The Second National Infrastructure Assessment National Infrastructure Commission England's Economic England briefing note

This briefing note provides a summary of the main recommendations relating to transport within the National Infrastructure Commission's Second National Infrastructure Assessment, launched on Wednesday, 18 October, 2023. Where appropriate we have also included (in italics) selected detail, maps and infographics from the report which provide context to the recommendations.

The recommendations include:

- Local authority funding devolution
- Increasing role for local authorities in electric vehicle infrastructure
- Recommendations for investment in strategic networks

The government is expected to respond to the assessment within 12 months. However, speaking at the launch event, NIC chair Sir John Armitt, called for a response before the general election, which he said would allow the government and opposition parties to set out their visions for long-term infrastructure in the UK.

• NIC news release: Long term review sets out pressing need to modernise infrastructure to support economic growth and climate action - NIC

Selected report recommendations

Devolution of powers and funding – including to local authorities

Recommendation 20: Government needs to move faster in devolving powers and funding for local transport to local authorities. By the next Spending Review, government should have agreed single multiyear financial settlements for existing mayoral combined authorities to invest in local priorities, and then continue to roll these out to new mayoral combined authorities. All county councils and unitary authorities that remain responsible for strategic transport planning should be provided with devolved five year transport budgets by the end of 2025, sufficient to cover maintenance, renewals and small to medium enhancements. Government should ensure that £8 billion a year is available for devolved transport budgets for local authorities outside London, consisting of a combination of central government grants and locally raised funds.

Within the report, the NIC says 'local authorities are better placed than central government to determine what their priorities are for transport investment, as they better understand local issues and opportunities.

It also recognises that 'there are multiple funding streams that can only be spent on centrally determined priorities, and local authorities often have to bid against each other to access

them, preventing long term planning and diverting scarce resources towards putting bids together'. It says devolving transport budgets would ensure 'all places are able to maintain existing infrastructure – for example improving the condition of road surfaces – and invest for local growth'.

"This will also help places develop locally led infrastructure strategies through which transport investment can be considered against long term goals and planned alongside housing and land use development. Locally led infrastructure strategies should also be used to ensure that transport infrastructure is accessible for all groups in society."

Roads

Recommendation 22: Government's first priority for roads should be to maintain the existing network by investing adequately in maintenance and renewal, including to ensure proportionate resilience to climate change impacts. Government should enhance the road network on a strategic basis, with improvements targeted at underperforming sections of the network, aligning schemes with complementary policies for economic growth and giving initial priority to interventions in regions with underperforming productivity.

By the end of 2026 and ahead of commencing work on Road Investment Strategy 4 (2030 to 2035), government should use the improvement options outlined in the Commission's analysis, alongside projects identified in partnership with sub national transport bodies, mayoral combined authorities and pan regional partnerships that unlock regional economic opportunities, to develop a pipeline of future interurban road projects over a thirty year horizon.

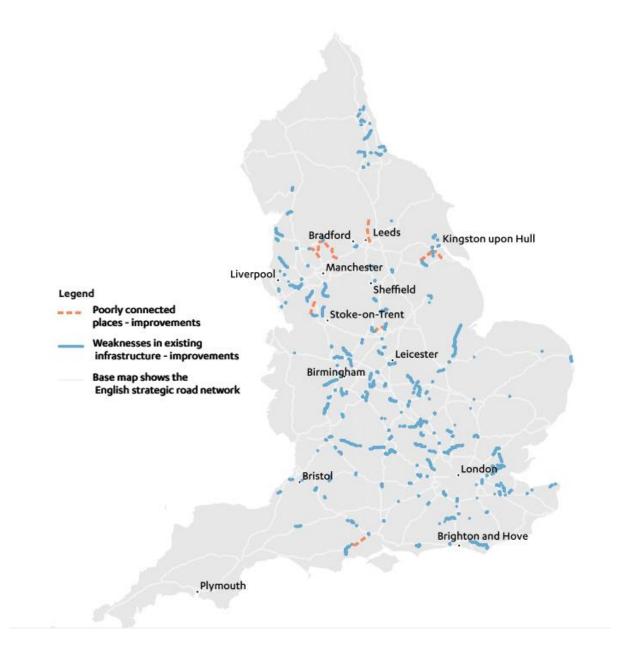
Within the report, the NIC says that National Highways' route strategies provides good quality information on the range of options the government has, 'but it has not always been clear how final decisions on prioritisation of enhancements follow from this analysis'.

It suggests that 'prioritisation should be undertaken on the basis of a systematic analysis of how and where connectivity could be most improved, starting with a clear understanding of which routes are most important for trading relationships between places, particularly the largest cities and towns and key freight hubs. It should then identify which sections of these important routes underperform in terms of journey times, or where there may be missing links in the existing network. This exercise should include the Strategic Road Network and the Major Road Network, and it should be complementary to wider growth strategies, given transport is necessary but not sufficient for improving productivity'.

Alongside this systematic analysis, the government should also engage with regional authorities, including sub-national transport bodies, mayoral combined authorities and pan regional partnerships, to understand their priorities, and identify where there may be opportunities for transport to support regional and local growth strategies that are not captured by analysis of the current network. The report also includes a map of the NIC's suggested portfolio of priorities for investment on the 'national road network'. For more detail on the rationale behind the map, see <u>Interurban</u> <u>Transport Connectivity Assessment (nic.org.uk)</u>.

Figure 3.4: The Commission's suggested portfolio of priorities for investment on the national road network

Map showing location of suggested long term priorities for investment on the national road network over the next 20 to 30 years



Rail

Recommendation 23: Government should prioritise maintenance and renewal of the existing rail network, ensuring proportionate resilience to climate change impacts. Government should develop a new comprehensive and long term plan for rail

enhancements to address the capacity and connectivity challenges in the North and Midlands, alongside completion of East West Rail and a portfolio of targeted network enhancements across the country.

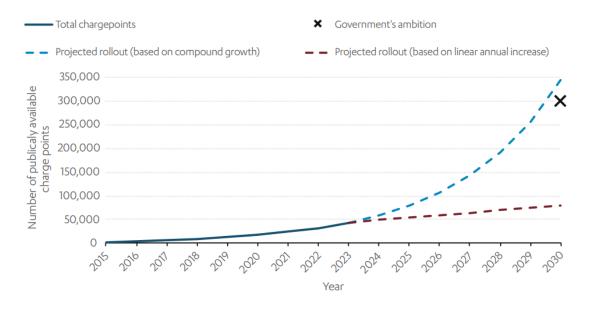
The NIC says East West Rail 'is a transport scheme which has been designed to support high productivity areas by removing a constraint to growth. The rail link is expected to be used for commuting, leading to denser housing development around the stations on the route. The number of stations will be limited to safeguard commuting times, with the focus on larger scale development around a smaller number of transport hubs and interchanges. It is important that long term funding is made available for the full route to enable construction of the remaining parts of the line to start in mid 2020s'.

Transport decarbonisation and electric vehicles

Recommendation 12: Government must accelerate deployment of electric vehicle public charge points to reach its expectation of 300,000 public charge points by 2030 and keep pace with sales of electric vehicles.

Within the report, the NIC says that 'local authorities are ideally positioned to identify local charging needs and should play a more active role in facilitating private sector investment in the deployment of public charging infrastructure...to perform this role effectively, local authorities should be sufficiently equipped and supported'.

Figure 2.5: Charge point deployment will have to grow at 30 per cent each year to meet the government's targets



Publicly available electric vehicle charge point rollout, 2015 to 2030, UK

Source: Department for Transport (2023), Electric vehicle charging device statistics (July 2023) **Note:** Annual charge point total is based on data from July of each year.

Recommendation 13: Government should, by 2025, establish a monitoring and review regime for its transport decarbonisation plans that reflects the uncertainty in carbon emissions outcomes from surface transport. The need for action to ensure decarbonisation targets are met should be reviewed annually, and all relevant information made publicly available. Carefully designed, adaptive policies that can be introduced, if necessary, should be prepared as part of the work on the integrated transport strategy.

Funding for major infrastructure projects - focused on four cities

Recommendation 17: Government should commit long term funding of £22 billion for major transport projects in cities from 2028 to 2045. The initial focus for this funding should be on those cities that are likely to have the greatest need for increased capacity, justifying investment in rail or tram type projects – the Commission's analysis indicates that these cities are Birmingham, Bristol, Leeds and Manchester.

Some of this funding should also be made available to other cities where there is likely to be a need for increased capacity or connectivity. To reflect the uncertainty over future travel demand and cost, the total investment package should be reappraised before final decisions are made on which projects to take forward.

In the report, the NIC suggests a third of the £22 billion recommended investment in major transport projects should be allocated to other cities, where a strong case can be made on the basis of connectivity or capacity.

Its analysis suggests there is 'also likely to be a case for investment in capacity in fast growing smaller cities such as Coventry and Norwich'. It states: "The government should carry out a more comprehensive analysis of capacity needs in smaller cities to see which ones should be prioritised. For smaller cities, it is likely that bus rapid transit, which operates like a tram or metro system but is substantially cheaper and more easily adapted, will be the most appropriate solution."

Demand management

Recommendation 18: To encourage modal shift and enable an increase in trips in congested cities, government should make the long term funding for major projects outlined in recommendation 17 conditional on recipient cities committing to introduce a demand management scheme, in a way that is designed to work best in the local context. The exact form and sequencing of the demand management scheme should be a decision for the individual city, and the revenue raised should be retained by the local area for investment in public transport and active travel.

Cities' contribution to capital costs through financing mechanisms

Recommendation 19: The cities that directly benefit from the major transport projects outlined in recommendation 17 should make a significant contribution to the capital costs. Government should expect a local contribution of at least 15 to 25 per cent towards the

total cost of the investment – although there are scenarios where a higher contribution may be expected, particularly for less expensive investments. Government and the UK Infrastructure Bank should work with cities to investigate and facilitate financing mechanisms and funding sources that could include a combination of business rates retention, third party contributions, forms of land value capture, and new income streams, to support the delivery of local public transport infrastructure.

Long-term vision for network performance and resilience

Recommendation 24: By the end of 2026, government should develop an integrated strategy for interurban transport to frame the development of Control Period 8 for rail (2029-34) and Road Investment Strategy 4 (2030-35). This should incorporate a long term vision for network performance and resilience, a pipeline of strategic improvements to road and rail over the next 30 years, as outlined in recommendations 22 and 23, and a plan for decarbonisation, as outlined in recommendation 13. It should also set out government's approach to harnessing the benefits of new technology and achieving environmental net gain.

Resilience standards

Recommendation 28: By 2025, government should:

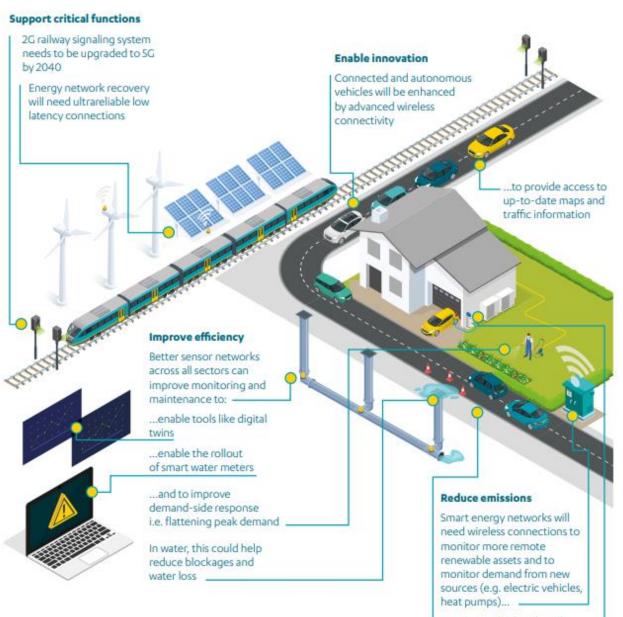
• following advice from regulators, publish a full set of outcome based resilience standards for energy, water, digital, and transport services, committing to future reviews every five years

require regulators to ensure their determinations in future regulatory settlements are consistent with operators meeting these resilience standards in the short and longer term
require regulators to put in place a system for cross sector stress testing which addresses interdependencies and the risk of cascade failures

Selected infographics of interest (below)

Figure 3.7: Telecoms infrastructure will be vital to delivering critical functionality and strategic objectives across multiple sectors

Potential benefits of telecoms infrastructure across sectors



...and to embed tools and incentives to reduce or reschedule energy usage at times of peak demand.

Traffic management can reduce emissions through alleviating congestion

Figure 4.4: Environmental outcomes will improve through Commission recommendations and government action

Trajectory of air quality, water quality and biodiversity, 2025-55



Air quality

Water quality

Biodiversity

NOx and PM 2.5 emitted from road transport, and electricity generation, and NOx emitted from gas boilers

Only 16 per cent of water bodies in good ecological condition, including 40 per cent affected by rural pollution, 36 per cent by waste water, including eight per cent from raw sewage, and 18 per cent by pollution from towns, cities and transport

Between 1970 and 2021, 19 per cent of terrestrial and freshwater species decreased in abundance, and 16 per cent of species are threatened with extinction'



Background trends By 2035 all new cars and vans will be zero emission (80 per cent by 2030)

Commission recommends

Phase out gas boilers and unabated gas fired generation, support electric vehicles and fund urban transport projects

Background trends

Climate change could increase sewage spills and road run off, but £60 billion investment to reduce raw sewage spills, and target for most phosphorous to be removed from treated wastewater by 2038

Commission recommends

Reduce water taken from the environment & invest in surface water flood management and water guality improvements

Background trends:

New NSIPs require projects to deliver biodiversity net gain

Commission recommends:

Improve biodiversity through maintenance and renewals, use nature based solutions to manage flood risk, and planning should support strategic environmental management.



NOx emissions - 100 per cent reduction from gas boilers, over 95 reduction from road transport, and 75 per cent reduction from electricity generation

PM2.5 emissions - 90 per cent reduction from electricity generation, but two per cent increase from road transport due to increased traffic volumes'

If targets are met, 80 per cent reduction in raw sewage discharged to water bodies by 2050, 80 per cent reduction in phosphorous in treated wastewater by 2055, and reduced impacts from surface run off

Despite climate change, fewer water bodies affected by excessive abstraction

New NSIPs deliver at least ten per cent increase in biodiversity compared to baseline levels

Infrastructure maintenance and renewal enhances biodiversity and ecological networks

Infrastructure development is not the principal cause but can contribute to this problem

⁹ This assumes electrification of the vehicle fleet is approaching 99 per cent in line with the Department for Transport's 'vehicle led decarbonisation scenario' and that gas bollers are no longer in use for household heating Sources: National Atmospheric Emissions Inventory, Defra; Environment Agency; Commission analysis; Department for Transport National Road Traffic Projections 2022