

Date: 14 July 2022

Item: Elizabeth Line Operational Performance

This paper will be considered in public

1 Summary

- 1.1 On Tuesday 24 May 2022 the Elizabeth line opened, transforming travel across London and the South East. After the opening of the central section, direct services from Reading, Heathrow and Shenfield are expected to connect with the central section in Autumn 2022 with a full service across the entire route by May 2023.
- 1.2 The Elizabeth line is currently operating 12 trains per hour between Paddington and Abbey Wood from Monday to Saturday 06:30 to 23:00. Work continues in engineering hours and on Sundays to allow a series of testing and software updates in preparation for more intensive services from the autumn.

2 Recommendation

- 2.1 **The Committee is asked to note the paper.**

3 Performance of Operational Service

- 3.1 TfL Rail/the Elizabeth line delivered a Public Performance Measure of 95.1 per cent during Period 2 (1 – 28 May 2022). Following the start of revenue service on 24 May 2022, performance in the central section between Paddington and Abbey Wood was 97.8 per cent over the first five days of service, with 100 per cent delivered for three of those five days. Performance on the east was 95.9 per cent during period 02 whilst the west was 93.3 per cent. The overall Moving Annual Average trend was recorded at 94.0 per cent.
- 3.2 In the east, passenger services between Shenfield and Liverpool Street are being operated by nine-car class 345 trains. In the west, services to Heathrow are operated by nine-car class 345 train, while services between Reading and Paddington are operated by a combination of nine-car and seven-car class 345 trains. The seven-car trains are progressively being converted at Old Oak Common Depot to nine-cars, with this programme now complete with the exception of few seven-car trains which will remain in use until the start of through-running services into the Elizabeth line central section.

- 3.3 By the end of 20 June 2022, the Elizabeth line had seen around 10.25 million passenger journeys across the whole route since it launched on 24 May 2022, around five million are estimated to have involved the central section from Paddington to Abbey Wood. The central section of the Elizabeth line is currently seeing at least 200,000 journeys being made most weekdays.
- 3.4 Initially the service will operate 12 trains per hour (a train every five minutes) in each direction between Paddington and Abbey Wood from 06:30 to 23:00 Monday to Saturday. There will be no Sunday services from Paddington to Abbey Wood until later in the year. Services between Liverpool Street and Shenfield, and Paddington to Heathrow and Reading will continue to operate on Sundays as they do now aside from any planned closures.
- 3.5 Work will continue in engineering hours and on Sundays to allow a series of testing and software updates in preparation for more intensive services later this year. By using Sundays and some Saturdays, we anticipate that the next phase of the Elizabeth line will be complete this autumn, thereby enabling a much earlier near doubling of train service through the central section and direct journeys from the east and west through the central tunnels. One full weekend closure took place on 11/12 June 2022, with two additional closures scheduled for 30/31 July and 29/30 October 2022.
- 3.6 The programme has been focussed on further improving the reliability of the railway following the commissioning of the major signalling software update ELR200 software at Easter. A subsequent update, ELR201, was commissioned during the planned weekend closure on 11/12 June 2022 to restore some aspects of functionality that had regressed in ELR200.
- 3.7 Reliability performance continues to trend in the right direction, which is important looking ahead to Stage 5B-minus and the near doubling of the train service through the central section. Reliability had been expected to dip slightly at Stage 3 but has remained steady, despite the railway moving from a 12 trains per hour timetable running with no passengers into revenue service.

4 Surface Stations

- 4.1 Customers on the west of the central section, between Paddington and Reading, have been benefitting from new station buildings and step-free access following the completion of Network Rail station enhancement works.
- 4.2 Network Rail continues their station upgrades on the eastern section, between Liverpool Street and Shenfield, focusing on completion of the station enhancement works at Romford and Ilford.
- 4.3 Although Romford has been affected by delays with gaining acceptance and assurance to enable handover, all parties are working collaboratively to deliver the ticket hall and lifts into use during the coming weeks, ahead of final completion. At Ilford, good progress has been made on the replacement of the concrete slab within the main concourse. Removal of the historical defective

slab elements is now completed, and Network Rail anticipates the station building and lifts being brought into use in summer 2022.

5 Stage 5B

- 5.1 The plan to complete the end-to-end railway entails three steps: 5B-minus which will provide a 22 trains per hour peak (16 trains per hour off-peak) frequency in the central section (Paddington – Whitechapel) which can commence outside of a National Rail timetable change but requires a 16-week notice period; and stages 5B and 5C both of which step up the peak frequency to 24 trains per hour but require auto-reverse and will be implemented to align with the National Rail timetable change. A T-minus process is being established that builds on the approach taken to countdown to commence revenue service of the Elizabeth line.
- 5.2 Reliability will be a key factor in commencing and moving through the Stage 5 stages with the reliability on each of the west, central and east sections needing focus and management. A further timetable trial for 20 trains per hour was undertaken on 19 June 2022. Particular attention is also currently on the transitions which will be key to support Stage 5. The transition at Stratford between the central and surface sections is an important part of Stage 5 services and needs to be highly reliable. Work is underway, with our signalling supplier, to build this reliability to the level required for passenger services.

6 TfL Residual Works Programme

- 6.1 The residual works team continue to progress post revenue service activities across the London Underground and Rail for London (Infrastructure) Limited estate.

List of Appendices:

None

List of Background Papers:

None

Contact Officer: Howard Smith, Director, Elizabeth line
Email: howardsmith@tfl.gov.uk