

Date: 5 November 2014

Item 6: **Transport for London's Response to the Mayor's  
consultation on the London Infrastructure Plan 2050**

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## **This paper will be considered in public**

### **1 Summary**

- 1.1 The purpose of this paper is to seek the Board's approval for Transport for London's (TfL's) draft response to the Mayor's London Infrastructure Plan 2050 (the 2050 Plan).
- 1.2 In considering its view, the Board is asked to note that, since the Greater London Authority (GLA) and TfL have worked side by side on the preparation of the 2050 Plan, the response has been drafted in a way that offers high level support for the overall approach as opposed to detailed comments in relation to the specific questions posed.

### **2 Recommendation**

#### **2.1 The Board is asked to:**

- (a) **approve Transport for London's draft response to the Mayor's 2050 London Infrastructure Plan consultation, as set out in Appendix 1 to this paper, subject to any comments it might have; and**
- (b) **delegate authority to the Managing Director, Planning, to make any further minor editorial changes to the draft response as may be required.**

### **3 Background**

#### **Introduction**

- 3.1 Following the recommendations of the 2013 London Finance Commission and the Mayor's 2020 Vision document, the 2050 Plan has been produced as a step towards improving the arrangements for planning and funding London's infrastructure. It forms part of the Mayor's case that to sustain his vision for the city's future, London's government needs greater financial powers to invest in London's infrastructure and to support its growth.
- 3.2 The purpose of the 2050 Plan is to provide a high level view of London's infrastructure needs to 2050 across a range of infrastructure sectors (transport, housing, energy, water, waste, green infrastructure, and telecoms) together with a way of funding them.

- 3.3 An online GLA consultation was held between 31 July and 31 October 2014. The deadline for responses to the consultation has been extended on an exceptional basis to TfL in order to seek the Board's approval for its draft response.
- 3.4 A series of consultation papers were produced (see list at Appendix 2), including an overall Consultation Document covering each infrastructure sector and a Transport Supporting Paper. A series of consultation questions were also posed (also at Appendix 2). Following analysis of the responses, the GLA intends to publish a final document in early 2015. It does not plan to issue revised versions of the supporting papers.
- 3.5 The overall work has been led by the GLA but in close cooperation with TfL on the transport work stream. During the preparation of the 2050 Plan, TfL held a series of presentations and workshops both internally and externally, with sub-regional panels and industry experts, in order to ensure a broad spectrum of views were taken into account.

### **Consultation document**

- 3.6 The main consultation document is set out in seven sections from A to G:
- 3.7 Section A sets out the strategic challenges, including population forecasts. The central projection sees London grow from 8.3m today to 11.3m in 2050, an increase of 37 per cent. A similar increase in employment, from 4.8m to 6.3m is also forecast.
- 3.8 Section B anticipates new technologies and innovations that will change both how we will conceive infrastructure in the future and how we will provide it. For example, it explains the role of data as a 'new utility' that is fast becoming a key element of planning and operating cities. It makes the case for being open to radical change and for finding ways of systematising the adoption of innovation and new technology in London's development.
- 3.9 Section C analyses the systemic barriers to successful infrastructure provision, such as organisational siloes and unhelpful regulations, and proposes ways to reconcile the disjointed arrangements in place to introduce more coordinated and strategic approaches. These include the creation of a London Infrastructure Delivery Board, which has been implemented with the first meeting taking place on 5 November 2015. The Commissioner is a member.
- 3.10 Section D sets out the proposed infrastructure requirements for each of the sectors and Section E sets out the spatial patterns of growth. The relevant sections for transport are summarised in the following section (Summary of the Transport Supporting Paper).
- 3.11 Section F sets out costs and payment methods. Arup was commissioned to develop a cost model and provide a high level estimate of London's 'complete infrastructure bill' in real terms and as a proportion of the economy. The costs include capital costs (enhancements and renewals) as well as operating and maintenance costs. There was no attempt to value London's existing infrastructure asset base. The headline figure is a total investment requirement between 2016 and 2050 of £1.3 trillion, with a range of £1 trillion to £1.7 trillion.

### 3.12 Key points from the Arup work include:

- (a) total infrastructure costs will double over the next ten years in real terms (from an annual average of £16bn in the baseline period between 2011 and 2015 to £38bn between 2016 and 2050);
- (b) as a proportion of the economy, infrastructure costs will almost double over the next decade but in later periods (after 2030) they are projected to decline as a percentage of the overall economy. These projections do not fully take into account the wealth creation brought about by implementing the 2050 Plan;
- (c) housing and transport together make up 77 per cent of the total cost, whereas information and communications technology forms only one per cent of the total;
- (d) overall, the estimates suggest the current level of funding will not meet London's growth. For transport there is an estimated gap of £2.5bn per year, which represents 19 per cent of the transport requirement; and
- (e) a range of funding options is considered, including fiscal devolution. The gains from this are likely, however, to be modest at least to begin with. In particular, it is noted that London lags far behind other international cities in capturing the property value uplift generated by infrastructure. More efficient project delivery is estimated to offer potential capital cost savings of 10 to 15 per cent. Technology and other innovation is also expected to yield significant savings.

### **Summary of Transport Supporting Paper**

- 3.13 In preparing the Transport Supporting Paper the intention was not to identify a comprehensive list of individual schemes for the future but to develop a vision for London's transport system in the light of the challenges the city faces as currently understood. In so doing, the work will also inform TfL's own understanding of the medium and longer term challenges it faces, and in particular future strategic documents such as the next London Plan and Mayor's Transport Strategy and future Business Plans.
- 3.14 The fundamental driver of the city's future transport infrastructure requirements is the large scale forecast population growth over the period to 2050, as set out above.
- 3.15 The case for encouraging London to grow rests on the benefits for the UK of having a leading global city. It is vital to view this in an international context. Future trends strongly suggest a view that cities, and especially very large international cities, are likely to continue to become relatively more important. London is one of Europe's only two 'mega cities'<sup>1</sup> (the other being Paris) and as such its agglomeration of high value services and international connections make it uniquely well placed to act as the UK's gateway to the rest of the world, attracting investment, trade and visitors to the benefit of the whole country.

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<sup>1</sup> City regions with more than 10m inhabitants.

- 3.16 The wider UK context is nevertheless important. Investment in London's infrastructure should not be seen to be at the expense of other UK cities. Indeed the 2050 Plan recognises that there will be strong mutual benefits if we can more fully integrate the economies of London and the UK's other major cities so that they work together more effectively, complementing each other's strengths while at the same time capitalising on London's world city status. The key point is that investment is needed in both London and key conurbations elsewhere in the UK.
- 3.17 A promising way forward would be to develop a Ranstad-type economic network of competitive well connected cities stretching beyond the South East (such as Birmingham, Manchester and Leeds) which can generate greater value than the sum of their parts.
- 3.18 Regional projects can often show good comparative value for money but the total benefits are larger in London. Both sorts of projects are needed in the national portfolio. The success of these locations should be considered as complementary to, rather than in competition with, the Capital.
- 3.19 A range of factors need to be considered before London's future transport infrastructure requirements can be determined, some of which are subject to considerable uncertainty, particularly the options for developing the city itself. A programme of analysis was undertaken, including:
- (a) land use scenarios relating to the distribution of future population and employment;
  - (b) consideration of possible / likely changes in transport demand factors to 2050;
  - (c) changes in user requirements; and
  - (d) technological developments likely to affect the provision of transport.
- 3.20 The key findings of this analysis included the following:
- (a) population growth alone will drive an increase of 35-40 per cent in the number of trips by 2050 under the central population projection. As a result of changing travel trends this will require a 70 per cent increase in public transport capacity;
  - (b) there is a strong case for supporting the continuing growth of employment in the dense core of employment in central London, which currently accommodates over 30 per cent of London's jobs in two per cent of its area. This can be achieved through densification of established areas, creating more new edge of centre employment quarters such as King's Cross and growing a few well connected additional hubs such as Canary Wharf, Stratford and possibly Old Oak;

- (c) current Opportunity Areas could accommodate a city of around nine million people under present planning policies. Beyond this, policy choices will have to be made in relation to the future 'shape' of London, i.e. how it develops spatially. A number of scenarios were tested included a greater focus on town centres, areas with good public transport provision and redeveloping areas of inner and outer London to higher densities. From a transport perspective all the scenarios are workable but in practice they would all present difficulties in delivery. More work is planned to investigate combinations that could be practically feasible;
- (d) consideration was also given to how some of London's growth could be accommodated outside the city, through developing further new towns or extending existing towns. Existing and planned rail lines provide a number of options. For example, HS2 will release capacity on existing main lines north of London that could be used for more commuter services. Supplementary investment would boost this potential further. Extensions of HS1 could help utilise spare capacity on the route and provide better links to relatively deprived coastal towns in Kent and Sussex, which would benefit from additional commuters;
- (e) TfL need to plan for a more diverse population, with more diverse needs. For example there is expected to be a fourfold increase in the number of Londoners who are over 90 years old by 2050. Transport also has a central role in improving the health of Londoners and is also closely linked to improving the quality of life the city offers, which is increasingly important to its competitiveness; and
- (f) over the period of the 2050 Plan there will be gradual technological advances in some areas and possibly some 'disruptive' new technologies affecting transport. TfL will need to look ahead to build in opportunities in its infrastructure including ways of responding to wider changes in lifestyle. Technology will also make possible new ways of paying for road infrastructure and use.

3.21 The understanding developed of the key challenges and opportunities was used to determine over thirty key transport requirements. These were grouped under four headings: Global City, Housing London, A Better London and an innovative system. In summary, they covered:

**Global City:**

- (a) world class international connections, including a new four runway hub airport;
- (b) improved rail connections to mainland Europe;
- (c) improved radial links including maximising the performance of the existing network, e.g. through the Tube upgrade programme, further "Crossrails," station upgrades and a transformed commuter rail network; and

- (d) a road network fit for the future including a congestion-busting programme, a new inner orbital tolled tunnel and series of mini-tunnels and decking over to help transform places across the city as well as new river crossings in east London.

### **Housing London:**

- (a) getting the most from existing and potential growth areas, e.g. through extensions to the existing network to connect to areas with major development potential and providing more and better stations to act as focal points for development; and
- (b) opening up wider opportunities across and beyond London for sustainable development, e.g. through further devolution of suburban rail networks, extending high quality metro style services across the whole city, schemes to support densification and further rail enhancements to unlock growth beyond London.

### **A better London:**

- (a) a more accessible, efficient, active, cleaner and safer transport system through an enhanced accessibility programme so that two thirds of public transport journeys are step free by 2050, high quality cycle and pedestrian routes, iconic place-changing and greening schemes, a pollution free transport system, and 'minimal impact freight'.

### **An innovative system:**

- (a) leading innovation through smarter assets and networks and transforming the customer experience, e.g. through seamless information and integrated systems for users, rolling out smarter assets, capitalising on wider technological / business change, developing a policy framework for implementing autonomous vehicles, delivering a cooler Tube and new ways to pay for infrastructure.

## **4 Legal Implications**

- 4.1 There are no legal implications for TfL in responding to the consultation. Were the 2050 Plan to be adopted in full or part, however, it is likely to have significant repercussions for the governance structures of both the GLA and TfL.

## **5 Financial Implications**

- 5.1 There are no financial implications (aside from staff resource) for TfL in responding to the consultation. Were the 2050 Plan to be adopted in full or part, however, it is likely to have a significant impact on the future funding and financing structures for large transport infrastructure projects. This will clearly have implications for TfL's finances.

**List of appendices to this report:**

Appendix 1: Draft TfL response to the London Infrastructure Plan 2050

Appendix 2: Consultation materials

**List of Background Papers:**

None

Contact Officer: Michèle Dix, Managing Director, Planning  
Number: 020 3054 7099  
Email: [micheledix@tfl.gov.uk](mailto:micheledix@tfl.gov.uk)

# **Appendix 1: Draft Transport for London response to the London Infrastructure Plan 2050 Consultation**

## **Introduction**

The integrated strategic planning of London's spatial development, economic development and transport has brought major benefits since the advent of the current Mayoralty. In particular it has made it possible to make a strong case to Government for sustained investment in the city's transport system. In some ways however the success has been in spite of, rather than because of, the arrangements that are in place for strategic decision making. Moreover, the challenges London faces are now significantly greater.

The city will soon have a larger population than it has had in its history and it is expected to continue growing. At the same time the centre of gravity in the world economy is shifting away from Europe and we will need to work harder at keeping London competing at the highest level. Meanwhile the fiscal environment is expected to remain difficult at the national level for the foreseeable future. Finally, it is increasingly difficult to make the case for high levels of transport investment in London independently of the broader context of the investment needs of the rest of the UK.

In the light of this, it is TfL's view that a new approach to long term strategic planning and funding with more integrated, devolved decision making is needed if we are to unlock the economic growth, jobs and housing needed to ensure London's ongoing success. The London Infrastructure Plan 2050 (2050 Plan) represents an early, vital step in this process.

## **The case for growth and a more long term approach to planning it**

In preparing the 2050 Plan, TfL has worked alongside the GLA to develop a joint understanding of the scale and nature of the infrastructure challenge facing London over the next 35 years. It isn't intended to be a comprehensive investment plan but rather to identify the likely nature and scale of our infrastructure requirements if we are to ensure the city develops sustainably in response to the continuing population growth that it is expected to experience.

The case for growing London rests on the benefits to the UK of maintaining a leading global city. It is important to realise that London's success is not at the expense of the UK's other major cities, but rather complementary to it. There is a wider consensus emerging across the UK that future economic prosperity depends on us developing a series of economic clusters, within and between our major cities, that can compete internationally. Furthermore, a necessary step in realising this will be to address the UK's historic underinvestment in infrastructure.

Cities depend on communication links - at the global, European, UK, and regional level and on a mixture of competition and cooperation with each other. In the UK, these matters have been too often understood parochially. To achieve a better balance we need to be clearer about the nature of the competition London and the UK's other cities face. It is becoming clearer that by working together we can more effectively reap the benefits of global economic growth and capture a larger collective share of trade, investment, and tourism.



## **Alternative visions for London's development**

A vital element of this will be an improved understanding of the sort of city we want and need and the policy implications of realising it, given the considerations set out above. In the light of this, a key part of the work has been to set out the alternative ways in which London could develop in terms of its size and shape over the coming decades. Clearly the choices we make about the development of the transport system will both influence and be influenced by this.

These are important choices that will influence London's future for decades and centuries to come. To ensure they are properly informed, TfL is embarking on a programme of further research to develop a number of themes that have emerged during the preparation of the Plan. These will inform the long term thinking needed to underpin future strategies such as the next versions of the London Plan and Mayor's Transport Strategy.

An important element of this will be working with the GLA to further develop the evidence base about London's long term future growth capacity and developing policies for realising sustainable growth patterns. This will include more detailed investigation of the alternative means identified in the 2050 Plan for densifying the city as well as sustainably accommodating some of London's growth outside the existing boundary. Alongside this we will work to improve our understanding of both the long term drivers of transport demand and the likely changes in the factors determining its provision, together with the implications for the long term future. This will include work to understand the changing nature of London's population and its needs, and the likely economic, environmental and technological developments that may have impacts on future infrastructure requirements.

## **Improved decision making processes**

There are also a number of practical issues, related to the way we decide what transport infrastructure is provided and where, which will need addressing at a more collective level. The current centralised decision making system for funding was developed during an era in which only modest budgets were available for managing what was felt to be the inevitable decline of cities. It is ill suited to the more expansionary climate of today, in which cities are once again the drivers of the country's future growth and success. In particular, the current appraisal system is no longer fit for purpose in relation to its application to large projects which are intended to fundamentally transform the functioning of the economy.

Major investment decisions must be shaped by a more holistic view of cities' needs, starting with the economic growth imperative and supported by strong risk analysis, rather than a narrow transport appraisal system that assumes the development of the economy is broadly independent of the transport system. In effect this means we should move away from centralised decision making in which transport decisions are evaluated independently of their impact on the economy or interaction with other policies. A fresh approach to these decisions will give a better strategic focus on how investment is to be paid back, whether by fares, taxes on increased activity, or developer contributions. Better transport and land use planning and devolution go hand in hand. Both for London and other cities, an integration of land use planning and development with the transport investment is central to economic growth and to future welfare.

A greater focus on revenue and the wider economic returns that are generated by major transport investment programmes will allow us to consider the capital financing of transport projects in a new way. A project which offers proven, realistic potential to add to jobs and productivity will raise the total sum of taxes generated and present new sources of finance over time. In due course, there will be continued streams of activity generating benefits. By viewing spending priorities in this way, we can break with the constraints of short-term decision-making and spending approaches to create a virtuous circle of investment and performance that rewards a spirit of entrepreneurialism in our cities.

### **Greater fiscal devolution**

Closely related to this is the need for more devolution of fiscal decision making. Britain's cities are among the least devolved in the world, with very little control over funding and borrowing. In fact linking benefits to paybacks, particularly those generated by new economic activity, is much more easily done at a sub-regional or city region level than nationally. Once the assumption that the economy is independent of the transport system is abandoned then the immediate prior question is what the objective is of a policy so that the relevant benefits can be examined.

Cities and city regions should be able to have a more focused view of their prospects and how best to respond to opportunities. Indeed they will be essential to actually taking advantage of new opportunities. Transport is a necessary but not sufficient condition for success. Cities and their regions will play a key role in ensuring the other conditions are in place and therefore for maximising the value for money of the overall investment.

### **Conclusion**

The 2050 Plan has provided a much needed opportunity to step back and consider the long view. When we consider how far London has come as a city over the last 36 years it is clear that forecasting the future over such a time frame will never be straightforward. It is clear however that transport schemes have been instrumental in changing London's economic fortunes, in some cases in spite of experts' appraisal methodologies rather than because of them. The role of the DLR and Jubilee Line Extension in facilitating the renaissance that has been witnessed in many of London's former Docklands is testament to this. Some clear lessons for the future can be drawn. In particular there is a powerful case for more, and better planned infrastructure investment to support economic growth in the UK and for this to focus on making our cities and their regions, including London, work better.

## Appendix 2: London Infrastructure Plan 2050 Consultation details

### Consultation materials

1.1 The following consultation materials were provided:

- Consultation document;
- Summary presentation;
- A series of supporting papers including:
  - Transport Supporting Paper;
  - Enabling Infrastructure; Green, Energy, Water and Waster Infrastructure to 2050;
  - Raising London's High Speed Connectivity to World Class Levels;
  - Improving Delivery of London's Infrastructure;
  - The Cost of London's Long Term Infrastructure (Arup).

### Consultation questions

1.2 The general questions and transport specific questions are set out below.

#### *General*

1. Do you agree with the need for an infrastructure plan for the capital? Do you support our approach? If not, why?
2. Is any of the infrastructure identified unnecessary – if so why? What (if any) infrastructure do you think London will need in addition to what we have identified? Why?

*We have identified a significant funding gap with regard to the infrastructure that we think London will need. We have also set out a menu of options to help close the gap.*

3. Which of these should we pursue and why? Which not and why? Are there other options we haven't considered which you think need to be addressed?
4. Will the London Infrastructure Delivery Board be enough to ensure best-practice joined-up delivery of infrastructure in London? What more could the Mayor do?
5. Where do you think London's growth would be best accommodated (please explain why)? Are there alternative spatial scenarios we need to analyse?
6. Do you agree that incentives on utility providers should be amended to enable investment costs for growth to be shared more widely? How practically can this be achieved? If not, why?

7. Regarding technological change, do you agree with the proposed approach?  
What technological advances should London be taking account of or be leading?
8. How can we change behaviours to reduce demand for key infrastructure? To what extent could demand side changes affect, for example, our energy needs or over-crowding on London's transport? \*

### *Transport*

10. Are there any other strategic projects we have not considered?
11. Given funding constraints, what projects do you think we need to prioritise?
12. Which transport innovations do you think will have the most impact and why?  
How can we encourage their development?
13. How clear is our approach to tackling road congestion? How significant do you think promoting walking and cycling could be as part of the solution?
14. What do you think of the vision for increasing step-free access on public transport?