

TfL FINANCE AND POLICY COMMITTEE MEETING ON 2 MARCH 2016 – SUBJECTS CONSIDERED

by John Hawkins

FULL FUNDING FOR THE BANK STATION CAPACITY UPGRADE: The meeting heard that construction of the new southbound tunnel requires a blockade of the Northern Line between Moorgate and Kennington in 2020. No trains will run in either direction for six weeks, after which northbound services only shall be reinstated, non-stopping at Bank station, with full service resuming after a further 11 weeks. Key milestones include start on site in April 2016, partial opening (not including new station entrance) in October 2020, and the new station entrance open to the public in September 2021.

JUBILEE LINE UPGRADE 2: Key milestones are the use of West Hampstead for service reversing by May 2017, with potential early benefits (32 tph service) in April 2018, and the introduction of 36 tph peak service in April 2020. The project involves power strengthening work at six substations by June 2018, four cooling ventilation fan upgrades by June 2018, conversion of a cleaning road at Stratford Market depot into a general maintenance road by March 2017 and provision of two roads at Neasden depot for maintenance of Jubilee Line trains by August 2017, conversion of the Temporary Fit Out Shed at Stratford Market depot into three stabling roads by July 2020, renewal and upgrade of the crossover at West Hampstead by March 2017, signalling modifications by October 2019, modifications to the existing fleet of 1996 Tube Stock for operational consistency, and all associated maintenance and operating changes. The feasibility stage had considered eight service strategy options. If funding was unconstrained, an option which provided more frequent services at the western end of the line towards Stanmore was the scheme which provided the highest overall level of passenger benefits. However, it was not selected as it required a further eight additional trains and an additional stabling scheme at Stanmore which were estimated at £170 million more than the selected option.

THE NTfL PICCADILLY LINE MODERNISATION PROJECT: This includes funding for completion of competitive tendering and supplier negotiations for new Piccadilly Line trains, commencement of procurement for a new Signalling and Train Control system, commencement of designs and specifications for infrastructure and railway systems upgrades, and commencement of High Voltage power supply upgrades and signalling immunisation work. Design development for the Bakerloo, Central and Waterloo & City line upgrades will continue. Capacity upgrades on the Piccadilly and Waterloo & City lines are planned by 2026, with modernisation of the Bakerloo Line by 2028 and the Central Line by 2033. It is intended to use a common design of train, signalling and control systems on these lines, with a single Operational Control Centre for all four lines. Signalling solutions have been developed for interworking with District and Metropolitan Line trains. Existing depot locations are favoured, with increased stabling capacity at Cockfosters and Northfields depots.

A review of programme changes since the last Board paper in February 2014 confirms that the new trains will initially be driven manually (Grade of Automation or GoA1) under current signalling, with migration to Automatic Train Operation (GoA2 as used on modernised LU lines) following upon resignalling. System capability for fully automatic operation (GoA4) at a future date will be included. This staged delivery prioritises the most beneficial asset renewal and capacity upgrades. The Waterloo & City modernisation has been brought forward alongside the Piccadilly Line works. The Bakerloo renewal has been brought forward before the Central Line works in view of the investment planned for 1992 Tube Stock. This will enable the oldest trains to be replaced first, although this order will remain under review in the light of funding availability and emerging asset condition. The Lewisham extension is not mentioned, with its requirement for additional trains.

Funding is now sought to progress train system procurement and key infrastructure enabling works on the Piccadilly Line, and also to commence design work for the Waterloo & City Line. The closure blockade duration for the latter line is under consideration to allow conversion for NTfL, including track and depot remodelling. This funding will take the project forward to the award of contract for Piccadilly Line trains in late 2017, when approval and funding will be sought to implement the Piccadilly Line plans. The rolling stock contract will provide options for further trains for the remaining three lines.