Department for Transport (2022) [Integrated Rail Plan for the North and Midlands: Technical Annex](#)

<sup>17</sup> Rail Delivery Group (2022) [Response to: House of Commons Transport Committee Inquiry – 'The Integrated Rail Plan'](#)

<sup>18</sup> HS2 Ltd (2021) [Phase 2a: West Midlands to Crewe](#); HS2 Ltd (2021) [Phase One: London to West Midlands](#)

<sup>19</sup> Department for Transport (2021) [Integrated Rail Plan for the North and Midlands](#)

<sup>20</sup> Ibid.

Major infrastructure projects and programmes suffer from a tendency to cost more or take longer than initial estimates outline. Indeed, while the government appears to have prioritised upgrades over new lines in a bid to deliver benefits to passengers more quickly, evidence suggests upgrades can often cost more and take longer than planned.<sup>21</sup>

In its most recent annual performance assessment, the Office of Rail and Road concluded that Network Rail had largely delivered its planned maintenance and enhancements programme, despite the impact of the Covid-19 pandemic.<sup>22</sup> Network Rail itself reported achieving 81.8% of enhancement milestones in 2020/21 and is on track to deliver all enhancement milestones for the current year.<sup>23</sup>

However, the NIC notes that on average, construction schedules for rail projects have ended up being between a quarter and a third longer than predicted, although this differs between project types.<sup>24</sup>

In recent years, both the West Coast Main Line modernisation and Thameslink programme extended their delivery schedules part way through construction, by 18 months and three years respectively. The Great Western railway electrification had to be scaled back to reduce risks and control costs.<sup>25</sup> Overall costs for the West Coast upgrade rose by £7.8 billion, while the cost of electrifying the Great Western railway grew by £2.4 billion between 2013 and 2016.<sup>26</sup>

In 2019, ICE published a paper setting out recommendations for limiting project overruns. This argued that a move away from a transactional arrangement to an enterprise model, such as the Infrastructure Client Group's Project 13, with more collaborative working, better governance, data-led frameworks and sharing of best practice, could support improvements in project delivery.<sup>27</sup>

The Construction Playbook does reflect several recommendations ICE made in that paper, including how to avoid guesswork on project costs and forecasts, improving the focus on outcomes from projects, and decarbonising the delivery of infrastructure.<sup>28</sup>

**Question 1:** What are realistic timescales for delivery of the individual schemes in the IRP core pipeline?

### How could delivery of the IRP be accelerated?

In the RNA, the NIC highlights four areas that could be addressed to help deliver major projects faster:<sup>29</sup>

- acquiring the necessary consents for new rail schemes
- a regulatory framework which does not support long-term investment
- lack of certainty in the supply chain
- the practice of closing existing lines only at weekends and overnight to deliver upgrades.

The IRP and subsequent developments go some way to addressing these concerns. The government has indicated that it will end the presumption that Parliament can deal with only a single hybrid Bill at a time to expedite the process and enable consents to realise faster.<sup>30</sup>

The core pipeline and adaptative approach is intended to provide the certainty of investment that the supply chain needs to plan and to allow for careful phasing and sequencing of projects. The NIC argues that this approach should help identify

<sup>21</sup> National Audit Office (2014) [Lessons from Major Rail Infrastructure Programmes](#)

<sup>22</sup> Office of Rail and Road (2021) [Annual Assessment of Network Rail April 2020 to March 2021](#); Network Rail (2021) [Half-Year Performance Report April–October 2021](#)

<sup>23</sup> Network Rail (2021) [Annual Report and Accounts 2021](#)

<sup>24</sup> National Infrastructure Commission (2020) [Rail Needs Assessment for the Midlands and the North](#)

<sup>25</sup> National Audit Office (2014) [Lessons from Major Rail Infrastructure Programmes](#)

<sup>26</sup> National Infrastructure Commission (2020) [Rail Needs Assessment for the Midlands and the North](#)

<sup>27</sup> ICE (2021) [ICE Submission to the Transport Committee on Major Transport Infrastructure Projects: Appraisal and Delivery](#)

<sup>28</sup> Cabinet Office (2020) [The Construction Playbook](#)

<sup>29</sup> National Infrastructure Commission (2020) [Rail Needs Assessment for the Midlands and the North](#)

<sup>30</sup> Department for Transport (2021) [Integrated Rail Plan for the North and Midlands](#) and APPGI meeting

schemes that can be implemented independently of other programmes and are therefore easier to accelerate, while ensuring that critical dependencies between other schemes are considered.<sup>31</sup>

However, some of these challenges remain outstanding or only partially addressed and require further consideration in relation to the IRP.

### **Governance and oversight: delivering multiple major projects concurrently**

Any major infrastructure plan needs to clarify the governance arrangements required for its delivery and operation. However, important details about the IRP's governance and oversight arrangements remain unclear. Without that clarity, there is a risk of further delays to delivery or future cost and time overruns.

A significant number of major rail projects are now underway or in development, with responsibility for delivering them currently split between Network Rail and HS2 Ltd. The IRP also envisions Great British Railways (GBR) as taking over responsibility from Network Rail for upgrading the existing network and ensuring the integration of HS2 into the network. GBR may deliver long-term benefits, including accelerating infrastructure delivery, but there is a risk it could initially slow down projects if it prompts further reviews.

There is now a dedicated Minister of State in the Department for Transport (DfT) to oversee these major rail projects. However, in his recent discussion with the APPGI on delivering the IRP, the Minister noted that the sheer number of major projects in the pipeline presents unique oversight challenges.<sup>32</sup> One solution could see more of the detail linked to project selection and delivery devolved to bodies like GBR and the subnational transport bodies (STBs), with central government more focused on overall accountability for outcomes and expenditure.

With the programme largely being run as discrete projects, consideration could also be given to the benefits of a portfolio approach for mitigating risks, managing phasing and sequencing and boosting efficiency.<sup>33</sup> The National Audit Office (NAO), in a review of recurring problems in delivering major projects including HS2, highlighted other examples of best practice, including transparency, honesty and proactively evolving governance arrangements as the project develops.<sup>34</sup>

### **Making best use of local expertise**

The value of place-based decision-making has been demonstrated through the devolution success of combined authorities and Metro Mayors. The relevant local authorities and STBs were instrumental in developing the rail proposals under consideration for the IRP.

However, many expressed concern that years of planning and coordination between stakeholders had been disregarded in the final strategy.<sup>35</sup> The DfT took over as sole client for the NPR programme in early 2022, with TfN reduced to a co-sponsor, offering strategic direction, analysis and advice.<sup>36</sup>

ICE has long called for a strong role for STBs in coordinating and delivering public transport schemes.<sup>37</sup> There remains a need to build support for the IRP at local level; however, the STBs can also be instrumental in developing and testing delivery plans for the major projects, as well as integrating them with other local infrastructure schemes.

More broadly, subnational bodies could play a key role in unlocking the wider benefits the IRP could deliver. These could include complementary investments in linked schemes, such as improving active travel infrastructure along the IRP core pipeline routes.

<sup>31</sup> National Infrastructure Commission (2020) [Rail Needs Assessment for the Midlands and the North](#)

<sup>32</sup> Andrew Jones MP (2022) [What Did the UK Transport Minister have to Say on the Integrated Rail Plan?](#)

<sup>33</sup> National Infrastructure Commission (2022) [Managing Uncertainty in the Second National Infrastructure Assessment](#)

<sup>34</sup> National Audit Office (2020) [Lessons Learned from Major Programmes](#)

<sup>35</sup> South Yorkshire Combined Mayoral Authority (2022) [Written Evidence Submitted to the Transport Committee](#)

<sup>36</sup> Transport for the North (2022) [Integrated Rail Plan Update](#)

<sup>37</sup> ICE (2016) [State of the Nation 2016: Devolution](#)

## Managing disruption

The government argues that the IRP will cause less disruption than previous plans, although there is little detail available about how this will be achieved. The shift towards prioritising upgrades adds urgency to the need for clarity on this point, as they typically require extensive line closures. Any major works, whether upgrades or new lines, will also impact the wider transport network, including strategic roads, which will need to be managed.

The NIC has called for further study of the scale of disruption caused by major works and how its impact can be mitigated. It also suggested a rethink of the typical approach to upgrades, which is to close lines at the weekend and overnight while keeping the line otherwise operational. Full line closures could reduce costs and speed up delivery but may be unpopular with passengers and freight users.<sup>38</sup>

Indeed, the case for a rethink has been strengthened by the impact of the Covid-19 pandemic on rail usage. With evidence suggesting that leisure travel has recovered faster than traditional commuter travel, operators may need to review their business models and look at windows outside weekends and bank holidays for line closures.<sup>39</sup>

## Navigating political and economic uncertainty

Changing economic or political circumstances are a risk to all major long-term projects. The IRP core pipeline is a clear statement of intent, but with much detail still outstanding and many of the schemes still required to pass further gateway reviews, there are questions as to how resilient it will be to changing circumstances and future political indecision.

In discussion with the APPGI, the Transport Minister argued that the number of individual projects already underway will build momentum behind the overall programme and indicated that further announcements could come soon.<sup>40</sup>

However, several linked rail strategies are also subject to political uncertainty. The UCR sets out recommendations for strengthening the network of key strategic transport corridors across the four nations of the UK, which the government used to explain its decision to cancel the Golborne Link.<sup>41</sup> However, more broadly there is a possible disconnect between the UCR's vision of holistic transport corridors and the connectivity forfeited by the reprioritisation of certain NPR schemes in the IRP.

At the time of writing, the government has yet to formally respond to the UCR. Other related strategies include the Rail Network Enhancements Pipeline, which is due to be updated, and Network Rail's Traction Decarbonisation Network Strategy (TDNS), which has yet to be fully endorsed by the government.

In the case of the TDNS, there appears to be a disconnect between the IRP's pledge to decarbonise over 75% of Britain's main trunk routes through electrification, and the 85% of non-electrified track across the UK that Network Rail argues should be electrified.<sup>42</sup>

Alongside the political risks is the challenge of economic uncertainty and the current environment of high inflation linked to the rising costs of energy and materials and skills shortages. This is new territory for most people in the developed world.

Industry needs to plan ahead to ensure adequate supply of skills and materials. It has the opportunity to use the clarity provided by the core pipeline to plan and drive down materials costs, which could create some headroom within the funding envelope. This may become critical if inflation continues to rise. However, the volume of major projects in development concurrently also places an onus on project owners to coordinate demand for materials and skills to ensure adequate supply and avoid unnecessary competition that could inadvertently drive prices higher.<sup>43</sup>

<sup>38</sup> National Infrastructure Commission (2020) [Rail Needs Assessment for the Midlands and the North](#)

<sup>39</sup> Rail Delivery Group (2021) [Rail journey trends show leisure journeys nearly back on track but slower return of workers puts city centre recovery at risk](#)

<sup>40</sup> Andrew Jones MP (2022) [What Did the UK Transport Minister have to Say on the Integrated Rail Plan?](#)

<sup>41</sup> Department for Transport (2021) [Union Connectivity Review Final Report](#)

<sup>42</sup> Network Rail (2020) [Traction Decarbonisation Network Strategy – Interim Programme Business Case](#)

<sup>43</sup> ICE (2022) [Presidential Roundtable Summary: What Impact will Inflation have on Global Infrastructure Pipelines?](#)

The economic context does offer an opportunity for the sector to innovate and do things differently. Long-term procurement approaches, such as Project 13, can accommodate more variability, while both using fewer materials to offset the impact of inflation and increasing efficiency and productivity to accelerate delivery. Approaches such as modern methods of construction (MMC) and Design for Manufacture and Assembly (DfMA) are also becoming more mainstream as planners seek to cut costs.

**Question 2:** What measures can be taken to accelerate the delivery of individual projects in the pipeline and the plan as a whole?

### How could the core pipeline be expanded?

The decision to develop an IRP core pipeline means many of the major NPR and HS2 proposals were scaled-back or abandoned altogether. However, the government's adaptive approach to delivering rail improvements in the North and Midlands paves the way for further projects to be greenlit in the future.

The adaptive approach is intended to help navigate uncertainty. In the context of rail, this would enable decision-makers to respond to future demand and economic growth. The NIC argues that keeping options open is also beneficial in the context of long-term goals and challenges, such as net zero and adapting to climate change.<sup>44</sup>

Nevertheless, in delivery terms there is a risk that leaving the construction pipeline somewhat open could cut against the level of certainty the industry requires to plan ahead. Navigating this and finding the right balance will be challenging.

The IRP makes clear that additions would be subject to delivering the core network projects on time and within budget. However, the strategy itself has little more to say about who will make future decisions on adding to the core pipeline and what other principles will guide how or when it will identify and prioritise projects to take forward.

One factor might be understanding the cost of mistakes or inaction. While an adaptive approach can add costs to a project, these may be offset by the higher costs of locking into the wrong approach too early. Economic infrastructure tends to have a long lifespan, so the impact of mistakes can endure. Indeed, concern to avoid those mistakes can lead to costly inaction which an adaptive framework can help mitigate against.<sup>45</sup>

Value for money is an important consideration in appraising projects; however, ICE has long advocated a shift in thinking around what constitutes success. This would mean attaching more weight to the whole-life benefits of projects and programmes – be they economic, social or environmental.<sup>46</sup> The Construction Playbook, published in 2020, reflects this by improving the focus on project outcomes.

Research commissioned by ICE shows that the public does not view a low cost of construction as the main measure of success for major infrastructure projects. Instead, people want to hear more about their wider benefits. The research found the public was more concerned about whether projects regenerate communities, are reliable and strengthen economic growth than about the overall cost of construction.<sup>47</sup>

Strategic decision-making on any planned infrastructure investment is vital. This means any future projects should be greenlit based on clearly defined objectives and a robust evidence base demonstrating how they work in synergy with the core network, other transport strategies and wider national objectives.

Alongside the National Infrastructure Strategy, key national strategies such as the Net Zero Strategy and the Levelling Up White Paper provide a framework of long-term national objectives. Their strategic objectives fit well with the UN Sustainable Development Goals (SDGs) as they help to provide UK context for progress against economic, social and

<sup>44</sup> National Infrastructure Commission (2022) [Managing Uncertainty in the Second National Infrastructure Assessment](#)

<sup>45</sup> Ibid.

<sup>46</sup> ICE (2019) [Reducing the Gap between Cost Estimates and Outturns for Major Infrastructure Projects and Programmes](#)

<sup>47</sup> Ibid.

environmental dimensions of sustainability and confirm the need to tackle specific, deep-rooted and long-term challenges in the UK.

Infrastructure has a vital role to play in delivering the SDGs. Indeed, 72% of the SDG indicators are linked to networked infrastructure investment and 92% when all forms of infrastructure are considered.<sup>48</sup> It seems sensible to make contribution to net zero, levelling up and the SDGs key considerations in deciding on any future rail investment.

Alongside net zero and climate mitigation, adaptation and resilience are increasingly important as the impacts of climate change become more apparent. However, the IRP has little to say about how it will ensure the new and existing network, including the existing electrification, is resilient to the impact of more extreme weather.<sup>49</sup>

Enabling more movement of freight by rail is critical to both net zero and boosting local economic growth. However, the IRP has little to say about freight beyond reiterating the ambition that the pipeline will free up capacity on the existing network for more freight. The Transport Minister acknowledged the importance of unlocking benefits for freight in his discussion with the APPGI.<sup>50</sup> The impact of future projects on freight capability could be a factor in how the pipeline is expanded.

Use of these frameworks could be further enhanced by tools such as local needs assessments, informed by local authorities, the STBs and communities. These may cover factors such as inclusion and accessibility on the network, while ensuring investment is place-based and directed towards regions and communities most in need. Empowering subnational bodies could also help expedite the decision-making process.

However, given the scope within an adaptive framework for delaying decisions, changing course and reprioritising projects, demonstrating that those decisions are based on robust evidence will be important. Given the geographical scope of the IRP, this will also help justify decisions to regions and communities who are impacted, whether as beneficiaries of investment or those who receive no investment.

**Question 3:** What principles could be used to determine what could be added to the core pipeline in the future and when?

## About the authors

### APPG Infrastructure

The All Party Parliamentary Group on Infrastructure (APPGI) is Parliament's leading cross-party group dedicated to economic infrastructure in the UK.

The APPGI is chaired by former Treasury and Transport Minister Andrew Jones MP. Supporting him as Co-Chair is Alan Brown MP, the Shadow Spokesperson on Energy and Climate Change for the SNP.

### ICE

Established in 1818 and with over 96,000 members worldwide, the Institution of Civil Engineers exists to deliver insights on infrastructure for societal benefit, using the professional engineering knowledge of our global membership.

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<sup>48</sup> ICE (2020) [ICE Strategy Sessions: How Can Infrastructure Help Achieve the UN Sustainable Development Goals?](#)

<sup>49</sup> Andrew Jones MP (2021) [What the Integrated Rail Plan will Deliver on the Ground](#)

<sup>50</sup> Andrew Jones MP (2022) [What Did the UK Transport Minister have to Say on the Integrated Rail Plan?](#)