Edge Roundtable 153
on the Costs and Impacts of Delays to Critical Infrastructure
16th November 2023 – Meeting Notes

The Roundtable was organised by the Edge at the invitation of the National Infrastructure Commission to address the issue of delays to infrastructure provision. The session was held at the headquarters of the Institution of Civil Engineers, London

Overview

The Roundtable session was planned around three indicative areas of infrastructure provision; Grid transformation, Clean water and Transport. Each topic was examined through lenses of environmental, social and economic cost and impact, with the intention of gathering evidence and learning lessons for infrastructure planning more generally.

The discussion was held following the publication of the Second National Infrastructure Assessment (NIA2), (NIC, October 2023)

Across the different areas of infrastructure delivery the discussion raised similar points of concern and proposals for improvement including the need for:

- New systems of infrastructure provision
- Forward and strategic planning to ensure adequate and equitable provision of infrastructure services, necessitating a properly resourced planning service and a UK-wide, digitally-enabled land-use strategy.
- Full attention to be given to environmental and social benefits/harms alongside economic ones
- Adequate and well-targeted public sector investment, including for cost-effective asset maintenance
- High quality and accessible information derived from effective data transparency and sharing
- Good and trustworthy communication
- Rapid and robust political decision-making following public engagement
- Long-term political certainty if the private sector is to provide the investment deemed necessary
- Timely and reliable implementation. Promises need to be kept.

Robin Nicholson of the Edge and Chris Richards of the ICE welcomed everyone to the session. Robin emphasised the importance of collaboration and bringing the industry together

Karl Fitzgerald of the IPA chaired the session.

- The IPA is very much behind the subject of the discussion
- The IPA's role is to improve the UK's project portfolio
- Echoes the principle of collaboration and working together including (and across) government and the private sector
- Delivering the change required is a formidable challenge, but one that the IPA relishes
- Interested in both delivery projects and the outcomes they deliver.
- Delays impact in particular on the benefits achieved from projects

John Armitt – introduction

Key issues are 'What we do and how we do it'.

- The National Infrastructure Commission (NIC) is an independent executive agency of Treasury. It advises government on its long-term infrastructure needs and published its second five yearly assessment last month. Its remit is to recommend actions that will generate economic growth across the UK.

Second National Infrastructure Assessment

- Topics:
    - The UK's economic infrastructure needs over the next 20-30 years;
    - The cost of meeting them and where the investment will come from; and
    - Necessary policy and regulatory changes.

- Givens:
  - the 2050 net zero carbon emissions commitment and interim carbon budgets.
  - Supporting and improving the UK's economic growth and quality of life.
- Three big strategic challenges. Modernised economic infrastructure to:
  - promote productivity and economic growth across all regions (principally transport and digital networks);
  - support the transition to net zero; and
  - improve climate resilience and the state of the natural environment - a huge shared endeavour across all sectors.
- Funding
  - Public expenditure must fit within the 'fiscal remit' of 1.1 to 1.3% of GDP - £30 billion per year, plus necessary private investment resulting in an approximate 40%-60% public-private split.
  - Significant investment is required for the UK to meet net zero, get off volatile gas and oil, tackle congestion, connect cities and become more resilient to drought and floods; increasing from around £55Bn per year over the last decade to around £70-80Bn in the 2030s, dropping back to around £60-£70b in the 2040s.
  - Public investment needs to rise from £20Bn per year currently, to around £30b in the 2030s and 40s. Government is committed but is a sharp rise.
  - The bulk of public investment will go to transport (£28Bn per year between 2025 and 2040) particularly prioritising urban transport and rebalancing the spend going towards the North and Midlands.
  - Private sector investment (as funded by bill-payers) needs to increase from around £30 now to 40b to £40-50Bn in the 2030s and 2040s. This is a political challenge.
  - £20-35Bn per year is needed in the energy sector, funding the move to a flexible renewables based system, plus new hydrogen and carbon networks.
  - Around £10Bn per year is needed to tackle sewage pollution and water supply issues.

<u>Planning</u>

- The planning system is frequently cited as a significant barrier to getting infrastructure built. An effective planning system that enables good decisions to be made swiftly is essential to deliver the infrastructure we need.
- The Nationally Significant Infrastructure Planning system has deteriorated in recent years — consenting timelines have slowed by 65% over the last decade, to over 4 years on average. The rate of judicial review has spiked in recent years to 58% from a long-term average of 10%.
- NIA2 shows that the system will need to handle many more consents.
  - 50GW of offshore wind by 2030 is required by the Energy Security Strategy, which equals 20 new offshore wind farms to be consented in 6 years. Double the historic rate.
  - At least 17 new energy transmission consents within 4 years are needed to support the 50GW of transmission. A more than fourfold increase in consents.
  - 9 new large water resource projects are needed in the next 6 years with a further 7 in the following 15 years. No water supply projects have been through the planning system to date.
  - The majority of road enhancements needed for improved connectivity across the UK will be consented using the Planning Act regime.
- Planning reform, is needed including: updates to National Policy Statements at least every five years, better use of environmental data, a meaningful and consistent approach to community benefits and integrated spatial planning.
- There is a need for the planning system to balance goals such as quality of life and net zero against the knowledge that no-one wants infrastructure near them (although, surprisingly, the public is generally in favour of on-shore wind). This was one reason why HS2, with all its mitigation measures, became so expensive. How do you square off the use of land with meeting national objectives, including the difficulties of private industry, and what are the dis-benefits of not doing so?

The costs of delay

- Policy stability is required with clear, long-term goals and implementation plans in all infrastructure sectors.
- Stability will support both public and private investment and help get things built.
- Delays in decision-making increase costs, including from inflation and the pricing in of risk by investors.
- In large schemes (where project teams can cost around £1.5million to run per month it is not possible to disband and reform teams while delay issues are resolved.
- In an extreme drought, and without new water infrastructure, emergency measures, could seriously damage the environment. Analysis in 'Preparing for a drier future' show that the cost of an emergency response to extreme drought could be £40 billion. It would cost half this to provide proactive and long-term resilience.
- A lack of water infrastructure is already harming development. In Cambridge, water scarcity is constraining potential housing and economic growth.
- The road network is vital for moving people, goods and services, yet maintenance and renewals of these networks is likely to become more expensive due to a changing climate, the age of the assets and increased demand on the network. Maintenance of road networks needs to be prioritised as it is critical for the country's productivity and competitiveness.
- The NICs distributional impact analysis has shown that lower income groups spend more of their income on infrastructure. Taking infrastructure as a whole, the average cost to households should decrease as we come to rely on cheaper, more efficient electricity to heat and power our homes and fuel our cars. But the longer we wait for infrastructure to be built the longer it will be before people see the benefits.
- Water is very different. There is 30% more demand than pre-Covid. The cost of water is currently too low and it is important to communicate openly and frankly with the public about reducing waste and overall demand.
- Getting the infrastructure built needs determined political leadership at national level, clear decisions on direction, and crucially, sticking with delivery plans.
- Energy investment needs to be absolutely massive in the immediate future. If we don't invest there is no chance of meeting the Sixth Carbon Budget. The next government needs to hit the ground running, to be publicly vociferous and much more up front about communicating the future of energy

Topic 1: Grid Transformation

Environmental cost – Naomi Baker, Senior Policy Manager, Energy UK

- Energy UK is a member organisation for firms working in the energy sector.
- Members have noted that the private sector is expected to provide 70% of the money required to decarbonise the building stock.
- Really welcome the NIC's report but concerned that there is no recognition that the UK is undergoing a fundamental system change in moving from one energy system to another with all that means for the sector.
- The proposal for change in the first-come first-served priority system for connection to the grid is essential as the massively long queue, including many projects that will ultimately have no use for their connection, is hindering delivery of additional capacity when demand is expected to grow by 50%.
- The bottlenecks in the system are making the UK unattractive to invest in and if they (including battery supply) can't be sorted out then decarbonisation is not possible.
- This is a system issue as supplies (e.g. wind in Scotland) are geographically separated from demand (pre-dominantly in England)
- A more efficient and leaner system is needed, and by 2030 lower running costs, but change and investment is needed now.
- Net zero is an investment challenge. The reward is lower running costs, but we need to invest to get there.
- There are many different ways to achieve energy investment

Social cost - Daisy Powell-Chandler, Head of Energy and Environment, Public First

How do we meet our clean power goals?

- The public generally supports on-shore wind generation contrary to what politicians state[1]
- Delays to building grid infrastructure mean:
  - Slower grid decarbonisation
  - Slower shift to decentralised power and storage
  - Slower shift to hydrogen economy
  - Slower build out of chargers for EVs of all types – cars, buses, vans – although 70% car owners have off-street parking for their EVs
  - Slower housebuilding

  These have impacts for social justice, for faith in the efficacy of the British state, for ownership of and consent for the net zero agenda, and for our health.
- Poor air quality is the largest environmental risk to public health in the UK. In 2010, the Environment Audit Committee considered that the cost of health impacts of air pollution was in the range of £8 to 20Bn per year.

Sources of air pollution:	$PM_{2.5}$	NO_x	SO_2	NH_3	NMVOC
Energy industries	3.3%	22.4%	37.3%	0.1%	0.5%
Manufacturing industries & construction	16.1%	15.6%	21.6%	0.7%	2.4%
Industrial processes	12.9%	0.1%	4.8%	1.3%	54.1%
Residential and small scale combustion	43.1%	10.3%	25.5%	0.8%	6.2%
Fugitive emissions	1.1%	0.2%	1.4%	0.1%	15.8%
Non-road transport	3.6%	16.8%	8.3%	0%	1.6%
Road transport	12.4%	33.6%	0.7%	1.5%	3.9%
Agriculture	4.0%	0.8%	N/A	87.6%	14.4%

All the orange highlighted items are a major issue.

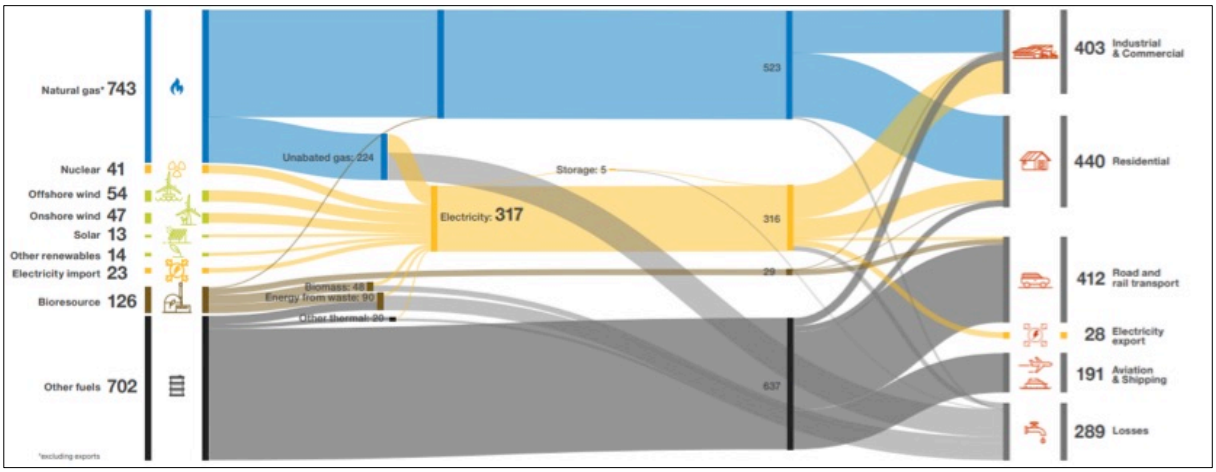
- We need to stop burning stuff!
  - A 1 µg/m^3 reduction in fine particulate air pollution in England could prevent around 50,900 cases of coronary heart disease, 16,500 strokes, 9,300 cases of asthma and 4,200 lung cancers over an 18-year period.
  - Reducing PM by 10µg/m^3 would extend lifespan in the UK by 5 times more than eliminating casualties on the roads, or 3 times more than eliminating passive smoking.

Economic cost - Paul Wakeley, Head of Strategic Network Development, National Grid ESO

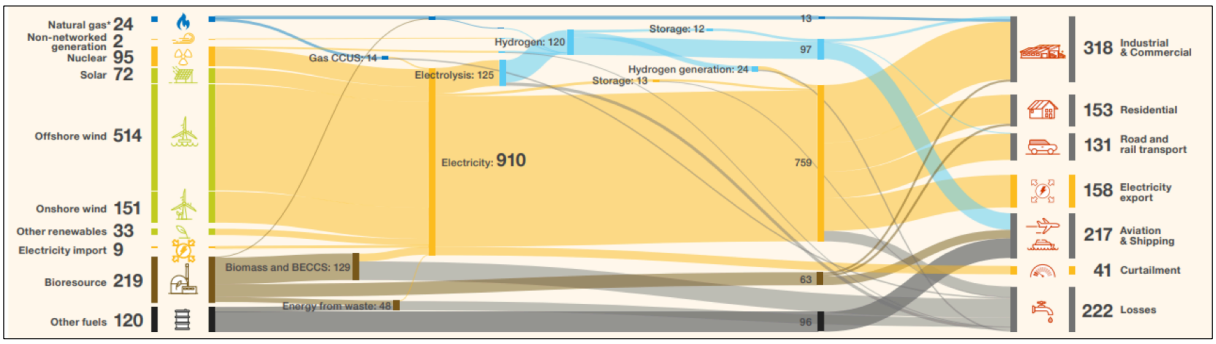
- The grid system has only had one upgrade since its inception and that is the network we have today, having used every ounce of fat available to keep it working.
- The issue is moving power across the country – from North to South or away from East Anglia
- At present over 400 GW of power from projects waiting to commence and in the Transmission System Capacity Queue - and they are not necessarily the right 400GW
- New emerging power generating technologies need to get into the queue now!
- But queue management is now possible and is necessary as lots of stuff wants to connect.
- There is a need for more central and strategic planning, including more certainty
- We are in a transition to a new energy system.

[1] The latest Public Attitudes Tracker from government has public support for onshore wind in their local area at 43%. 'Don't mind' is at 28%. Opposition is just 12%: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1186164/DESNZ_PAT_Summer_23_Energy_infrastructure_and_energy_sources.pdf

- A pair of Sankey Diagrams from ESO Future Energy Scenarios 2023 illustrate the transition from 2022, with a pre-dominance of natural gas, to 2050, with a reliance on offshore wind. The energy system of 2050 is fundamentally different from that of the 1960s.
- It will be really expensive not to get on and build a complete new system. If we had started building the Eastern Green link 10 years ago, when it was first proposed, it would have paid for itself by now



Energy Supply & Demand 2022 - ESO Future Energy Scenarios 2023



Energy Supply & Demand 2050 - ESO Future Energy Scenarios 2023

Panel discussion:

- Increased spatial planning is essential
- It is a big question whether markets can be used to take the next step. There is a strong role for them but it needs directing
- No-one wants to see a stranded asset, so if the market is not sure then it doesn't build
- A lack of certainty slows everything down
- Production of assets needs to be accelerated

Topic 2: Clean water

Environmental cost - Erica Popplewell – Campaigns Manager, River Action

- Our rivers are in a dire state. Every river in England is polluted above legal limits
- There are two main causes:
  - Sewage – dumped over 40,000 times into river courses per year
  - Agricultural and chemical run-off into rivers.

  The sewage system can't cope?
- Wastewater infrastructure can help but there is a lack of investment from water companies, a lack of regulation, a lack of monitoring and a lack of data.
- There is a need for more money to be put into infrastructure – if designed properly the water doesn't get into the wrong place. Water is too cheap.

- The economy can support and create a resilient natural environment
- Planning is essential – see River Action's Charter for Rivers - https://drive.google.com/file/d/1SD46XVLGbAPf9LtaNHZqMEAHUHCHRw4w/view

Social cost - Ana Mijic, Reader in Water Systems Integration, Imperial College

- The main issue for clean water is the imbalance between water demand and supply
- Key social risk is related to not being able to deliver clean water when needed
- NIC recommends a twin-track approach to manage this - increasing supply and reducing demand and leakage, but:

There are 3 challenges that need to be addressed:

1. Creating new risks - if supply and use are increased without demand management, less water will be in the river and more pollution will be discharged, worsening the water quality which is already in a very bad condition
2. Dealing with multiple drivers:
   a. climate change and how we ensure resilience under a highly uncertain future; and
   b. development as the main driver for not only the increase of water use but also impacts on surface runoff and pollution. Water system planning should be done in coordination with urban planning, and we can improve the water system by informed decisions about where and how we want to build, and how we can ensure flexibility in our design to deal with future uncertainty.
3. How we decide what is a good 'outcome' and the role of policies to inform decisions. What could be the role of policies such as water neutrality (allowing development only if the current pressures on the water system are not exceeded) in reducing current and future risks?

Questions

- What policies are needed to control inappropriate development?
- What can we now a bit of now to give us space for bigger interventions later?
- Or, are we going to carry on developing as we have done and expecting infrastructure to follow?

Economic cost - Daniel Johns, Managing Director, Water Resources East

- There is not enough water to go around in the East of England – see the NIC's 2018 'Preparing for a Drier Future' report[2]. The First National Infrastructure Assessment suggested that an investment of £40b was required.
- This is not just about acute events
- Water companies may have plans for dealing with this, but not the rest of the industry
- Water neutral developments are required.
- Protected sites/SSSIs are suffering from over-extraction this will lead to loss of farming, depreciation of land value and a greater reliance on importing food from abroad.
- Around Cambridge development is already on hold because of lack of water availability – 9,000 homes and (was it) 1m ft2 research facilities? We need 2 major reservoirs and desalination plants.
- Water Resources East is working with government on economic growth and environmental improvements – see Environmental Improvement Plan 2023 for the East of England

Future unlocking of opportunities

- There is a requirement for new reservoirs and the ability to move water around the country
- An effective planning system is critical for this
- If investment in infrastructure doesn't come through there will be a lack of growth and a lack of agriculture in the UK leading to reliance on overseas production and the importing of food.

[2] Preparing for a drier future: England's water infrastructure needs, NIC, 2018

- Green hydrogen production also needs large quantities of water.
- Post-Covid there was a massive requirement for non-domestic water.
- Building Regulations on rainwater and grey water usage may be required.
- In the last 12 months Anglian water had requests for more water than there is in their reservoirs. They have had to turn down more than two thirds of applications for new connections.

Panel discussion

- There is a need for communication to persuade people to act in ways that control the demand side. Education on the benefits of water restraint is needed.
- An honest conversation is needed about the affordability of unlimited water
- It is very important that investment plans are approved. There has been too much sweating of assets and lack of investment
- We can't expect water bills to remain flat into the future

Topic 3: Transport

Environmental cost – Sue Percy, Chief Executive, Chartered Institution of Highways and Transportation (CIHT)

- CIHT is the professional body for the transport sector
- There have been many common themes so far that are shared with transport
- It is difficult to find evidence relating to the environmental costs of transport and there is also very little evidence that the environmental costs of programmes are an issue in decision-making
- For example, the Edinburgh tram decision was silent on the benefits of achieving a modal shift.
- If we take decarbonisation as a proxy for other environmental goods it is clear we have to act to meet the CCC's carbon budgets
- There are challenges in switching modes and reducing demand to support common goals –do we rely on EVs or work to increase the reliability of public transport
- The RAC theoretical models show the need to target an absolute reduction in demand and therefore look at overcoming the delays in implementing public transport
- We need to take the net zero commitments seriously

Pollution

- Vehicles in traffic jams cause 4 times the pollution levels and there are 40,000 premature deaths annually from pollution

HS2

- On HS2 the sunk costs now invested in the line will no longer be offset by environmental benefits
- As a result there is a lot less certainty and confidence in the provision of transport infrastructure

Maintenance

- We are not investing in time in things like the resurfacing of roads
- On assets like Hammersmith Bridge, a lack of maintenance has led to closure, longer journeys and much greater pollution as a result.
- A lack of maintenance leads to a lack of resilience when flooding occurs. There is no funding for maintaining retaining walls leading to regular road closures (e.g. the A83 in Scotland).
- Such costs need to be factored into plans in future.

Conclusions

- There is a need for far more (environmental) data, especially on pollution.
- There are only 3 recommendations in NIA2 explicitly concerning the environment
- Environmental benefits need to be at the heart of planning for transport.

Social cost - Professor Tim Benton, Director Environment and Society, Chatham House

- Net zero is not the target – it is the area under the curve
- Most discussion so far has been on the cost of transition, but the greatest risk is the impact of climate change acceleration, e.g. the damage from Storm Daniel
- Frequent heavy rains are now inevitable and we are not building in resilience
- The relationship between infrastructure and extreme weather and the ability to feed ourselves has not sufficiently been factored in

Major Points (notes):

1. **National transport infrastructure for national security** – we are not thinking about enough
   - UK food security – accessibility of nutritional, affordable and sustainably produced food is needed at all times; there is only 3 days supply of fresh food at any one time. We could easily lose the ability to feed ourselves if, for example, access to ports is limited due to extreme weather;
   - Risks of storm surges and overtopping is very serious, e.g. East Coast/Channel 1953 >3m, 2013 1-3m.[3]
   - Storm Ciaran storm surge 1m; Hurricane Otis
   - Import infrastructure[4]; channel ports overtopping[5]
   - Less crucial (more workarounds) domestic transport networks and Storm Daniel (dropped 750mm in one day in Greece) type flooding.
   - Significant supply chain disruption/FPI/social costs
2. **Social costs of ICEs**

   Social costs include:
   - Air pollution, noise, accidents, congestion, carbon costs. The social costs of a single car are in the order of £4-5k per year
   - Interaction with lack of exercise/dietary health
   - Liveable neighbourhoods are uncommon

   Case study:
   - Social costs of a standard car (DE study[6]) 29-41% of car total costs (€4-5k per year)
   - EU wide; social costs of cars may exceed €500bn (Gossling et al 2015) - 10% shift from cars to active mobility, may save €15bn across EU 27[7]
   - Porto[8]: shift of 10% driving to cycling and 15% driving to walking gave social/health savings of 7bn euros, reducing DALYs by about 25%; mainly through reducing strokes and heart disease
   - Thessaloniki modelling study: reduction in air-pollution through coupling city-centre underground with incentivisation of EVs projected health care savings of 300m euros pa
   - Study of transportation futures' social costs for Austria[9] projected that an improve/shift/avoid strategy (active transport for short trips, public transport for long trips, unnecessary trips avoided e.g. through WFH), projected total savings of

[3] https://www.sciencedirect.com/science/article/pii/S0012825215000628
[4] Verschuur, J., Koks, E.E., Li, S. *et al.* Multi-hazard risk to global port infrastructure and resulting trade and logistics losses. *Commun Earth Environ* **4**, 5 (2023). https://doi.org/10.1038/s43247-022-00656-7
[5] DEFRA PROJECT FO0454
[6] Gössling, Stefan, Jessica Kees, and Todd Litman. "The lifetime cost of driving a car." Ecological Economics 194 (2022): 107335.
[7] Pisoni, Enrico, Panayotis Christidis, and E. Navajas Cawood. "Active mobility versus motorized transport? User choices and benefits for the society." *Science of The Total Environment* 806 (2022): 150627.
[8] Rodrigues, P. F., et al. "Health economic assessment of a shift to active transport." *Environmental pollution* 258 (2020): 113745.
[9] Maier, Raphaela, et al. "Cutting social costs by decarbonizing passenger transport." *Transportation Research Part D: Transport and Environment* 122 (2023): 103878.

€1700 per capita per year through reduction in social costs and improved health benefits

3. **Conclusions**
   - Anything that delays health savings is very costly – evidence points to the possibility of achieving huge savings by taking action
   - A modal shift to active travel would bring enormous health benefits
   - ICE trips avoided through adequate spatial planning/fostering WFH (broadband)
   - Fostering active transport (walking, cycling) and public transport
   - Incentivising switch from ICE to EVs
   - i.e. focus on liveable neighbourhoods, with ICE and public transport infrastructure
   - Haven't talked about aviation – where social cost arises mainly from carbon costs (though disease spread is an issue as pandemics become more likely) but recent CH report indicates that UK will miss its net-zero targets significantly in aviation sector without demand-side management[10]
   - Demand management provides solutions to a lot of these issues but is politically very difficult.

Economic cost - Martin Tugwell, Chief Executive, Transport for the North

- We need a planning system that listens to the people it is going to be servicing
- Example of Platforms 15 & 16 in Manchester Piccadilly station. No action has been taken since the decision over a decade ago[11].
- A project should have cost £2bn becomes £10bn as a result of delays
- The planning system has always been a problem – we have got to get the decision-making mechanisms right as a matter of priority
- It is essential to unlock the North. It is costing £118bn per year in lost productivity.
- 3.3m people are living in places with high social exclusion because of a lack of access to transport.
- In the North every single train has its costs subsidised, but the narrative is driven by the experience of the SE – a £1.20 trip in London costs £4.50 in Manchester.
- There is huge untapped social and economic value in the north – transport in the North offers growth opportunities

Decarbonisation
- We will have burnt through the carbon budget for the North by 2030/32

Conclusions
- The language has got to change
- EVs are unaffordable at £10-14k in places like Redcar or Jarrow
- It is about planning, but we've got to stop talking about strategy and got to get onto doing and delivering
- Local/regional decision-making can deliver levelling up like no-one else – so empower those running the network
- Example of buses, where a 20% reduction in fare costs led to a 50% growth in journeys made
- We are well off when we are serving the people, our friends and neighbours

[10] https://www.chathamhouse.org/2023/11/net-zero-and-role-aviation-industry

[11] https://www.manchestereveningnews.co.uk/news/greater-manchester-news/long-held-plans-two-new-26986599

Full Table discussion

S1 The infrastructure system we need is completely different. We need to transition from GDP to a circular economy model and a wellbeing economy and the time to do that is now. Achieving demand management is not a small thing!

S2 There is an economic and social cost to so much of this.

Land-use in food and farming is the problem, but it is also the solution. We need to plan and move away from a system where cheap food is the only goal. Small businesses cannot be expected to make these decisions individually so need a countrywide strategy to minimise the environmental impact – we need a Plan. Note: HS2 could have been done so much better and used much less land with local consultation.

S3 Productivity is key, but confidence in the construction industry is at the lowest point since 2008.

A good planning system could save billions pounds a year – ref. the RTPI review on the significance of the planning system and profession[12]

1. Planning needs to be seen from a spatial perspective, integrated into a multi-disciplinary and technology-based system. See the Geospatial Commission report[13]
2. A feedback loop for data is currently absent and is very necessary. We could all benefit from data sharing and need a 'Digital National Trust'
3. There is a lack of capacity in the UK planning system, which only spends £6 per person per year. There is a need for more to achieve strategic and long-term thinking.

S4 Re. Project Speed[14] – Great initiatives do not have a common sense check – leading to unintended consequences

S5 To do any of these works needs investment and requires people not to object, but by time a decision is made it is too late. Whose job is it to do pre-conditioning of the public? Is this something for Government to think about?

S6 One response would be to provide people with more options than required. For the Channel Tunnel the people of Kent were consulted on many different alternatives and after 2 years just wanted a decision. The route was accepted and went through relatively smoothly. Contrast that with HS2 where the DoT planned 100 alignments but there was no consultation and absolute resistance.

If you don't pre-condition the public and have a debate you are going to get more and more resistance. Who does this is a valid question, but it is something we all have to do. There is a need to demystify the private finance approach as they have done in Australia. Here there is a tendency to want everything tied up with a ribbon and not to put in the hard yards. You've got to talk the language of the Daily Mail. You've got to take on the costs and talk around consequences

S2 People are generally very supportive if consultation is done well

S4 Local leadership is essential – Manchester is closing the productivity gap with the SE as a result of its long-term leadership from Howard Bernstein to Andy Burnham.

[12] State of the Profession 2023, RTPI https://www.rtpi.org.uk/research/2023/november/state-of-the-profession-2023/

[13] UK Geospatial Strategy 2030, Geospatial Commission, https://assets.publishing.service.gov.uk/media/6489b1fb103ca6000c039ea2/2023-06-15_UK_Geospatial_Strategy_2023_.pdf

[14] https://www.gov.uk/government/news/launch-of-project-speed-challenges-rail-industry-to-cut-time-and-costs-of-rail-upgrades

Summing up – Sir John Armitt

- The subject of resilience and the impact of rainstorms is discussed a lot. We may have to accept that we do nothing but we have to decide what levels of harm are acceptable and only politicians, involving the public, can do so. See NAO report on Resilience to Flooding[15].
- There is a need to make more of the environmental costs of not doing things.
- There is a £30bn hole coming from the end of petrol/diesel tax
- Demand management is a real issue and we need to step up. Possibly cities would be a good place to trial this first. We should not be afraid of having a public debate about this. It is possible to do this at zero-cost and then gradually increase. There is a need to increase public debate on this.

Edge takeaways

- Delays to infrastructure critically interconnect, so that a delay in one sector impacts on others and may have major implications for environmental and social wellbeing
- There is an urgent need to balance supply and demand.
- The length of time from making the decision to implementing and completing the project is a serious problem by itself.
- There is a worrying lack of investment funding and long queues for project implementation, which may not have been sufficiently prioritised in a changing environment.
- New infrastructure systems need to replace the existing ones. How can this be implemented effectively and efficiently?
- We need politicians to make the urgent decisions required, but in the context of an honest public debate (including the economic, environmental and social costs of inaction) and, if politicians won't engage, then professionals and those with the knowledge and understanding must do so
- Planning must be seen as an essential part of the solution and means of achieving a fair and equitable balance rather than the problem
- We do not emphasise the environmental impact sufficiently and broadly enough in decision making – this is also the case with the second National Infrastructure Assessment and yet, it is the environment on which we all depend.
- Investment decisions cannot be made on an economic basis only – they need social and environmental overviews.
- The problems of the planning system are a common theme as is the need for an intelligent approach to land use. The present interpretation of 'planning' is too narrow and needs to change to taking a spatial planning perspective with common spatial data – a Digital National Trust. Currently the UK spends £6 per person on planning compared to £4,180 per person on public health.
- Maintenance is being overlooked and struck out of budgets with widespread consequences.
- It is time to stop talking and time to deliver.

--- End ---

the Edge v4

[15] Resilience to Flooding, Nov 2023. https://www.nao.org.uk/reports/resilience-to-flooding/