



TOWARDS A TRANSPORT MANIFESTO

Central London Forward

October 2009

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1. INTRODUCTION

This paper for the Central London Forward Board provides an initial review of the key elements of the Mayor's Transport Strategy (MTS) published for consultation on 12th October 2009. It reflects CLF's priorities set out in discussions with TfL's Commissioner for Transport and this paper therefore provides a basis for CLF's transport priorities and manifesto.

The document comprises five further sections, namely :-

- an overview of the key contextual issues;
- a discussion of the core strategic planning principles underpinning the MTS and their relationship to central London and its future transport requirements;
- a review of key modal issues insofar as they have a material bearing on the direction of development of the central area;
- discussion of other issues from the MTS; and
- the principal themes that Central London Forward is recommended to focus on in its engagement with the GLA and TfL.

2. CONTEXT

This section considers the context in which the MTS proposals have been brought forward.

2.1 Access to the Central Area

Against a backdrop of seemingly major changes to the central area and its transport systems over that last 15-20 years it is helpful to briefly consider what has happened to morning peak demands arriving in the central area.

The headlines are :-

- 1991 to 2004 saw no growth in total number of people travelling into central area during the peak three hours. This in part reflects a trend to the progressive spreading of the peak hour across the peak three hours and to a certain degree outside of the traditional peak period also. Between 2004 to 2007 there was growth of 9%;
- the brunt of growth has been accommodated by rail and LU modes. Bus demands remained static between 1991 and 2000, before major expansion of the network coinciding with the congestion charging scheme saw growth of 60% in bus-kilometres between 2000 and 2004. However, since 2004 bus usage has declined 3%. Buses usage has been generated by the significant expansion of the service, a decline in real fares and the broadening of travel concessions to passengers. However, buses still only cater for 10% of demands into the central area;
- car usage declined by 33% between 1991 and 2002 at a time when parking controls were significantly tightened (i.e. the introduction of wheel-clamping and vehicle removal and the reduction in parking standards). Congestion charging has caused a further fall of circa 30% although vehicle movements have largely stabilised at this new level; and
- cycle usage increased by 33% between 1991 and 2002 and received a further boost since Congestion Charging by 58% since 2002. However, cycling still represent less than 2% of mode share to the central area during peak periods.

Forecasts for the demands going forward have been produced by TfL¹ showing growth between 2006 and 2026. The MTS adopts similar growth forecasts for 2031 but does not provide the detailed breakdown for the central area and so this report presents the estimates for 2026. The key projections are :-

- overall travel demand to rise from 1.1m trips to some 1.35m (or a 21% increase);
- car, taxi and motorcycle usage to continue to decline proportionally (mode share falling from 9% to 8%);
- rail and LU demand to increase from 0.87m trips to 1.01m;
- bus usage to rise from 0.12m trips to 0.17m; and
- cycle usage to more than triple and for the mode share in 2026 to be 4.5% of peak period trips.

If realised, the scale of change is significant and would have a marked impact on the central area networks. It should be remembered, however, that many previous forecasts of growth have not been borne out in practice, and there is a greater risk of under-shooting, rather over-shooting, the demand projections.

¹ Transport 2025 : Transport Challenges for a Growing City, TfL, June 2006

2.2 Committed Improvements

The MTS is premised on the delivery of a range of major improvements to the rail and LU system which are considered to be “committed”. Schemes are “committed” if they are included within the TfL Business Plan (covering a period to 2018) or Network Rail’s High Level Output Specification (HLOS) which covers the control period to 2014. Both of these plans are subject to agreed funding from central Government, although in the current climate it is unclear whether the programmes will remain immune to funding cutbacks and the effects of the recession on revenue.

Figures 1 and 2 overleaf shows the key infrastructure “committed” changes taken from the MTS for London Underground and National Rail schemes respectively. In summary the changes are :-

- the delivery of the Crossrail and Thameslink schemes;
- completion of line upgrade works on the Northern, Bakerloo, Victoria, Piccadilly, Jubilee and Sub-Surface (Circle, District, Hammersmith & City and Metropolitan) Lines;
- a range of train lengthening projects (including infrastructure works as necessary) on many rail lines;
- completion of the East London Line and enhancements to the remainder of the Overground network; and
- the lengthening of DLR trains and the delivery of the Canning Town to Stratford International line.

This is a comprehensive programme of works with wide ranging benefits across the capital but with a particular focus on the capacity to/from the central area which accommodates around one third of London’s jobs. These works will provide a welcome and significant platform for more targeted measures in the medium-term as they address the core components of the radial network and seek to respond to under-investment in the past.

2.3 Aspirations

The MTS – which is designed to cover a period to 2031 – includes broad aspirations for continuing to develop the public transport system after 2018. Figure 3 summarises the main components envisaged by the Mayor.

Commentary on the key elements is provided later in this document, but the main focus is on :-

- the delivery of many of the rail proposals emerging from the Route Utilisation Strategies (RUS) prepared by Network Rail which continue the programme of train lengthening and some infrastructure works such as four-tracking of the West Anglia route;
- the construction of Crossrail Line 2 (originally the Chelsea-Hackney Line); and
- a couple of LU line extensions into south London – one of the Bakerloo Line to Hayes in south-east London and a privately-funded extension of the Northern Line to Battersea.

In addition, it is proposed to improve a ring of interchanges on the fringe of the central area to encourage orbital connections and interchange outside of the core (i.e. at Clapham Junction, West Hampstead and Highbury & Islington amongst others).

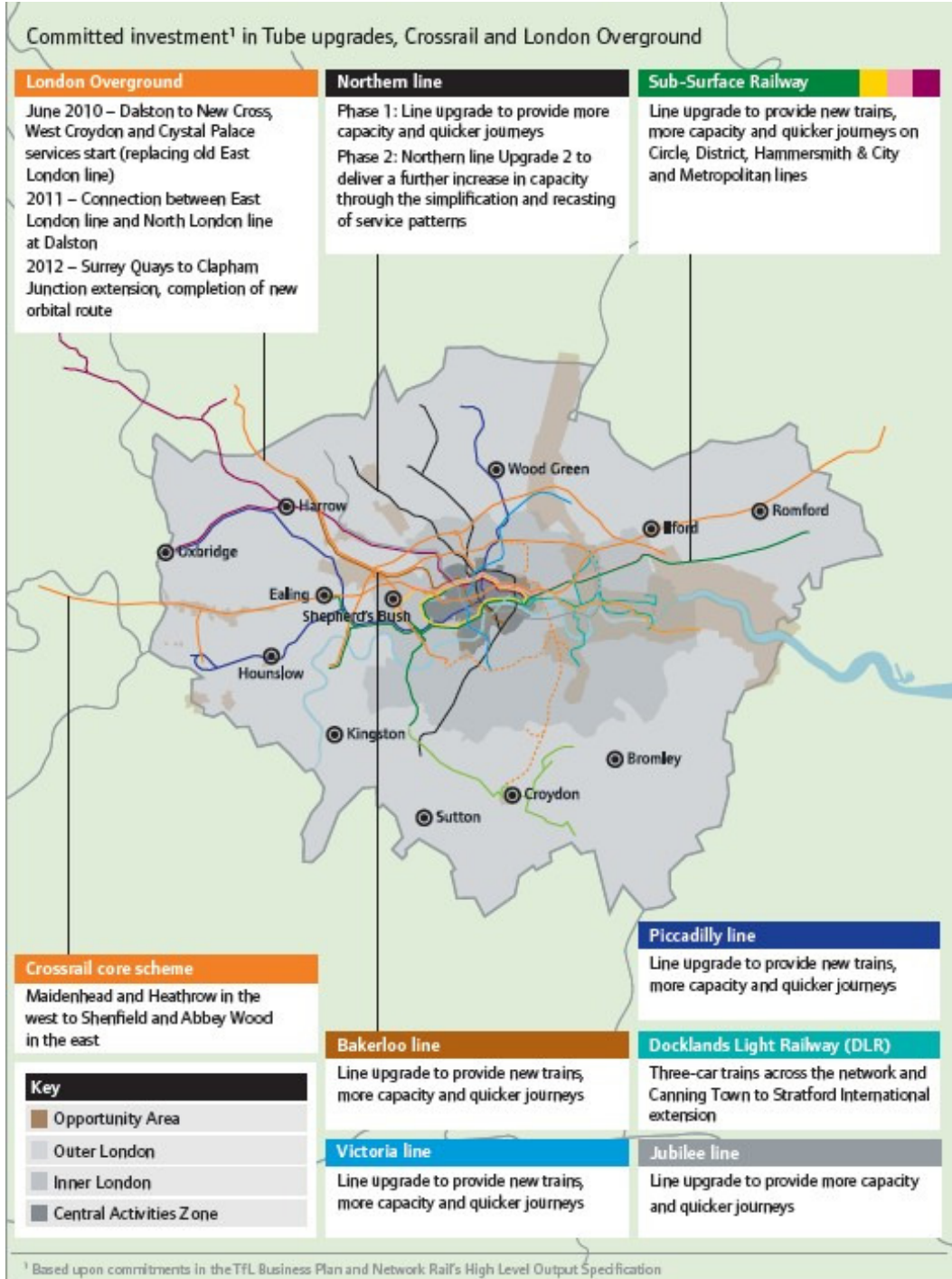


Figure 1 – Summary of “Committed” Improvements : London Underground

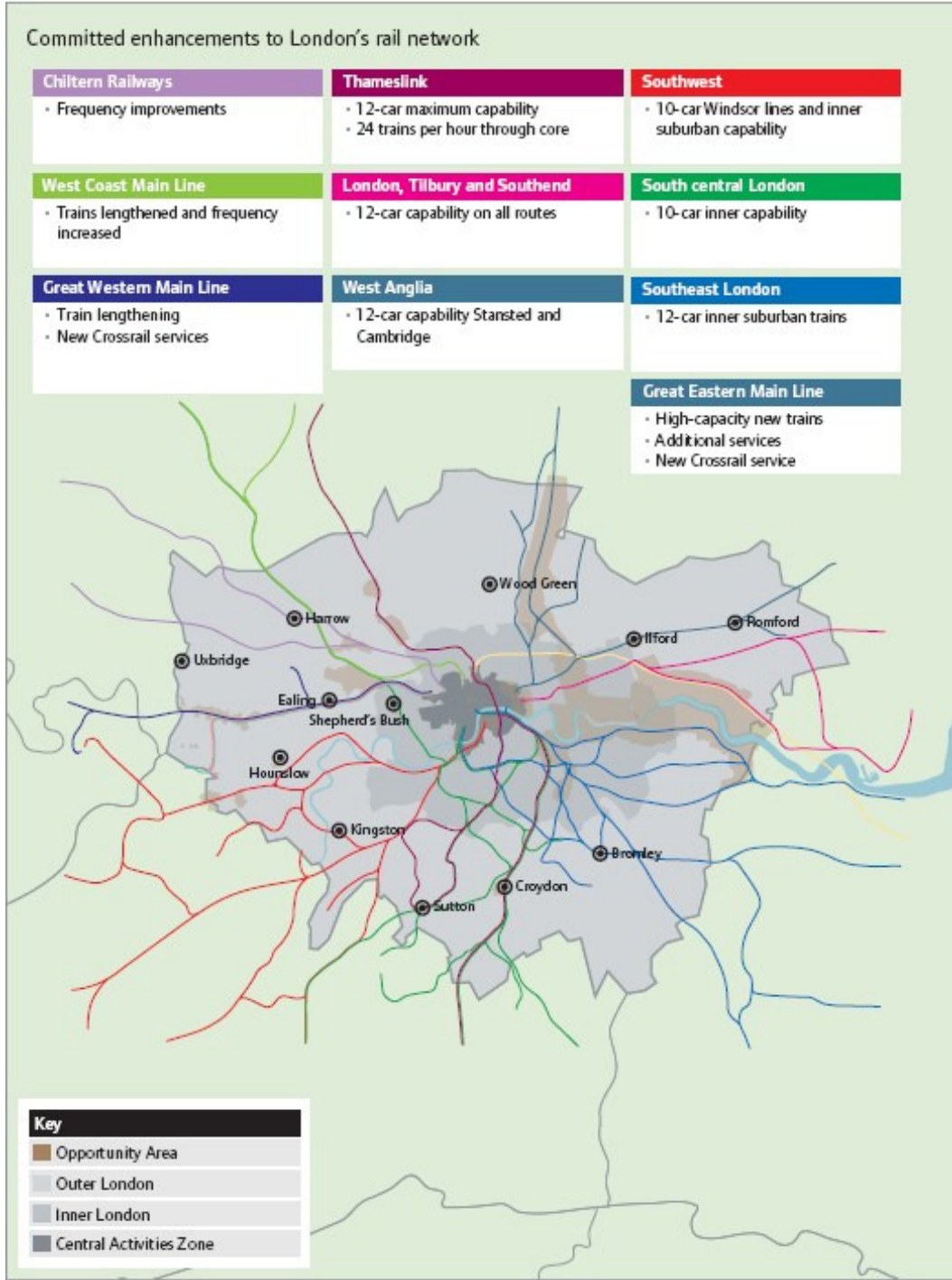


Figure 2 – Summary of “Committed” Improvements : National Rail

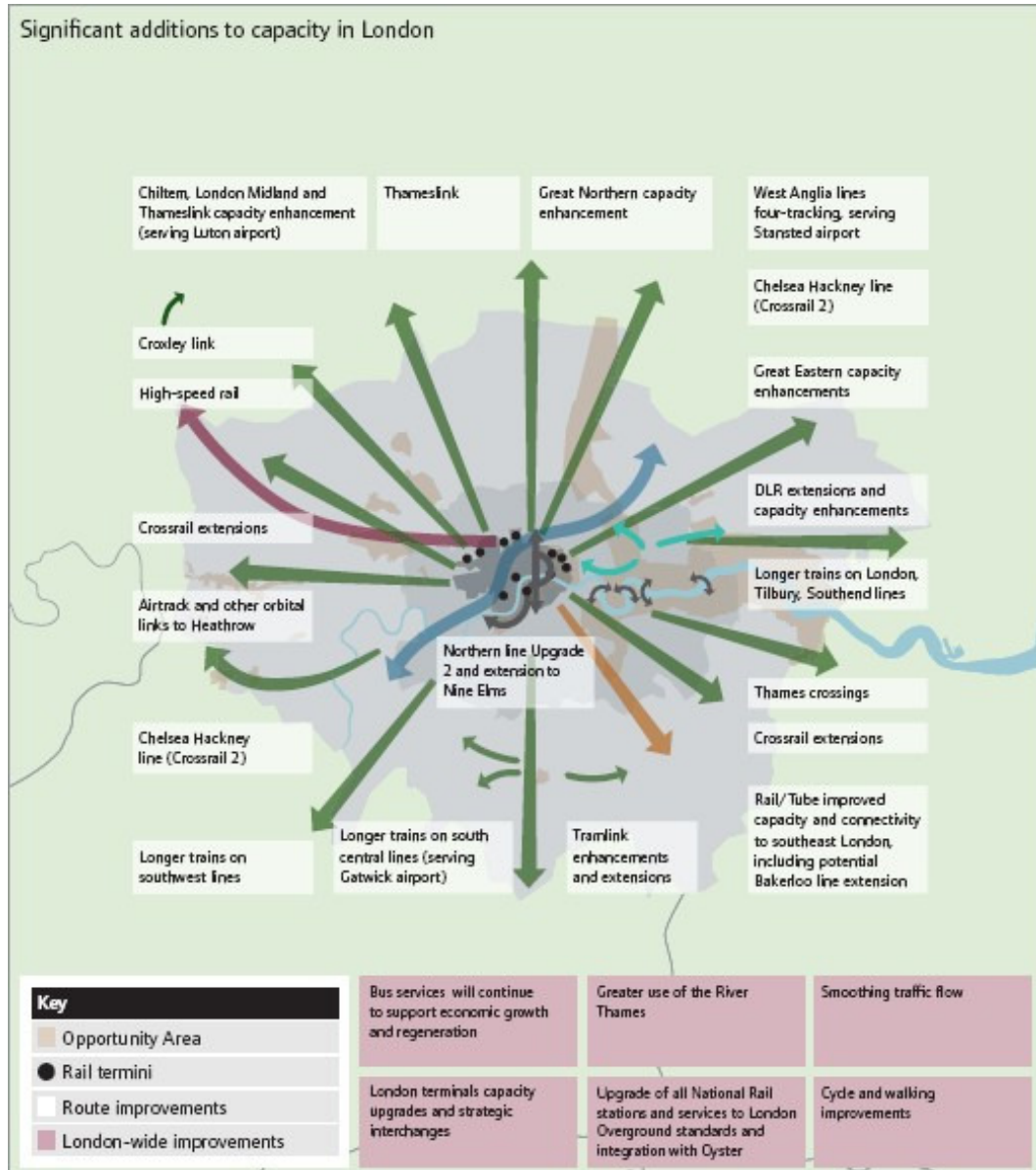


Figure 3 – MTS Aspirations Post-2018

2.4 Outcomes

The MTS includes forecasts of the crowding levels on National Rail and LU services in 2031 based on:-

- the programme of investments “committed” to 2018 alongside the expected additional projects post-2018; and
- the expected growth and distribution of jobs and population.

Figures 4 and 5 shows the change in crowding for both systems compared to conditions in 2006 for the National Rail and LU systems.

Whilst not eradicating crowding (which is in any event unlikely to be economically viable), the measures are shown to generally improve conditions across both networks and meet the future predicted demands during the peak periods.

Figure 67: Anticipated change in crowding levels on the National Rail network by 2031

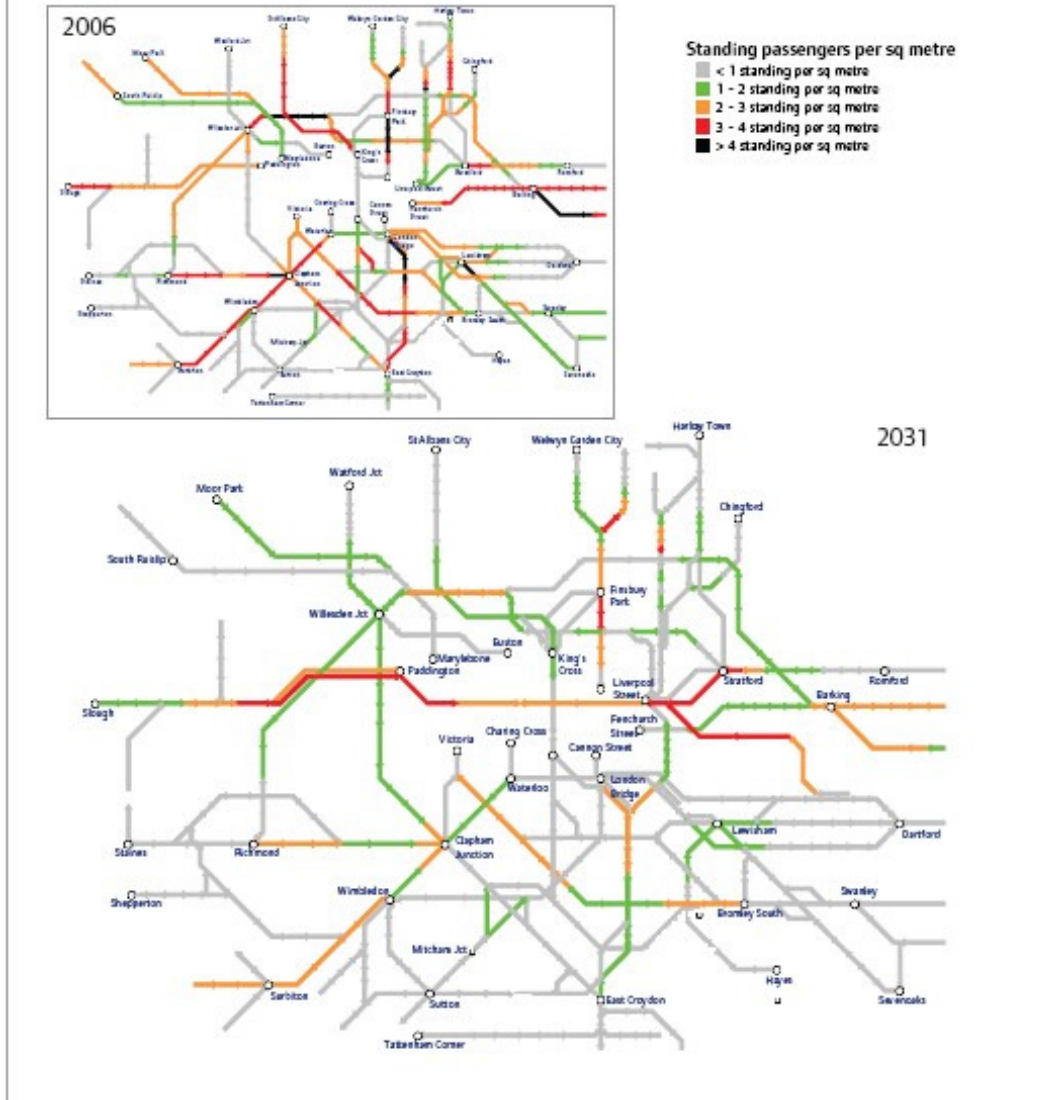


Figure 4 – Predicted Outcome on National Rail Network

Figure 68: Anticipated change in crowding levels on the Tube and DLR network by 2031

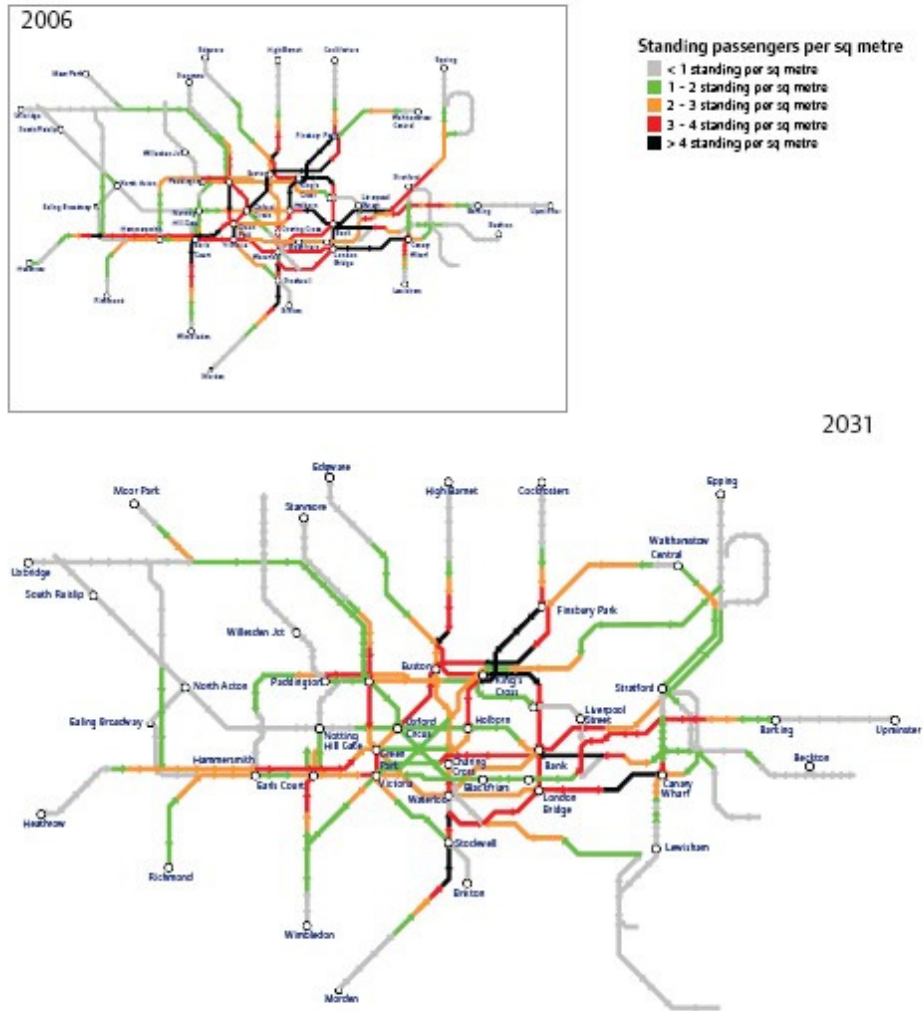


Figure 5 – Predicted Outcome on LU Network

The overall impression of the MTS is :-

- a series of investment proposals which are necessarily speculative as no funding settlement for the period has been established as yet;
- there must, however, be a concern that in the current climate the funding aspirations may go unanswered;
- the same can be said for the Network Rail proposals embodied in the MTS for which Network Rail will be seeking funding also;
- there is a risk that the MTS comes across as a unstructured wish-list rather than a prioritised programme of works. It is important that a clearer focus is emphasised in the document to identify the priorities if funding is not as forthcoming as expected and the likely outcomes of a reduced programme of works. This is particularly pertinent given the deterioration in revenue and the consequential impact on fares policy and investment priorities in the current business plan period;
- it is evident that the Mayor's agenda regarding modal shift, the quality of urban spaces, air quality and reduced carbon impact are being strengthened but there is a need to draw the disparate elements into a more cohesive package;
- the various elements of the strategy related to walking and cycling, enhanced bus provision but with reduced impact in the central area, and roadspace utilisation are leading to a new way of dealing with the use of the public realm in the central area. Again this needs to be brought together more sharply;
- continuing priority for improving transport and development opportunities in outer London (for example, through a mix of radial and orbital improvements) but balanced with strong recognition of the role and importance of the central area;
- whilst the MTS promotes sub-regional working, greater clarity is needed on the process and how it will work by mode, with reference to key sites and in terms of funding and delivery; and
- the bus section of the MTS is comparatively weak – especially viewed against other sections – and there is a lack of a strategic focus to the future direction of bus provision.

3. STRATEGIC PLANNING ISSUES

This section considers :-

- the debate regarding the merits of continued development of the central area against a more dispersed growth hub strategy; and
- the development of the Central Activity Zone and its transport implications.

3.1 Growth Strategy

London has generally developed around a radial-centric model, driven in no small part by the inherent shape of the rail network. However, this model has been challenged and tested insofar as accommodating a proportion of future growth in employment. The Mayor's Outer London Commission (OLC) has been exploring this issue and the MTS responds to this initiative. It is reassuring to see that the MTS scales back the aspirations for "growth hubs" compared to the Statement of Intent and the earlier Way to Go! document. It would appear that the argument for a focus on centralised development has been acknowledged.

Central London Forward responded to the Mayor's Statement of Intent² noting that "the choice...between prioritising growth in central London and a more dispersed polycentric growth pattern is a false one". This is undoubtedly true as there are distinct limits on the potential of "growth hubs" to absorb significant levels of development that would be attracted away from the central area.

Consequently, the continued growth and development of the central area is both inevitable and desirable. However, finding a better balance between growth in Inner and Outer London, and making best use of the advantages of hubs outside central London for business investment and jobs growth is an important policy focus.

Nonetheless, there is merit in pursuing the development of a limited number of large-scale hubs which are likely to have a small beneficial impact on central London congestion by abstracting some of the development pressure and making better use of existing infrastructure, especially the rail network.

However, it is important to recognise the limitations of the "growth hub" model. There are in practice relatively few locations suitable for accommodating major office employment. Stratford and Croydon – the key locations used to promote the concept – are appropriate but the additional capacity over and above existing and planned development is relatively modest. Brent Cross/Cricklewood is stated as a potential third hub, but the case for this as a significant "growth hub" – as opposed to a strong local centre – seems much weaker in comparison.

From a transport perspective – especially in comparison to locating development within CAZ – a hub must be able to command a sizeable rail catchment area to sustain strategic employment uses. The rail catchment needs to be diverse and rounded within the sub-region and with strong links to a number of parts of the central area.

Both Stratford and Croydon have their own rail networks comprising a range of radial and orbital links with access from many different corridors and fast connections to a range of central London stations. Brent Cross/Cricklewood simply does not have the diversity of rail connections and consequently accessibility and capacity will always remain a concern for

² Letter of 29th July 2009 to Peter Hendy

major office use. That is not to say it will not develop as a significant node, but its role will be very different from Stratford and Croydon.

Looking more widely across London, there are few, if any, locations which have – or could be adapted to have – comparable rail networks. There are a number of lower-order locations which could potentially accommodate modest levels of new development but which are unlikely to challenge the central area (or to offer significant benefits to relieving pressure on the central area).

Consequently, the focus should be on continued development of the central area with the promotion of a limited number of hubs within Inner and Outer London where the opportunities for significant rail access exist.

3.2 Development of the CAZ

The continuing focus on development within the CAZ based on a radial commuting model places a significant burden on the rail system and there will be inevitable concerns about the potential to keep increasing capacity.

Despite widespread concerns regarding congestion, transport systems are inherently inefficient due to the concentration of travel demands in time and space. For example, the average Underground train is loaded to less than 15% of its capacity and this ratio is little changed over the last 15-20 years (115.7 passengers per train in 2007/8 compared to 111.2 in 1991/2)³.

So what can be done to improve transport efficiency? Simply put there is a need for greater dispersal of demand by time and space. For example, there has been a continuing trend in people travelling over longer peak periods, reducing the significance of the peak hour itself. In the early 1970's between 55% and 60% of the peak three hour demand fell within the peak hour; it is now around 45%.

This downward trend is likely to continue, albeit much more slowly, and the proportion of commuting trips occurring outside of the traditional peaks is likely to increase as people work more flexibly. A key driver is peoples' desire to avoid crowding. However, more could possibly be done through pricing to encourage commuting earlier in the peak. The Mayor notes that fares policy could be utilised but appears to reserve this as an option of last resort.

With regard to achieving a more balanced use of the transport system spatially, the development of "growth hubs" in Inner and Outer London will help utilise under-used capacity away from the central area. However, it is essential that the commuting demands within the central area are dispersed more widely and evenly, and thereby more effectively utilise existing infrastructure.

³ Travel in London : Key Trends and Developments, TfL, 2009

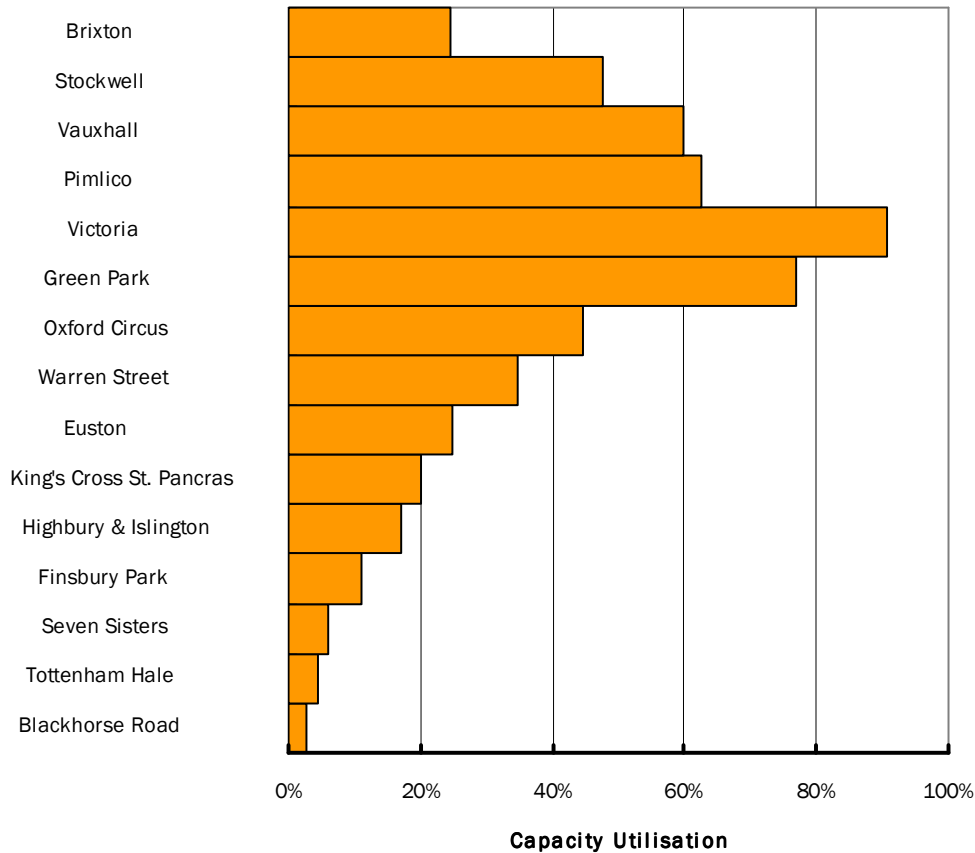


Figure 6 - Capacity Utilisation of Victoria Line (NB)

Figure 6 shows the utilisation of capacity on the Victoria Line Northbound service. This illustrates the capacity that remains “un-used” either side of the busiest section of the line.

Clearly it is difficult in practice to utilise this capacity without also impacting on the most heavily loaded section, but it remains the case that the efficiency of the infrastructure would be improved by greater variation in boarding and alighting stations and as a result more even loading along the line. An example of how changing patterns of land use can influence transport efficiency is the Jubilee Line between central London and the Isle of Dogs, where the loadings are intensive in both directions of movement during the peaks.

It has usually been held that increasing densities are essential to sustain public transport, and policies to support more development around key nodes have been pursued. However, it is the case that the density of the public transport network in the central area and the degree of inter-connectedness means that it is more appropriate to aim for a “sufficiently-dense” city across a larger area.

One way in which this has – and will continue to – occur is through the progressive development of fringe locations in and around the CAZ. For example, the emergence of the South Bank, Paddington and Shoreditch show how development has practically enlarged the effective core area of central London.

This process is continuing with Opportunity Areas such as Vauxhall/Nine Elms/Battersea and Whitechapel/Aldgate, and the upshot of this will be a greater physical dispersion of travel demands across transport networks and higher levels of development sustained by a given transport provision.

There will inevitably be a need to improve elements of the transport system serving these areas, but it should be a priority to bring these areas up to the standards of access found across the CAZ as a whole.

4. MODAL ISSUES

This section reviews the principal issues affecting each of the main modes in light of the MTS and the expected development of the central area.

The focus is on the “uncommitted” measures proposed in the MTS to address demands post-2018. This assumes that the current programme of works is not affected by forthcoming cuts in funding.

4.1 Rail

The MTS is inevitably informed by Network Rail’s Route Utilisation Strategies (RUS) that have been prepared for each key corridor. The RUS’s have identified a host of potential improvements to enable the network capacity to increase in response to growth (both in London and within corridors outside the capital).

It will be for Network Rail to make the case to Government for further investment in the next control period starting from 2014, but clearly TfL have a major interest in ensuring that the measures are appropriate for London and supporting Network Rail in attracting the investment funding.

The programme of works identified in the MTS consists of a further round of train lengthening works on a number of corridors, including Thameslink, and this is likely to be a recurring theme as the scope to increase service frequency is more constrained.

Crossrail Line One

The MTS envisages extensions of Crossrail Line 1 in the east and west, although no detail is given of what these might be. It would not appear sensible to extend Crossrail beyond Reading so to the west it might mean delivery of the extension from Maidenhead to Reading which is enabled by the Government’s plans to electrify the Great Western Main Line and for major improvements at Reading station.

There is generally a reluctance to incorporate too many branches into the system because of the impact that this can have on service reliability. By the same token it is important that the branches that are attached to the central core generate sufficient demand (and trains) to warrant the provision of the tunnelled section.

At present the demands to the west are lower than in the east and Crossrail are planning to terminate a significant number of trains from the east at Paddington. A further branch in the west might help improve the balance between east and west, albeit that the base service already includes two branches (Heathrow and Maidenhead). Kensington & Chelsea’s aspiration for a new station around Ladbroke Grove with a turnround facility would represent a step towards achieving this balance.

The original scheme envisaged running to Amersham and Chesham or as far as Aylesbury. It seems unlikely that this is now expected given the emergence of Chiltern Railways and the go ahead to upgrade the Metropolitan Line. Accordingly, the imbalance between demands to the east and west may well persist.

To the east there is potential to extend the service on the Abbey Wood branch through Canary Wharf and the Royals along the existing rail corridor. It was originally planned to run beyond Abbey Wood before the scheme was cutback on cost grounds.

Crossrail Line Two

Crossrail Line Two is identified as an LU project and is considered under the following section.

Terminal and Interchange Capacity

Terminal capacity – both for trains and passengers – is now becoming a major issue with a significant projected increase in passengers using limited terminus capacity, particularly if plans for train lengthening increase the throughput of the central London termini. It is often the case that the areas immediately around the termini are poorly equipped to cope with large volumes of onward movement, especially on foot or by bus. A more focused agenda for termini and station capacity is required.

Generally Network Rail has looked for the funding for schemes at these stations (such as Victoria, Paddington, Waterloo and Euston) to be significantly generated by commercial development at the stations themselves. This can be highly problematic as the sites are often heavily constrained (making development costs high); the projects are subject to the vagaries of market conditions; and the addition of the development constrains the station for the future (i.e. “burying” the station like Birmingham New Street).

This raises the more general issue of the need for realistic expectations for developer related infrastructure funding, including the prospects of the Community Infrastructure Levy raising significant funds.

The MTS also identifies a series of strategic interchanges in Inner/Outer London which the Mayor wishes to see improved. The interchanges are primarily focused on making better links between radial lines and the orbital lines of the Overground network. This is sensible approach – albeit one that does not warrant (and presumably does not need) major investment – as the orbital network is likely to focus on catering for short “hops” between radial corridors within the same quadrants.

Other Opportunities (Not in the MTS)

The Mayor’s projections of employment and population growth emphasize the continuing trend to development in an east-west corridor, particularly to the east of the central area. An opportunity exists to add rail capacity to respond to this form of growth (post Crossrail Line 2), building in part on the expansion of the CAZ to the east and the aspiration to develop a limited number of “hubs” in Inner London with “chordal” links (semi-radial/semi-orbital skirting the central area).

What is suggested is the potential for the development of a Thameslink-style scheme focused on a core between Stratford and New Cross/Lewisham which would link growth corridors along the M11 with the Lee Valley, Stratford and Docklands zone and tapping into two or more corridors to the south.

Critically, the Stratford/Docklands hub is probably the only node outside central London sufficiently strong (and well connected) to warrant new rail capacity of this scale. The area also benefits from the fact that much of the rail infrastructure is integrated through recent additions (such as the Jubilee Line Extension and DLR) and as such it is much easier to disperse the benefits of a new line across the sub-region.

4.2 London Underground/DLR

As the major upgrade programme for the network is included within the current business plan period to 2018, the proposals post-2018 are focused on a more limited set of interventions.

The MTS identifies the following projects :-

- Crossrail Line Two;
- separation of the Northern Line branches and the extension of the Charing Cross branch to Battersea;
- extension of the Bakerloo Line into south London; and

- further extensions and capacity enhancements on the DLR.

Crossrail Line Two

No specific alignment is described although the graphics suggest that the scheme would link Wimbledon to the Central Line in east London via Clapham Junction, Victoria, Kings Cross and Hackney. The MTS indicates post-2020 delivery of the project. In some parts of the document it is indicated as a Network Rail project; in others it is shown as part of the LU network.

It is certainly the case that the proposals are more akin to a traditional LU line rather than Crossrail Line One and its Regional Metro feel. The broad alignment was conceived to relieve the Victoria and Central Lines and this remains the principal feature of the scheme. It is therefore likely to represent a core project for the development of central London in the long-run and it is vital that it is progressed. It will realistically only proceed if Crossrail Line One is delivered successfully and there is an appetite for another large-scale project from central Government.

Northern Line

LU proposes to partially separate the Northern Line branches to simplify operations and enable a higher service frequency through both branches of the line in the central area. There are costs incurred by this process in terms of station congestion relief (especially as Camden Town), stock and so on, but the scale of improvement in this busy and congested corridor suggests that this is likely to emerge as a priority project.

The MTS also identifies the extension of the Charing Cross branch of the Northern Line from Kennington to Battersea. This is indicated as a privately-funded scheme associated with the Opportunity Area at Vauxhall, Nine Elms and Battersea⁴.

Despite the impression given in the MTS, it is not the case that the extension is a necessary part of developing the OA, and in any event the level of developer contributions sourced from the area will not be sufficient to fund the extension. Accordingly, there will be a need to direct public funding to the scheme if it is to be delivered and this has been acknowledged by the local authorities.

It is also the case that the scope to extend the line further (for example, to Clapham Junction) needs exploring given :-

- the service capacity potential of the branch;
- the strategic importance of Clapham Junction (particularly with the orbital rail network and Crossrail Line Two);
- the line's ability to reduce pressure on links into Victoria and Waterloo and on the existing southern branch of the Northern Line; and
- the benefit in developing a downstream catchment for the OA.

Extending the Northern Line remains an attractive prospect but it requires further work to establish the scope and funding of such a scheme.

⁴ It should be noted that iCube is working for Ballymore in Nine Elms

Bakerloo Line

The Bakerloo Line is more lightly loaded than its adjacent neighbours (the Victoria and Northern Lines), is currently configured with no branches at either end and penetrates south London fairly shallowly. It is therefore a candidate for extension to the south to make better use of the central infrastructure and to improve accessibility to Inner London areas.

No specific destination is suggested in the MTS although the graphics indicate a likely extension to Hayes via the Lewisham area with four additional stations between Elephant & Castle and Lewisham. The extension would utilise existing rail links from Lewisham to Hayes.

However useful such a scheme would be for parts of Southwark and Lewisham, it remains to be seen whether a sufficiently strong case can be constructed for the tunnelling and station works that would be necessary. Consequently, it would be expected to remain a relatively low priority for TfL/GLA unless substantial investment funds are available in the period to 2031.

The challenge to making the case for the Bakerloo extension reinforces the need to consider, sooner rather than later, how best to deliver the outcomes associated with the now terminated Cross River Tram. The Cross River Tram would have opened up access for many communities in the Elephant & Castle/Peckham areas and this pressing requirement remains.

DLR Extensions

A range of future extensions are indicated as possible for the DLR system. They are :-

- the Dagenham Dock branch as part of the proposed Barking Riverside scheme;
- extension of the Lewisham branch southwards (the graphics imply the likely end point is Bromley);
- extension west of Bank to Victoria with the potential for three new stops; and
- taking the DLR north from Stratford International to Walthamstow Central according to the schematics.

In the context of Central London Forward, the extension beyond Bank is the key project. It is not immediately clear how strategically important this scheme would be. Whilst it would disperse the pressure from Bank station somewhat, the District/Circle corridor itself is not especially congested (after the upgrade of the Sub-Surface Lines) and the DLR is unlikely to compete strongly for direct access to Canary Wharf against Crossrail and the Jubilee Line.

Station Congestion Relief

The programme of congestion relief projects is proposed to continue after 2018. Stations identified as being likely candidates are Vauxhall, Holborn, Camden Town, Oxford Circus, Edgware Road, Old Street and Moorgate. There will also be works at termini where enhancements of the rail network lead to greater pressure on the throughput of LU elements of the interchange.

It is vital that station capacity is enhanced in balance with line infrastructure and the stations indicated appear to be the key schemes after the current tranche is completed. As with the main termini, consideration needs to be given to onward movement on the streets surrounding the stations.

4.3 Bus

As the MTS notes, the bus network is planned on a rolling and continuous process responding to changing demands. Accordingly few specific proposals are advanced in the document. Critically, little is said to suggest a radical change in approach to address the large and expanding subsidy necessary to maintain the network. The subsequent

announcement of fares increases are focused on addressing the shortfall in revenue due to the recession and its impact on investment proposals in the current business plan.

From a position in the mid-90s when the bus system largely covered its operating costs, the expansion of the network and, perhaps most significantly, the policy to allow fares to decline in real terms and increase the number of passengers benefiting from free and discounted travel, has resulted in annual subsidy increasing to £620m (and set to continue to increase through to 2017/18). Over the 9-year life of the TfL Business Plan the subsidy is expected to amount to some £6,300m.

Over the same period, the operating subsidy for the LU system is expected to fall from £536m currently to £223m. Obviously the Underground network is benefiting from major investment and the treatment of capital and operating costs between the two modes is quite different and therefore not really comparable, it is nonetheless a significant issue for the on-going financial position of TfL.

As some 40% of bus passengers now benefit from free or discounted travel, the average real fare per passenger kilometre has declined from close to 18p in 1996/7 (at the same time the figure for LU was about the same) to under 14p in 2007/8 (meantime LU fares per passenger-kilometre have risen to nearly 19p).

Against the backdrop of the declining average fare – and modest change in the average loading of each bus – the cost of operating the bus system has been steadily rising. Since 1997/8 the real cost per vehicle kilometre has increased by 33%. This scale of increase is mirrored in the PTE areas across England, albeit that the typical operating cost in these areas is just 60% of that in London.

It is understood that a strategic review is underway which is focusing on the contractual arrangements and ways in which costs can be controlled. It is clearly crucial that such a review addresses wider issues also such as the shape of the future network, and a comprehensive review of the central London bus network is needed to establish priorities and to respond to the changing environment in the CAZ. Furthermore, bench-marking with other UK bus networks would be anticipated to enable a view to be taken on the cost effectiveness of different aspects of the current bus system in London.

Maintaining a balance between these various issues is a complex and difficult choice for the Mayor, especially given the very different roles that buses provided across the sub-regions. Nevertheless, it would be helpful to have a clearer guide to the Mayor's intentions with regard to fares policy, bus subsidy and the future shape of the network.

4.4 Cycling

Cycling is particularly personal focus for the Mayor and builds on the recent growth in usage. TfL have published ambitious targets for continued growth – including a 400% increase by 2026 over usage in 2000 – which have been carried over into the forecasts for central area access during the peak period (i.e. increasing from 1.6% mode share in 2006 to 4.5% by 2026).

The basis for the setting of the target is not especially robust and so appears quite aspirational. However, there is good reason to believe that the mode share by cycle can be increased generally, but also specifically in terms of commuting with central and Inner London.

It is likely that cycle usage will impact on the use of walking, buses and Underground/Rail services as much, if not more so, than travel by car. This may be beneficial in helping to relieve crowding on radial public transport services. However, the effects are likely to be on the margin and will not significantly alter the issues facing the radial commuting network serving the central area. It will impose an additional burden on the streetscape in terms of

integrating additional parking and on roadspace where new priority measures are introduced.

4.5 Walking

One of the key pedestrian measures is the implementation of the Legible London initiative across the central area and other centres. The MTS justifies the proposal on the basis that people are currently travelling by Underground for short distances in the central area due to their misperception of the length of journey.

However, work by iCube for TfL⁵ suggests that the effects are likely to be very small and concentrated in very few locations and corridors, especially during the peak periods. That is not to say there is not merit in introducing a comprehensive signing and information strategy and encouraging people to travel on foot rather than use public transport for short distances, but rather that the wider effects on public transport usage should not be over-stated.

4.6 River

The river has long been seen as an under-used resource for London's travel demands. Growth has occurred in recent years on the back of the expansion of pier capacity and more particularly the concentration of new development along the river frontage.

Further growth in development along the river will enable the river to take a share of new demands, but the overall contribution of river transport will realistically always remain small.

4.7 Taxis

Taxis constitute 20% of all vehicle-kilometres in the congestion charging area⁶, and as such are a major contributor to the traffic and environmental conditions faced by pedestrians and cyclist. In fact all goods movements in the area represent only 24% of vehicle-kms (though 35% based on Passenger Car Equivalents).

It could be argued that the passenger-carrying benefits of the taxi system are fairly modest – low passenger occupancy, relatively short distance trips – and their effects on the roadspace available are disproportionate. Whilst there is a continuing role for taxis, unfettered access to the central area for so many vehicles may not be the best strategy for the use of limited roadspace.

In the context of considerations regarding the best way to manage the central area public realm and to ensure a high quality environment the future role of taxis is one that is worthy of further debate.

4.8 Goods Vehicles

As noted above, goods vehicles represent around a quarter of the weekday vehicle-kilometres in the central area and over a third of the use of the roadspace. There are inevitable concerns regarding the continued growth in servicing activity with further central area development.

It is often said that deliveries could be made more efficiently, with an emphasis on consolidation and out-of-hours deliveries in central London. There is clearly some scope for consolidation of activities within certain sectors of the freight market, but it seems optimistic to expect significant traffic reduction from greater shared deliveries within the central area.

⁵ Legible London : Review of Potential Impact on London Underground, TfL, 2006

⁶ Central London Congestion Charging Impacts Monitoring, TfL, 2008

Out-of-hours deliveries are also unlikely to be significant in reducing peak traffic impacts given the limited scope to achieve these for the bulk of freight activity.

However, it is evident that current delivery activity tends to be concentrated disproportionately to the morning peak hour with activity falling away across the day. Therefore some smoothing in delivery activity seems possible with associated benefits in roadspace and vehicle efficiency. Working with delivery companies to bring about change may be more productive than focusing resources too heavily on the end-users of the deliveries (i.e. encouraging a change in logistic practices rather than expecting customers to promote a change in business practices).

5. OTHER ISSUES

5.1 Developer Contributions

There are often unrealistic expectations with regard to the transport infrastructure that can be delivered through developer contributions. This is particularly the case in regeneration areas, which often start from a lower base without the benefit of the more highly developed transport systems in existing parts of the CAZ.

It is also the case that contributions are often directed to projects of marginal benefit due to difficulties in co-ordinating and dispersing funds. There should be more focus on identifying strategic priorities across wider areas and the aggregation of contributions towards significant capacity projects.

A key example of this approach is the Paddington Area Transport Study (PATS) fund, which identified the pressure on the public transport system from a host of developments in the area and established a basis for assessing contributions. Funds collected in this way have then been directed to help deliver the measures necessary to sustain the whole area. Even at a wider level – such as by borough – it is evident that developments exert pressure on key strategic infrastructure, and it is appropriate that contributions from the wider area are directed to projects that help address strategic concerns.

Work by iCube for Transport for London and the City of London⁷ showed how the interconnected nature of the rail system meant that virtually all developments in the City would impact on Bank and Liverpool Street stations, and it was appropriate to focus contributions from across the City to works to improve both stations.

Figure 7 shows how demand from one particular office development was forecast to disperse across the City and that demands inevitably fall on the key interchanges.

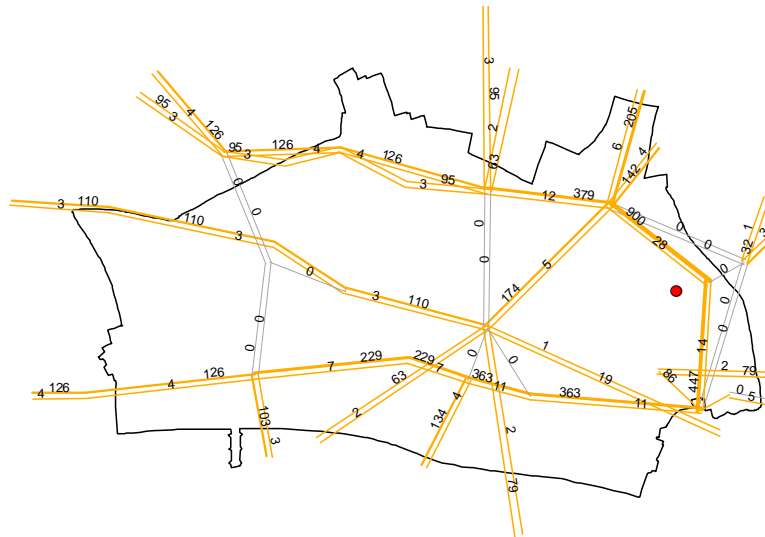


Figure 7 – Impact of Development Demands

⁷ S106 Transport Pooling Study, 2006

Whilst this approach to developer contributions is recommended for the collection and disbursement of funds, it is the case that contributions are unlikely to be a significant factor in addressing public transport capacity overall.

For example, the S106 Transport Pooling Study revealed that the City could expect to receive just £70m in contributions for transport measures between 2006 and 2016 with London Plan growth levels. In the context of multi-billion pound schemes these funds will have a modest impact.

5.2 Carbon Reduction

The Mayor's (and central Government) target for CO₂ reduction are extremely challenging. The MTS estimates the impact of the various policies and measures proposed in the strategy on CO₂ emissions by 2025, and this highlights a substantial gap to the target.

The Mayor indicates that the gap may need to be plugged by the introduction of a road pricing scheme outside of the central area and a more aggressive roll-out of alternative fuel vehicles. The MTS strategy is based on 8% of vehicles being electrically-powered by 2025 and the gap would only be met by raising this take-up to over 50% of vehicles.

As it is the bulk of the CO₂ emissions reduction is based on improved vehicle efficiency as technology improvements and policy pressures allow. Failure to achieve these improvements will naturally widen the gap.

Furthermore, the estimates assume a significant decarbonisation of electricity generation (given the shift to electric vehicles). Given the slow start to the replacement of power station capacity with nuclear facilities and the low capacity of renewables this seems optimistic. There was a marked decarbonisation of electricity during the 1990s as gas replaced coal, but this trend has for now stopped.

It seems likely that if the target is retained then a road pricing scheme of some form will be needed covering a much larger area of London than currently is the case.

6. TRANSPORT MANIFESTO

This section outlines potential elements of a Central London Forward “Transport Manifesto”.

6.1 Land Use Planning

As argued earlier in this document, employment growth will remain focused on central London and Docklands with limited “growth hubs” in Inner London (such as Stratford).

Growth in the central area is likely to be focused on the development of “fringe” locations – Nine Elms, Paddington, Aldgate, and so on – which will also disperse rail demands and make better use of existing infrastructure. Transport priorities need to align with regeneration initiatives.

This form of development will continue to apply pressure to the radial rail network serving the central area, and the focus for transport interventions in central London will inevitably be the capacity and quality of the public transport sustaining these patterns of movement.

6.2 Modal Measures

Rail/LU

It is essential that the committed infrastructure planned to 2018, especially the upgrades to LU lines and the construction of Crossrail Line One, is delivered. Whilst there is pressure on funding both at a local and national level, the measures within the TfL Business Plan represent a vital renewal of the core infrastructure serving the central area and an expansion of capacity which will enable and sustain recovery.

Of the longer-term projects identified in the MTS, the implementation of Crossrail Line Two is the most significant project to help sustain the central area and make best use of existing infrastructure in south-west and east London. It is a vital component of the future development of London.

Likewise, the separation of the Northern Line branches frees substantial capacity in these vital corridors in a highly cost-effective fashion and should be a priority in the next business plan. There is scope to extend of the Charing Cross branch to make greater use of the new capacity and to relieve other parts of the system. The MTS proposal for extending the line to Battersea perhaps fails to make best use of this strategic opportunity.

The programme of progressive train lengthening on National Rail corridors is strongly supported, as is the four-tracking of the West Anglia line as a critical component of ensuring the M11 corridor growth plans are deliverable.

Growth in line capacity needs to work hand-in-hand with a rolling programme of station and terminal congestion relief schemes (both within and outside the stations) to ensure that the benefits of capacity are realised in practice. This also applies to interchanges in inner London which can help distribute demands and ensure added resilience to the network.

Bus

If the investment needs of London are to be met, it is vital that a comprehensive and wide ranging review of the bus network and fares policy is conducted to reduce the operational bus subsidy and to improve the cost effectiveness of the network. This is especially the case in central London where the impact of buses in certain corridors is so significant.

Inevitably as a system grows so fast, certain aspects of the system have grown in relatively unproductive and inefficient ways, and a refocusing of the network and its services is needed to ensure that the bus service is equipped to face the challenges it faces now and in the future. One challenge is to improve accessibility to poorly served communities in inner London such as along the alignment of the now cancelled Cross River Tram.

Roadspace and Public Realm

The competing pressures on the roadspace and public realm of the central area require careful consideration. The focus on making the city more walkable, encouraging cycling, 24-hour use, reducing the impact of roadworks and so on alongside growth appears to need a more radical and co-ordinated plan on how the roadspace can be best used over the next 20 years. Whilst the policy direction of the MTS is supported it is less clear how this will be delivered in practice.

The future direction of the use of the public realm warrants much more considered debate across stakeholders encompassing aspects such as the impact and management of taxis, buses and freight movements in central London streets.

Air Quality

The increasing Mayoral emphasis on improving air quality is welcome. The specific measures - such as electric vehicles, improving the performance of bus and taxis engines, use of hybrid vehicles, general modal shift and so on - need to be systematically brought together. This will help provide a better understanding of their respective contributions to this important outcome.