◤ London Councils' response

◤ National Infrastructure Assessment: Call for Evidence

London Councils represents London's 32 borough councils and the City of London. It is a cross-party organisation that works on behalf of all of its member authorities regardless of political persuasion.

Introduction

London Councils welcomes the extensive consultation activities undertaken by the National Infrastructure Commission on the National Infrastructure Assessment. We would welcome an ongoing conversation with the Commission, given that new evidence, policies and strategies continue to emerge. The text below represents London Councils views at this point in time.

Cross-cutting issues

1. What are the highest value infrastructure investments that would support long-term sustainable growth in your city or region? *Note: this can apply to national, regional or local infrastructure, where you consider it would best support sustainable growth in your city or region in practice. Considerations of "highest value" should include benefits and costs, as far as possible taking a comprehensive view of both. "Long-term" refers to the horizon to 2050 and should exclude projects that are already in the pipeline.*

London has a growing population and not only needs infrastructure to support this growth but also to improve connectivity to other parts of the UK.

On transport, London Councils supports the following schemes:
- Crossrail 2, connecting Hertfordshire, London and Surrey, and providing regional benefits across the south east;
- Brighton Mainline Upgrade, removing the bottlenecks at East Croydon station and improving reliability between London, Gatwick Airport and Brighton;
- Crossrail 1 extension from Abbey Wood to Ebbsfleet for connections to High Speed 1;
- River crossings in East London and the lower Thames;
- Improved orbital bus, rail and road links in outer London;
- Financial incentives and a positive regulatory framework for uptake in electric vehicles, including commercial light-vans.
- Southern access to Heathrow Airport and improvements to the South West mainline;
- East-West rail and road links between Oxford and Cambridge;
- North Downs rail link between Gatwick and Reading;

LONDON COUNCILS

- Road and rail corridor Dover-Southampton (A27/M27/A259);
- Great Eastern mainline (connecting London, Ipswich and Norwich);
- East London rail connections to the Thames Gateway;
- Western access to Heathrow Airport from London and Reading;
- Midlands and West Coast mainline (connecting London, Luton, Bedford and Milton Keynes);
- New link from Felixstowe to Nuneaton and the East Midlands.

On digital, London Councils wants to see:
- UK adoption of the standardised wayleave produced by the City of London to speed up fibre connections;
- Preparatory work to secure the rollout of 5G.

On energy, London Councils wants to see:
- A decentralised energy system based on cleaner energy technology;
- Incentives for individuals and organisations to install cleaner energy technologies on their buildings;
- More emphasis on demand management, including energy efficiency measures for current buildings and planning standards for new builds;

On water and wastewater, London Councils wants to see:
- Strategic adoption of SUDS across new and retrofitted buildings;
- Changes to regulation that remove the automatic right to connect to a sewer, requiring developers to maximise their site capacity for managing its own wastewater and rainwater;

On flood risk management, London Councils wants to see:
- Changes to the financing of capital schemes that allow consideration to be given of funding flood defence works to protect commercial property and strategic assets.
- A continuation of the local prioritisation of projects for funding by Regional Flood and Coastal Committees, giving local politicians oversight over flood risk in their areas.

On solid waste London Councils wants to see:
- Greater policy and regulatory focus on waste minimisation, with increasing recycling rates as a secondary priority.

2. **How should infrastructure most effectively contribute to the UK's international competitiveness? What is the role of international gateways for passengers, freight and data in ensuring this?**

Infrastructure needs to enable businesses in the UK to thrive; be that through fast broadband connections, proximity to national, regional or international transport gateways, or because they can get their goods quickly to market. The physical infrastructure of transport and digital is inevitably backed up by waste and energy infrastructure and the need to 'green' and decarbonise our activities. Infrastructure should be an enabler of business, rather than an inhibitor (for example, sending staff home because upload speeds are faster there than in the office).

3. **How should infrastructure be designed, planned and delivered to create better places to live and work? How should the interaction between infrastructure and housing be incorporated into this?**

There is some infrastructure that is integral to building sustainable communities, such as public transport provision, digital infrastructure, localised energy generation, water supply and some waste facilities. There is other infrastructure relevant to the NIC's remit, which could potentially be located anywhere, providing important jobs for that locality, but also providing nationally significant infrastructure, such as certain waste and energy facilities that due to their nature could not be close to all the communities they serve.

Infrastructure needs to be designed in at the beginning of new developments, to make sure that places where people live 'work' for them and the lifestyles they are expected to lead. For example, a no-car development needs to have good public transport links; if a bus route cannot be secured into the development, the development becomes not only undesirable, but potentially very difficult to live in.

Infrastructure can be used to unlock sites, and often needs to be built ahead of housing in order to secure it. Masterplanning a site needs to understand these interdependencies and funding mechanisms need to be in place to enable this to happen. Business cases for strategic infrastructure, such as new railway lines, new energy and waste facilities should include the real value they are adding in accommodating existing and future demand.

However, we need to be realistic that a lot of infrastructure is needed in places already well-established and heavily built-up. Design and delivery solutions here need to identify whether new infrastructure is simply about improving what already exists or reshaping a place. It is worth stating that making the most of existing assets should always be the first consideration.

4. **What is the maximum potential for demand management, recognising behavioural constraints and rebound effects?** *Note: "demand management" includes smart pricing, energy efficiency, water efficiency and leakage reduction. "Rebound effects" refer to the tendency for demand to increase when measures aimed at reducing or spreading demand also lead to lower prices or reduced congestion, undoing at least some of any demand reduction. For example, if smart meters reduce the cost of electricity in off-peak periods, this could lead to greater energy consumption overall, where a large number of individuals or firms take advantage of these lower prices by increasing their total usage.*

We acknowledge the challenges around demand management and believe there is a lot more we need to understand about it. Demand management, however, is a valuable tool in helping shape infrastructure and investment decisions albeit its limitations. We do believe that more emphasis is needed on demand management measures, such as energy and water efficiency and should also be applied more strongly in waste management (reducing the amount of waste produced).

We think demand management can be best used where there are several positive outcomes available; for example in London the Hopper fare reduces the cost of bus travel, meaning more people take the bus. This in turn contributes to reducing the number of people using a car and therefore helps to improve congestion. The negative outcome however is more overcrowded buses. Demand management can then be used again to understand when increasing the frequency of the route is appropriate, before people switch back to car use.

We support demand management such as metering as it offers more holistic solutions, for example addressing the costs of utility bills for lower income households. We acknowledge this can in turn increase the amount of energy used, but if this energy is from a renewable source, the negative outcomes are reduced. As such we believe a 'whole system' look at demand management is necessary.

5. How should the maintenance and repair of existing assets be most effectively balanced with the construction of new assets?

We know that communities want to see existing assets maintained to an adequate standard. Allowing assets to decay to a position where they no longer provide the expected standard is damaging for public confidence, especially where assets are relied upon to protect communities, which is especially the case for flood defences. London Councils commissioned polling of Londoners on infrastructure in summer 2015 and on flood defences, 87 per cent of respondents living in inner London, compared to 58 per cent of respondents living in outer London, prioritised maintaining existing defences rather than building new ones. We know London Boroughs are equally concerned that there is sufficient ongoing funding for the maintenance of existing and new assets, as for installing new schemes.

We suggest a better understanding of assets at a national level, and levels of risk with regards to maintenance regimes. This would enable a prioritisation of maintenance of existing assets alongside construction of new assets. It is important to bring both schedules together rather than viewing them as separate.

6. What opportunities are there to improve the role of competition or collaboration in different areas of the supply of infrastructure services?

We believe that packaging of schemes and/or aspects of work within those schemes could be used to a far greater extent at all levels of infrastructure, national and local. We note that the Environment Agency actively packages schemes for flood defence works in order to achieve efficiencies, and we suggest a similar approach is taken in other infrastructure sectors where it is not already. Determining whether to use consultants or train internal staff is another factor in competition and collaboration, as well as in skills.

7. What changes in funding policy could improve the efficiency with which infrastructure services are delivered? *Note: by "funding", the Commission means who pays for infrastructure services and how, e.g. user charges, general taxation etc.*

Regardless of who pays for infrastructure, the process by which funding decisions are made needs to be drastically accelerated. We believe there is a bigger role for greater standardisation of agreement between government and local parties. For example, it took the Mayor of London and the London Borough of Croydon four years to agree a business rates retention deal to secure regeneration and infrastructure upgrades in Croydon. The next local authority who wishes to negotiate such a deal will take equally long. There needs to be a single, standardised agreement and process, with due diligence, rather than bespoke negotiations for each funding agreement.

Greater use of 'user pays' principles can only be achieved with fiscal devolution from government, which in turn ensures that not only can an infrastructure asset be paid for, but its long-term maintenance secured as well.

London Councils supports the recommendations of the London Finance Commission for the Government to work with the GLA, TfL and the London boroughs to develop a consultation paper on the objectives, principles and design options of a land value capture charge[1]. Mechanisms for extracting value uplift on property brought about by infrastructure investments should also be considered. Infrastructure investment, usually paid for through fares and taxes, results in property price rises and new development. Evidence from TfL shows existing mechanisms only extract a small fraction of land value gains from transport investment (for example extension of the Jubilee Line). Further modelling predicts future transport schemes in London are also likely to produce large land uplifts.

A sample of eight prospective TfL projects that cost around £36 billion (including Crossrail 2, the Bakerloo Line Extension and the DLR extension to Thamesmead) could produce land value uplifts of about £91 billion. Under existing arrangements, local transport schemes capture less than five per cent of this uplift in value.

8. **Are there circumstances where projects that can be funded will not be financed? What government interventions might improve financing without distorting well-functioning markets?** *Note: projects that "can be funded" but "will not be financed" refers to projects that can be paid for, but where the upfront costs of construction cannot be raised at an efficient price and/or with an appropriate risk sharing balance between the different parties. General government financing policy (i.e. the issuance of gilts) is out of scope.*

    London Councils takes the view that this is a major factor in slowing infrastructure investment in the UK. For example, one funding source for Crossrail 2 is from the payback gained in house prices, which the Treasury will see through increased stamp duty receipts. Due to the risk appetite of government, this is delaying the project's progress.

9. **How can we most effectively ensure that our infrastructure system is resilient to the risks arising from increasing interdependence across sectors?** *Note: this includes resilience against external risks and/or problems that arise in one or more parts of the system.*

    London Councils believes resilience to flood risk and climate change is a major consideration in interdependencies. This requires that infrastructure takes account of future projections, for example of sea level rise, flood risk zones and changing land use; and appropriate solutions for the future are developed in the present. Flood risk and climate change is relevant not only in the siting of physical infrastructure such as roads and bridges, but also for the UK's energy and water supply requirements in future generations. Consideration should also be given of the interrelated aspects of digital and transport infrastructure. Transport is a sector where digital solutions have not yet made a significant impact on transport patterns, nor seen a marked increase in working from home or flexible solutions. However, this could change in the future, and so needs to be considered when determining the transport infrastructure investment the UK needs in the longer-term.

---

[1] https://www.london.gov.uk/sites/default/files/devolution_-_a_capital_idea_lfc_2017.pdf

10. **What changes could be made to the planning system and infrastructure governance arrangements to ensure infrastructure is delivered as efficiently as possible and on time?**

London Councils cautions against any attempts to reduce the amount of public consultation or opportunity for the public to better understand proposals. That said, we have noted already that greater standardisation in the way that funding is negotiated with government would speed up the timescales for infrastructure projects. Local and regional projects that have funding secured should not get caught up in national government interest or bureaucracy, when the project is not of national significance.

11. **How should infrastructure most effectively contribute to protecting and enhancing the natural environment?**

We want to see greater adoption of green infrastructure and sustainable drainage measures to ensure that new infrastructure does not worsen flood risk and contribute to create greener, more pleasant and biodiverse environments that do not exacerbate the effects of urban heat islands. Use of green energy sources should always be considered, along with more of the environmental practices already commonplace; for example reusing aggregate, tree planting and building materials that reduce the impacts of noise. The concept of Circular Economy should be at the heart of decision making, particularly regarding waste management but also in other areas, such as construction. When ageing infrastructure comes up for renewal, options for improving the environmental impacts of its replacement should always be considered. This could include a change of location if appropriate and should look at the wider impacts, such as transport, biodiversity, amenity, social and economic.

Transport

13. **How will travel patterns change between now and 2050? What will be the impact of the adoption of new technologies?** *Note: "travel patterns" include both the frequency and distance of trips taken, as well as the mode of transport used. This covers both personal and commercial travel, including freight.*

We are concerned about the projected increase in vans in London, as regardless of whether these vehicles are low emission vehicles, they will contribute to congestion. Driverless vehicles present a set of challenges that need further investigations; currently London Councils remains concerned the impact this technology may have for London in terms of congestion.

We envisage a continued increase in cycle couriers and the transition of the entire taxi fleet to low emission vehicles. Climate change and the impacts of the urban heat island effect may hamper efforts to encourage people to walk and cycle more, if conditions to do so are unpleasant. We have yet to see any great impact of technology on the way people work and an increase in working from home. By 2050, this may be more prevalent, and we want to see this supported by better part time and off peak ticketing. London's population is projected to increase at almost twice the rate of the rest of England, and public transport investment needs to keep pace with this demand, otherwise congestion will worsen.

LONDON
COUNCILS

14. **What are the highest value transport investments to allow people and freight to get into, out of and around major urban areas?** *Note: "high value transport investments" in this context include those that enable 'agglomeration economies' – the increase in productivity in firms locating close to one another.*

London Councils supports the progress boroughs are making in establishing freight consolidation centres to reduce the impact of 'final mile' deliveries. We believe freight consolidation, along with greater use of the river in London, can contribute significantly to improving the relationship between freight and the city. Restricting car use and encouraging people to reduce car use will be important going forward.

15. **What are the highest value transport investments that can be used to connect people and places, as well as transport goods, outside of a single urban area?** *Note: this includes travel in and between rural areas, as well as between urban areas and international travel.*

In London, we need fast, through routes connecting people in London to other places; for example as the Thameslink line already achieves, and as the Elizabeth line will do as well. Better connectivity as well as faster journey times are vital to ensure the UK's competitiveness. As discussed above, tackling congestion is very important, and London is due to receive new airport capacity before 2050.

16. **What opportunities does 'mobility as a service' create for road user charging? How would this affect road usage?**

Road user charging extends the principle already part of public transport and taxi trips to private cars. Car clubs play a role in this, alongside road user charging as mechanisms for encouraging people to stop owning their own car and instead hire one as necessary. Any proposals for 'mobility as a service' need to take into account the impacts on the lowest paid as they travel to work or school, and the impacts high travel costs have on social isolation and loneliness.

Digital communications

17. **What are the highest value infrastructure investments to secure digital connectivity across the country (taking into consideration the inherent uncertainty in predicting long-term technology trends)? When would decisions need to be made?**

We feel government's role is not to second-guess the market but to focus on bringing those left behind by existing improvements up to speed and quickly. We want government to identify how it can incentivise or regulate providers to address the need of the 'final mile' hard to reach and often unprofitable areas. We note the government's recent work in this area to bring a digital connection in line with other utility connections, but believe there is still more to do in this area. Areas of London continue to suffer from poor broadband speeds, and so access to good, reliable broadband is not an issue reserved only for rural areas. Whilst we welcome efforts to ensure the UK is well-placed to adopt 5G quickly, this should not be at the expense of providing everyone with a reliable, fast connection. We note the City of London's recent work in developing a standardised wayleave that can be used across the UK to speed up the process of agreeing new internet connections between providers, tenants and building owners; and that the GLA is currently producing a standardised wayleave for mobile connections.

18. **Is the existing digital communications regime going to deliver what is needed, when it is needed, in the areas that require it, if digital connectivity is becoming a utility? If not, how can we facilitate this?**
    Note: the existing "regime" refers to the current market, competition and planning frameworks. "Digital communications" includes both fixed and mobile connectivity.

    We are not convinced that making digital connectivity the 'fourth utility' will resolve all the problems associated with rollout. We want to see government introduce a planning requirement for fibre-ready connections to be installed within new buildings, and for the wayleave toolkit to be adopted as best practice by government.

Energy

19. **What is the highest value solution for decarbonising heat, for both commercial and domestic consumers? When would decisions need to be made?**

    More support and strategic planning is needed by government to assess the most effective methods. Energy efficiency remains important as this reduces demand for heat regardless of fuel source and therefore should take high priority. Further research into carbon capture and storage needs to be undertaken.

    The Committee on Climate Change notes that the continued roll-out of low-carbon heat networks through the 2020s will require a supportive planning policy framework and a financing framework. The government will need to establish a process for determining the direction of travel for heat decarbonisation post-2030. This includes identifying stakeholders and their roles, and which decisions need to be made during the 2020s.[2]

20. **What does the most effective zero carbon power sector look like in 2050? How would this be achieved? Note: the "zero carbon power sector" includes the generation, transmission and distribution processes.**

    London Councils wants to see a range of solutions: increased energy efficiency of buildings; increased use of low carbon gas; increased electrification of heat; increased decentralised (district/local/community) energy systems (as efficiency is lost through transmission); and increased use of "fringe technologies" such as solar thermal, geothermal and heat pumps. To achieve this, the government needs to set out a long-term plan, and provide investment (see comments above).

21. **What are the implications of low carbon vehicles for energy production, transmission, distribution, storage and new infrastructure requirements?**

    We note that one scenario used by the Committee on Climate Change is for electric uptake in the UK to increase significantly to 13.6m electric vehicles on the road by 2030. This would have an impact on energy infrastructure; storage will be important alongside the decarbonisation of the power system. Innovative solutions around demand side response and vehicle to grid technology would assist with this.

---

[2] https://www.theccc.org.uk/wp-content/uploads/2016/10/Next-steps-for-UK-heat-policy-Committee-on-Climate-Change-October-2016.pdf

Water and wastewater (drainage and sewerage)

22. **What are most effective interventions to ensure the difference between supply and demand for water is addressed, particularly in those parts of the country where the difference will become most acute?** *Note: "demand" includes domestic, commercial, power generation and other major sources of demand.*

London Councils supports the rollout of metering and we want to see greater uptake of strategic sustainable drainage systems (SUDS) across London and the UK. Water stress needs to be given much greater consideration when development sites are identified, particularly as this is a pressure that needs to be considered from the beginning, as solutions are difficult to add once buildings and layouts are designed.

23. **What are the most effective interventions to ensure that drainage and sewerage capacity is sufficient to meet future demand?** *Note: this can include, but is not necessarily limited to, governance frameworks across the country.*

We want to see stronger requirements on developers to introduce SUDS and greater retrofitting of existing buildings. The right to connect to a sewer needs to be discontinued, to force developers to give much greater consideration to the water that can be managed on site. We see a continued role for local authorities and water companies working together on ensuring developers include adequate sustainable drainage in their development. Not having an automatic right to connect to a sewer (and especially a surface water drain if this is nearest) would help improve this approach.

London is already building the Thames Tideway Tunnel to better manage demand, but we note that Thames Water still predicts severe capacity constraints in some parts of London, regardless of this new infrastructure.

24. **How can we most effectively manage our water supply, wastewater and flood risk management systems using a whole catchment approach?**

London's local authorities are part of the Thames Regional Flood and Coastal Committee which is funding 'slow the flow' land use management pilots in the upper part of the Thames catchments. At a very local level, there needs to be greater public awareness of the implications of paving driveways, perhaps for neighbours several streets away. Local authorities could play a greater role here if planning permission were required for such changes. In London the Greater London Authority is mapping where there are opportunities for effective installation of SUDS measures.

Flood risk management

25. **What level of flood resilience should the UK aim to achieve, balancing costs, development pressure and the long-term risks posed by climate change?**

London Councils believes that flood resilience should focus on protecting homes and significant economic assets to the UK. We need to be mindful of a changing climate and locating developments in flood plains and this includes in cities like London. As a country we need to improve the way we determine which areas will flood, and we need to do this in cities as well by making space for water and for water to drain.

26. **What are the merits and limitations of natural flood management schemes and innovative technologies and practices in reducing flood risk?** *Note: "innovative technologies and practices" can include, but is not necessarily limited to, property level resistance and resilience, temporary defences, advances in predictive asset maintenance and innovative construction materials.*

The Thames Regional Flood and Coastal Committee is looking at piloting schemes in the upper Thames catchment. These are valuable, as they help protect green assets, but we also know that they do not protect against the worst floods. A number of boroughs install property level protection for homes at risk of flooding where a large scheme is not viable. We need increased use of construction materials that repel water, and to ensure householders are educated in the benefits of these materials. We welcome the innovative approaches in flood risk, and note that there is a much more limited approach in the drought and overheating aspect of water management.

Solid waste

27. **Are financial and regulatory incentives correctly aligned to provide sufficient long-term treatment capacity, to finance innovation, to meet landfill and recycling objectives and to assign responsibility for waste?**

We are concerned that the focus on increasing recycling rates is misplaced when the focus should be on waste minimisation. As such we want to see changes to regulation that require greater action from business to reduce their packaging, and of what remains, ensure it can be firstly reused and secondly recycled. We hear mixed views on whether London and the UK have enough infrastructure to meet its waste needs – a robust and comprehensive review would be welcomed. The transition to a circular economy should reduce requirements for landfill, which should be an ambition of the UK anyway.

28. **What are the barriers to achieving a more circular economy? What would the costs and benefits (private and social) be?** *Note: A "circular economy" is an alternative to a traditional 'linear economy' (i.e. make, use, dispose) in which products are designed and packaged to minimise waste, and resources are kept in use for as long as possible, e.g. through re-use, recycling and greater recovery of materials through the waste management process.*

London Councils is supportive of achieving a more circular economy as a key principle to move to better waste management to reduce waste and become zero carbon. Planning and leadership would generate long term certainty which will enable the correct infrastructure to be delivered so we would like stronger government commitment to circular economy principles across all department including BEIS, DEFRA and DCLG.

New targets for reuse and recycling place a financial burden on local authorities as capture rates for traditional materials will need to be increased and new materials added to collection and disposal services. At the moment local authorities bear all the costs of waste management but have no control over materials entering the waste stream so see none of the benefits. This makes a strong case for extended producer responsibility to incentivise the circular economy approach as far upstream as possible. Once circular economy principles are implemented it makes no sense to continue to measure recycling by weight as materials move out of the traditional waste stream to new uses. We support targets and measures which encourage the best environmental or economic outcome.

It is expected that further investment in waste processing infrastructure would be required to ensure the appropriate capacity is available. There is currently a lack of investment in recyclate processing infrastructure so confidence needs to be renewed which could be provided by government. An additional barrier to the circular economy is space for new industries and storage especially in urban areas.

LONDON
COUNCILS