

TfL NOTES

by John Hawkins

SYSTEM USAGE SUMMARY

Annual Travel in London Report 13, presented at the December 2020 TfL Board meeting, contained this summary of the pandemic effect on LU. The general trend in London Underground demand since the beginning of the pandemic was one of a dramatic fall in demand from mid-March 2020 to a low point of 3% of normal, followed by a recovery at a slower pace than other modes, reaching typically 35% of normal during October, prior to the emergence of a second wave of coronavirus.

Within this overall trend, one feature has been the re-balancing of demand across the days of the week, with weekend travel being more resilient than weekdays – a reflection of the faster return of discretionary travel over the summer compared to the continuing large-scale absence of weekday office based commuter traffic.

Another feature is the changed balance of Underground travel across the hours of the day, again reflecting changed demand patterns. For example, in mid-October the morning peak happened around 15 minutes earlier and was only about 30% as busy as before the pandemic (and quieter than the evening peak, which was not the case before). This reflected the spreading of demand more evenly throughout the day, reflecting advice to travel at quieter times, and assisted the management of crowding under social distancing protocols.

Spatially, in terms of all TfL rail networks, the height of the spring lockdown period saw Underground demand in central areas fall to between just 2% and 4% of normal, while outer London saw demand fall to typically between 5% and 10% of normal. During October 2020, activity started to recover but this spatial disparity remained. Within the overall context of about 35% of rail demand having returned, central and inner London station entries were typically around 30% of normal, rising to around 50% in outer areas.

In terms of Underground service provision, trains operated were over 90% of normal by late-spring and throughout the summer, with demand during late summer being typically around 35% of normal, albeit under social distancing protocols. A forecast of five possible recovery scenarios over the coming decade was presented.

DLR PLANS

Further details of the 2018 announced Housing Infrastructure Funding (HIF) grant for the DLR was revealed at the Programmes and Investment Committee meeting on 11 December 2020. Up to 14 additional DLR trains will be delivered after the 43 already ordered from CAF. These trains will add a further 33% to the total DLR peak capacity above the base order (resulting in an overall 67% uplift). This will be achieved by:

- Upgrading the remaining two-car Stratford to Canary Wharf trains to new full-length trains.
- Extending this service past Canary Wharf to Lewisham. As a result, 30 tph will run between Lewisham and Canary Wharf (currently 22.5tph).
- Increased services from Canary Wharf to both Stratford and Bank.
- Doubling the frequency of the Woolwich Arsenal to Stratford International service from 7.5tph to 15tph. This will provide a 22.5tph total service between Woolwich Arsenal and Canning Town.

To accommodate the additional HIF-funded trains, Beckton Depot will be expanded. This will also enable trains to be temporarily relocated out of Poplar depot to facilitate a new housing development opportunity there. The acquisition of land adjacent to the existing Beckton Depot, where the new sidings will be constructed, is a fundamental element of this expansion.

The final element of the HIF grant is a contribution to enabling works at DLR Poplar, directly unlocking 'airspace' for development. This will facilitate a wider TfL over-site development scheme, to deliver approximately 1,750 new homes in the area. Work will comprise of a reconfigured Poplar DLR station and depot with a deck over the station, and a pedestrian link bridge over Aspen Way towards Canary Wharf. There is provision in the agreement for removing these enabling works at Poplar from the grant scope if it cannot be demonstrated that the development continues to be viable.

A £10m contribution to the new station at Thames Wharf has now been removed from the grant scope, due to risks arising from the construction of the Silvertown Tunnel.

The detailed train design phase has been completed by CAF, and a life-sized mock-up has been delivered to the UK for review. Provisional acceptance of the first train into passenger service is now expected by February 2024, due to Covid-19 delays, with the final train into service by September 2026.

SURREY QUAYS STATION DEVELOPMENT

Surrey Quays Station Upgrade (SQSU) is funded by both a housing grant and the developer of Canada Water, to provide a new northern ticket hall to the east of the line, with new footbridge linked by lifts and stairs to the north end of the platforms. (TfL Board meeting 9 December 2020).

LEWISHAM AND BEYOND – A REPORT ON THE 2019 BAKERLOO LINE EXTENSION CONSULTATION

The original consultation was summarised in the January 2020 *Underground News*, and the reports of its findings were published in November 2020, over 300 pages in three documents. At the time of its publication, proposals for Crossrail 2 had already been put on hold but the Bakerloo extension remains a possibility. However, it is too soon to know how Covid-19 will affect long-term demand and funding options, and proposals to fund TfL regular operations beyond March 2021 were still to be determined at the time! In any case, statutory safeguarding of the route to Lewisham is the next step. Safeguarding is a formal process, undertaken by the Department for Transport, to protect land required for major new infrastructure projects from future development. It will not require further consultation and should be completed by April 2021.

A possible further extension beyond Lewisham via Catford to Hayes and Beckenham Junction would involve converting the National Rail line and so does not require safeguarding. There will be further opportunities to provide feedback on aspects of the extension as proposals develop, including subsequent rounds of consultation. Subject to funding and design development, permission to build the extension would require consultation for the formal procedure of a Transport & Works Act Order.

Commencing east of Lambeth North platforms, the first station on the line beyond the new Elephant & Castle platforms will be called Burgess Park, before the second new station, to be Old Kent Road, although this name does not make clear where the station is sited along the two miles of road. There will then be deep level platforms at New Cross Gate and Lewisham providing connection to the National Rail stations. Apart from decisions on the names for the two new stations, little new information is revealed. It has yet to be decided if the onward route to Hayes would be delivered alongside that tunnelled to Lewisham or as a later phase. The first tunnelled section is planned from New Cross Gate to Wearside Road Council depot south of Lewisham, before the TBMs are recovered to drive from New Cross Gate to Burgess Park. The first tunnels can be fully equipped from Wearside Road whilst the second tunnelling drives are progressing, and perhaps this depot could also be an equipment base for conversion of the National Rail lines. The Hayes branch would need to close for a changeover period whilst platforms and track are adjusted for step-free train access, and trial running under new signalling is undertaken.

The long-term use of the Wearside Road site would depend on whether the line is to end at Lewisham, or continues to Hayes. It is planned at basement level below existing ground level and below the level of the current Network Rail lines, allowing for reuse of the surface area upon completion. The tunnels would be accessed via a head house built on the surface at the north-east corner of the site. If the Bakerloo is to end at Lewisham, a scissors crossover will likely be provided to the west of the platforms to allow trains to reverse in either platform. Trains will only then move to and from Wearside Road for stabling. The 2017 consultation suggested only eight trains would stable south of Lewisham, and the site would provide plenty of room for eight roads, or four double length roads.

However, if the line is to be connected with the Hayes line, then the running lines will need to rise through the site to join the National Rail network, and the cost of tunnelling the Lewisham crossover could be avoided by reversing short workings in one of the sidings. Many more sidings would be required to stable trains for the long branch, and the triangular site would best suit a shunting neck to the south with trains stabling from the Hayes direction. Trains might also stable on the former National Rail connections, at least one of which might be maintained for transfer of track maintenance machines. A former goods yard on the branch might also be required to stable sufficient trains.

The response makes clear that in addition to all current stabling on the Bakerloo Line, consideration is being given to stabling using the existing tunnels between Lambeth North and Elephant & Castle once the new alignment is in use. I envisage the current layout providing emergency reversing of empty trains

in the way that the Jubilee Line now uses Charing Cross, although Lambeth North can reverse trains using both platforms. TfL will probably need to close the line between Waterloo and Lambeth North for a period to make the new connections, which suggests that the new step-plate junctions are too close to the platforms to safely reverse there. Maintaining a reasonable service on the rest of the line will be difficult whilst reversing only in the single line London Road Depot access north of Lambeth North station.

The document continues the practice of referring to the faster acceleration and breaking (sic) capabilities of modern Bakerloo Line trains! No decision has yet been made on the provision of platform edge doors at the new stations but the design will, in any case, provide for this possibility.

The Programmes and Investment Committee meeting on 11 December 2020 learnt that TfL could deliver the extension as far as Lewisham for under £5bn. This does not include work to upgrade the existing line, but does include the introduction of additional new trains for the extension assuming an option in the Siemens contract is exercised. It does not preclude a further extension beyond Lewisham to Hayes and Beckenham Junction. Work has commenced to develop the Strategic Outline Business Case to help reinforce the case for the scheme, as well as highlight the importance of all elements of the Bakerloo Line Upgrade & Extension (BLUE) Programme to London's recovery and growth. It is due to be completed by May 2021.

TfL 2021/22 BUDGET SUBMISSION AND 20 YEAR CAPITAL STRATEGY

In recent years, TfL has produced each December a detailed five-year Business Plan but, given the high level of uncertainty caused by Covid-19, they instead produced a look into the Mayor's Budget submission that included a detailed view of 2020/21 and 2021/22 and also a brief look towards 2022/23. This was included in a supplementary paper to the December 2020 Board meeting. An update on recent LU passenger demand during the four-week lock-down from 5 November 2020 shows that travel dropped from 36%, where it sat since September, to 27% of prior year levels. Passenger revenues are projected to return to only 80% of pre-pandemic levels by the end of 2021/22 and to remain at that level through 2022/23. Meanwhile the Investment Programme must be adequately funded to keep assets safe and reliable. This will require further Government funding, and discussions remain on-going. The short-term impacts of the coronavirus pandemic have been the most significant since the formation of TfL, but the long-term impacts remain to be fully understood. It is likely that the pandemic and its after-effects will influence the development of London, travel demand within it, and the financial position of TfL for many years to come.

Projects in the next five years include station upgrades at Elephant & Castle and Colindale, completing current step-free access schemes, and continuing the rollout of 4G to all lines. Also included are the DLR new trains and capacity uplift, East London Line upgrade, and commencing work on the DLR extension to Thamesmead (subject to securing third party funding). Projects within TfL's 2020 Capital Strategy, which must be longer term, include replacing trains on the Piccadilly, Bakerloo, Jubilee, Central, and Waterloo & City lines. I presume this order reflects the plan for deliveries. Also included is the cascade of some Jubilee Line trains onto the Northern Line to expand capacity there. Mentioned for the first time is the beginning of a rolling stock replacement programme on the Northern Line that would continue into the 2040s. Of course, that would mean that the Victoria Line and sub-surface line trains were nearing their replacement!

It is mentioned that funding is insufficient to cover all investment included in the 20-Year Capital Investment Plan, particularly given the need to replace rolling stock and signalling on the Deep Tube lines dating back to the 1970s or earlier, presumably referring to the four Deep Tube Upgrade lines. All current DLR trains and London Trams are to be replaced. The Overground and Elizabeth Line trains are leased, and so not included. There are plans to upgrade Piccadilly Line signalling as soon as possible, to incrementally improve Central and DLR signalling, and address obsolescence on all other lines. The DLR signalling is intended to support more intense services with additional trains now ordered, so we could assume that similar improvements are intended for the Central Line. However, this presumably indicates that new trains for the Bakerloo and Waterloo & City lines will operate with current signalling. TfL assumes contributions (subject to third party funding) towards schemes such as the West London Orbital and extending the Bakerloo Line. Crossrail 2 works are assumed to commence in the mid-2030s, with only £2bn of the total cost of £23bn spent by 2040.

With the Night Tube and Waterloo & City Line suspended from the outset of the virus outbreak to enable LU to concentrate on resourcing the 'day tube' (sic) to maintain appropriate service levels, work continues to confirm a date for their restart. Other small service level reductions to some weekend and

off-peak services are planned to be implemented throughout 2021/22 where it is economically viable and where demand levels are expected to be about 20% lower than pre-virus levels. The service reach will, however, be enhanced with the Northern Line Extension due to open in Autumn 2021. One wonders what will happen during the Bank line closure, now scheduled from October 2021 to January 2022, when all Morden line trains will be routed via Charing Cross ...

TfL INDEPENDENT PANEL REVIEW

Even before Covid-19 struck, TfL faced a funding challenge of around £1 billion annually with the withdrawal of Government grant to fund their network. In mid-2020 TfL set up an independent review to investigate options for long-term financial stability. Emergency grants will continue to be required until long-term demand becomes clear and new funding is in place. They concluded that Government funding would still be necessary for major network investments such as Crossrail 2 and the Lewisham extension. An initial estimate put the post Covid-19 annual shortfall in the vicinity of £2 billion, which might be met with a share of council tax and VAT, and road user charges. This would provide diversity of funding, but also ensure that all beneficiaries of the system make a contribution.

The funding gap is close to the level of planned capital expenditure, indicating that without further funding there can be no investment. The biggest element in that spend is for LU where trains on the Bakerloo and Piccadilly lines near their half-century, but renewals also include signalling for both road and rail, structures, earthworks, track, buses, road repairs and improvements. Unlike the rest of the UK, London does not receive any grant for maintenance of London's strategic road network.