

Response by Canary Wharf Group to National Infrastructure Commission

0 Summary

0.1 Canary Wharf Group Limited (CWG) is pleased to respond to the call for evidence from the National Infrastructure Commission (NIC) on London's future transport infrastructure. The key points are:

- According to the London Plan, London's housing growth will be primarily focussed in east and south east London, highlighting the need for additional transport infrastructure to improve access to areas, particularly those adjacent to the Thames on both sides of the river
- Even with planned rail improvements, there is still a need to enhance orbital rail routes/capacity as a means of providing a better alternative to road travel across Greater London as a whole and also reducing pressure at Central London termini and interchanges
- Crossrail 2 is supported as a means of providing additional rail capacity, but in its original north east – south west orientation.
- The costs of Crossrail 2 could be reduced by:
 - reviewing the alignment in south west London and restricting tunnelling to the section north of Clapham Junction
- The benefits of Crossrail 2 could be enhanced by:
 - extending services in the north to Stansted
 - providing a new eastern branch to serve London Riverside
- Other priorities for transport investment include:
 - New road/rail river crossings east of Tower Bridge
 - Improved orbital and radial road capacity
 - Extension of Crossrail 1 to Ebbsfleet, subject to further capacity studies and provision of at least 30 trains per hour through the Isle of Dogs
 - Further extension of the Bakerloo Line (over and above the recently announced extension to Lewisham) to include a route through Surrey Quays, the Isle of Dogs (and potentially beyond to open up areas adjoining the Thames including the Greenwich Peninsula and Charlton Riverside for housing growth and other development), linking a string of Opportunity Areas identified in the London Plan 2015
 - ensuring road capacity and accessibility meets the needs of essential servicing / delivery vehicles, buses and cyclists.

0.2 CWG would welcome further discussion with the NIC on the ideas presented in this response.

1 Introduction

- 1.1 This evidence for the National Infrastructure Commission (NIC) on London's future transport infrastructure is prepared by Canary Wharf Group Limited (CWG).
- 1.2 CWG is keen to ensure that over the next 30+ years existing and future transport infrastructure will support the Greater London Authority's ("GLA") and Transport for London's ("TfL") objectives as set out in the London Infrastructure Plan 2050: to ensure the foundations for London's continued success as a Global City; to help house a growing London; to support a better, not just bigger, London; and to innovate to develop a transport system of tomorrow.
- 1.3 CWG feel that infrastructure investment should facilitate the maximisation of development potential in the Opportunity Areas (OAs) identified in the London Plan 2015, in particular those in east and south east London.
- 1.4 We recognise that the Commission will not consider opportunities related to airport expansion, and have borne this in mind in preparing this response. We note though that when a decision is made, important choices will need to be made on the locations of transport infrastructure, to ensure flexible services are provided serving all of London's airports and potential expansion locations.
- 1.5 We note that the Commission is not currently tasked with looking at ways to reduce the need for major capital projects by better use of existing and future capacity. Technology and other measures should be explored to achieve better use of infrastructure capacity.
- 1.6 The response is set out as follows:
 - **Section 2** – London and its hinterland – major economic and social challenges
 - **Section 3**- Strategic large-scale transport options, including commentary on potential funding
 - **Section 4** - Crossrail 2 - improving the cost: benefit ratio.

2 London and its Hinterland - Major Social and Economic Challenges

High population and employment growth

- 2.1 The key transport infrastructure challenges, and underlying trends such as population and employment growth have been researched by the GLA and TfL and other interest groups, notably within the London Plan 2015. The GLA predict that London's population could grow from 8.6 million in 2015 to potentially 13.4 million by 2050. The GLA also forecast that the number of jobs within London could increase from 4.9 million in 2015 to 6.3 million by 2041.
- 2.2 Actual growth in travel has also been greater than the forecasts in the Mayor's Transport Strategy (source: GLA London Infrastructure Plan: Transport Supporting Paper (2014)). This further highlights the need to proactively plan and implement substantial improvements to transport infrastructure, particularly to accommodate growth in public transport trips.
- 2.3 TfL estimates public transport trips could increase by up to 60% by 2050, based on projected population growth, with continuing trend mode shift from car use given increasingly dense patterns of development. This underlines the need for further major investment in public transport.

Housing demand

- 2.4 London's forecast population growth will need 49,000 additional homes each year, but only 30,000 are being completed each year. The Future of London's London 2050 workshop concluded "supply of housing [is] an enabling tool for economic growth in London. Housing, taken as a piece of infrastructure, is one of the most (if not the most) important risks to London's economy." Housing demand into the foreseeable future exceeds supply, resulting in high housing costs. Effective transport investment can help by improving connectivity with lower cost areas in London's hinterland, opening up new areas for development and facilitating densification within London.

Ageing population

- 2.5 The London Plan estimates that the number of people over 64 is projected to increase by 64% (nearly 580,000) to reach 1.49 million by 2036. The over 90s are expected to grow in number over the same period, by 89,000. This will require further investment in accessible public transport including flexible demand responsive services and use of vehicles with wheelchair access.

Reducing commuting times

- 2.6 London has the longest average commute time in the UK - 56 minutes per trip each day. Lower value housing areas located along the radial road and main line routes out of London are increasingly being used by commuters, leading to transport infrastructure capacity constraints.
- 2.7 Transport investment should increase capacity on strategic routes, particularly underground and rail routes and this should be combined with high density development around stations. It should improve service reliability, reduce overall journey times, reduce congestion at terminal stations and improve interchange opportunities outside Central London.

Transit-oriented development

- 2.8 London needs higher density development around public transport nodes and increased public transport accessibility to redevelopment and regeneration areas. The focus for investment should be to unlock and raise the cap on development potential, especially within the Opportunity Areas and Areas for Intensification identified in the London Plan, potentially generating greater surplus value to help fund infrastructure delivery.

3 Strategic Large-Scale Transport Options

Priority Rail and Underground Schemes

- 3.1 Key rail and underground network interventions should improve capacity and connectivity within London and on radial links with its hinterland. These should be combined with strategic interchanges between radial and orbital routes to reduce pressure at terminal stations. National Rail's corridor upgrades as shown in the 2050 London Infrastructure Plan should be a priority for funding.
- 3.2 CWG supports Crossrail 2 in principle, as it opens up important connections needed to allow London to grow. However the planned scheme does not tackle the transport challenges outside central London/West End, nor does it address London's Opportunity Areas very well. Therefore, it needs to be complemented by new rail capacity to improve connectivity between and to other key centres of employment and major new development – the City, Canary Wharf (incl. Poplar and Isle of Dogs), City in the East/Tilbury Port, Euston/Kings Cross/St Pancras and Old Oak Common/Wembley.
- 3.3 CWG ask that the Commission consider in more detail the following rail, DLR and underground improvements that meet the strategic objectives by improving both accessibility and connectivity. Prioritisation should be given to schemes which provide improved connectivity, in particular reliability and speed of journeys and which unlock the delivery of housing and jobs within London:
- Crossrail 1
 - provide a new link to the West Coast Mainline from Old Oak Common
 - extend services east to Gravesend and Ebbsfleet, to provide interchange with HS1 services, subject to further capacity studies and provision of at least 30 trains per hour through the Isle of Dogs
 - Crossrail 2 (see more detail in section 4)
 - consider fuller scheme, with extensions to Stansted airport and to Barking Riverside / City in the east (supporting major housing development)
 - simplify scheme in south west London to reduce tunnelling costs
 - take over a Crossrail 1 branch as part of Crossrail 2, providing an interchange station between Crossrail 1 and 2 at Liverpool Street/Shoreditch and seek to avoid problems of turning trains and imbalances associated with Crossrail 1
 - Further east-west rail capacity in the areas adjoining the River Thames in east London in order to support development e.g. Crossrail 2 branch and/or Bakerloo line extensions
 - Bakerloo line extensions over and above the recently announced route from Elephant & Castle to Lewisham, to open up areas of development on the north as well as the south side of the river and improve transport capacity and resilience in east and south east London
 - A new Brighton – Gatwick – Stansted rail link via East London, interchanging with Crossrail 1 and Crossrail 2
 - New orbital rail routes including routes using new river crossings east of Tower Bridge with enhanced interchanges outside Central London, to improve peripheral connectivity and reduce congestion at main termini, such as extensions to the London Overground and improvements to interchange at locations such as Lewisham

- Upgrade main termini to improve passenger experience and reduce congestion
- Increase central /suburban rail capacity - through selective interventions, including capital investment and increasing train lengths.
- World class tube – fund signalling improvements and removal of congestion points to increase running capacity to at least 36 trains per hour on all routes
- Provide Northern Line Extension from Battersea to Clapham Junction
- DLR improvements including:
 - General capacity enhancements, improved service frequencies and upgraded stations
 - An extension from Bank to Euston, including a new station at Tower Hill (to facilitate closure of the Tower Gateway branch)
 - Further extensions to key centres such as Barking and Thamesmead.

Priority Road Schemes

- 3.4 CWG considers there is a need for a bold approach and agreement to a programme of schemes designed to bring London's road network up to date including consideration of tolls, road pricing applied to all road users as well as extending the Congestion Zone in order to help fund improvements. Priorities for capital investment in road schemes should focus on providing and improving key links in the road network to improve connectivity, capacity, reliability and journey times, particularly for buses and essential servicing and delivery vehicles. It is particularly important to provide additional Thames crossings east of Tower Bridge to link the OAs in east London, north and south of the river, to maximise development capacity and improve economic synergies in the key development opportunity in London. Priority schemes include:
- Thames crossings in east London, notably at Gallions Reach
 - Improved Orbital Routes, such as enhancements to the North and South Circular Roads:
 - Underpasses / tunnels (to enhance capacity and improve urban realm), such as a link from the A13 to the A4 via Central London.

Key Funding Priorities

- 3.5 CWG ask that the Commission gives further consideration to several schemes which appear to offer the best outcomes relative to the GLA's strategic objectives:
- Crossrail 1 extensions, particularly to Ebbsfleet and the West Coast Main Line
 - Crossrail 2 extension to open up access to London Riverside
 - Further extensions of the Bakerloo Line to serve planned regeneration areas and Opportunity Areas either side of the River Thames in East London.

Potential Funding Approach

- 3.6 London has an established framework for strategic spatial and transport planning, through the London Plan and the supporting Mayor's Transport Strategy. The London 2050 Infrastructure Plan consultation sets the context for the development of the next London Plan and MTS.
- 3.7 It is imperative that strategic planning, and the infrastructure priorities that stem from this are supported by a long-term, consistent and sustainable funding stream. This means London needs more control over long-term funding and financing of strategic infrastructure.

- 3.8 The principle that the beneficiaries of major investment (people and businesses in London) should fund investment is compelling, and will ensure greater buy-in to infrastructure investment. Fiscal devolution would enable this, and remove some of the political uncertainty of major infrastructure decisions being made by Treasury, where long-term investment could be subject to political risk based on the false perception that investment in London is at the expense of other areas.
- 3.9 CWG support the ambition towards greater fiscal devolution of business rates and property tax revenues. Local income taxes are another option, which we think should apply regionally rather than just in London (as so many in the south-east commute into London, shop and use other services here).
- 3.10 In considering rail investment specifically, we note the recent successes of public/private approaches in London, including:
- Over-station development funding new stations, e.g. Crossrail 1 at Canary Wharf
 - Development cross-funding the provision of the station box at Woolwich Arsenal Crossrail 1 station
 - The anticipation that the Northern Line Extension from Kennington to Battersea Power Station will be fully funded by developments in the Vauxhall Nine Elms and Battersea Opportunity Area.
- 3.11 In considering road investment specifically, we also support the principle of road user charges to better manage London's road network (with tariffs allied to congestion) and to fund vital new road infrastructure. This would be more equitable than the current road tax and fuel duty.
- 3.12 In view of the desire to discourage private vehicle use, funding priorities should be focussed on increasing capacity on rail, DLR, tram and underground services, to open up new areas for housing and development, as well as addressing existing capacity constraints. Nevertheless, funding for roads should also be made to ensure sufficient capacity is provided for the needs of essential servicing / delivery vehicles, buses and cyclists.
- 3.13 Infrastructure providers should also consider ways for development opportunities, such as major housing schemes, to cross-fund new infrastructure.

4 Crossrail 2 – Improving the Cost: Benefit Ratio

Commentary

- 4.1 Crossrail 2 is currently proposed by TfL as a scheme linking Epsom and other locations in south west London with Broxbourne in Hertfordshire and New Southgate in north London.
- 4.2 Although a strategic north-south link will help London to grow and relieve congestion on key underground lines and at Network Rail termini, the proposed scheme misses the opportunity to help open up major housing and employment sites in east and south east London. It also does not serve major destinations such as Stansted Airport.
- 4.3 In south west London, there appears to be duplication with existing suburban services terminating at Waterloo. While possibly relieving congestion, this will add to operational complexity. The tunnelling options in south west London / Chelsea seem to be unnecessarily circuitous and lengthy. Consideration should be given to reviewing the proposals in south west London and providing the tunnel portal closer to Clapham Junction.
- 4.4 Crossrail 2 supports development of 200,000+ new homes along its alignment. It increases capacity between Clapham Junction and Euston, reducing pressure on the underground (especially the Northern and Victoria Lines) and freeing up track and platform capacity at Waterloo and Victoria stations. Connectivity is improved by new interchanges:
- **HS1** - at Euston/ St Pancras
 - **Crossrail 1** - at Tottenham Court Road
 - **Thameslink** – at Euston/ St Pancras
 - **Suburban routes - south** - at Wimbledon /Clapham Junction
 - Suburban routes - north - Tottenham Hale.
- 4.5 It is essential that the new interchanges are designed with sufficient capacity to comfortably handle anticipated passenger flows. This is particularly important at Tottenham Court Road where Crossrail 2 would interchange with Crossrail 1, the Central Line and the Northern Line and the expected numbers of interchanging passengers will be very high.
- 4.6 As currently proposed, Crossrail 2 would provide the primary route to Canary Wharf from the majority of south west London, with passengers interchanging onto Crossrail 2 at Tottenham Court Road. It would provide comparable journey times to the current route via Waterloo and the Jubilee Line, although waiting times for Crossrail 1 at Tottenham Court Road would be longer than those for the Jubilee Line at Waterloo.
- 4.7 10% of Canary Wharf employees currently pass through Waterloo, which the ‘Office of Road and Rail’ recently identified as Britain’s busiest rail station (99.2m entries/exits between 1 April 2014 and 31 March 2015). Recent analyses of TfL Railplan data by CWG have also highlighted that the Jubilee Line is likely to experience increasing congestion in the future in the absence of Crossrail 2. Therefore, CWG sees Crossrail 2 as important for providing journey choice and resilience and reducing waiting times for passengers joining the Jubilee Line at busy times, notably at London Bridge in the morning peak period, especially when Thameslink 2000 is fully operational.
- 4.8 The need to interchange at Victoria mainline station would also be reduced, which is currently Britain’s second busiest mainline station (85.3m entries/exits between 1 April

2014 and 31 March 2015). Particularly in the shorter-term, Crossrail 2 is also likely to relieve the Victoria Line and the Charing Cross branch of the Northern Line.

- 4.9 It is important that real-time information for all key routes is provided on trains on all lines including Crossrail 1, Crossrail 2 and the Jubilee Line. This will ensure that passengers can make informed decisions about which routes to use and where to interchange, based upon up-to-date knowledge of operating conditions and train occupancies.

Suggested improvements

- 4.10 CWG considers that the effectiveness of the current Crossrail 2 proposals could be improved as follows:

- Provide a branch from Euston/St Pancras to east London taking over the Crossrail 1 branch to Shenfield with a Crossrail 1/Crossrail 2 passenger interchange at Liverpool Street/Shoreditch. This would enable the Abbey Wood branch of Crossrail 1 to run with up to 30 trains per hour and would provide more rail capacity to and through the Isle of Dogs and Opportunity Areas in east and south east London
- Subject to further detailed capacity studies and provision of 30 trains per hour through the Isle of Dogs, it would be possible to extend Crossrail 1 to connect with HS1 services at Ebbsfleet and assist with regenerating North Kent Thameside
- If Crossrail 2 were to take over the Shenfield branch, it may also be possible to build another Crossrail 1 branch east of Custom House possibly taking over all or some of the c2c lines. This would support major housing development areas and higher density development in the east London Opportunity Areas including the Isle of Dogs, Royal Docks and London Riverside
- Extend Crossrail 2 services to serve Stansted Airport. This would significantly improve connectivity between central London/ City /east London and Stansted Airport and between Stansted and Heathrow as well as increasing the housing and employment development potential in the Upper Lee Valley Opportunity Area and beyond.
- Relocating the tunnel portal nearer Clapham Junction. This would reduce the costs of the route in south west London.