

This paper will be considered in public

1 Summary

- 1.1 This paper provides a status update on Elizabeth line operations and on the readiness for further opening stages of the Elizabeth line including the remaining work of the Crossrail project.

2 Recommendation

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

3 Performance of Operational Service

- 3.1 Period 9 of 2022/23 (13 November to 10 December 2022) (P9) represented the first full period of through-running, and of the new, enhanced timetable. Since 6 November 2022, the service has been operating 22 trains per hour (tph) in the Central Operating Section (COS) at peak times, Monday to Sunday (seven day per week) and from 05:30 to 23:30. Twenty-two tph represents a near-doubling of service from 12 tph since opening, more than six months ago.
- 3.2 Following the successful launch of the new timetable in November 2022, initial performance has been slightly below target, but in a period of disruption of rail services nationally. Good collaborative working with the operator MTR Elizabeth Line and Network Rail teams on preparing for it has followed through into timetable delivery and management of incidents and we have a good process to capture learnings.
- 3.3 The overall Public Performance Measure scores on the Elizabeth line for Period 8 of 2022/23 (16 October to 12 November 2022) (P8), P9 and Period 10 (11 December 2022 to 7 January 2023) (P10) were 91.8 per cent, 86.4 per cent and 92.7 per cent respectively.
- 3.4 The Elizabeth line remains the third most reliable railway in the country on the basis of the moving annual average performance (MAA) which in P10 was 93.1 per cent PPM. The only operators with greater reliability were Merseyrail and London Overground. For the first two weeks of P11 Elizabeth line reliability is second in the country at 92.7 per cent with only Chiltern railways higher.
- 3.5 New Year's Eve saw the first 24-hour passenger service run on the Elizabeth line.
- 3.6 Fifteen days of industrial action on Network Rail and TfL impacted the Elizabeth line between 6 November 2022 and 7 January 2023, with reduced services available on strike days and late start up on days following a strike. All partners are working closely together to deliver the best possible service levels and information

to customers during these times.

- 3.7 Strike action taken by Rail for London (Infrastructure) Limited staff resulted in a reduced service being available on Thursday 12 January 2023. Eight tph ran on the eastern section between Shenfield and Liverpool Street and six tph on the west departing from Paddington high level platforms. No service was available in the COS.
- 3.8 The key issues in terms of reliability have been:
- (a) Network Rail infrastructure in the west, where there have been a significant number of points failures, which are disruptive and take time to recover the service; and
 - (b) the reliability of the class 345 trains. A further train software upgrade to support this is expected to be delivered by Alstom in February 2023.
- 3.9 All 70 class 345 trains have now been converted into nine-car full length units. Since the autumn, the final three seven-car or 'reduced length' units have been converted to nine-car trains, with the last brought into service in December. A full fleet of nine-car units supports improved railway performance, for instance by allowing greater resilience in the event of service disruption or unit failures. It has also allowed for the withdrawal of all class 315 trains as of December 2022.
- 3.10 Step-free access was better than target for P8 with 99.05 per cent performance and close to target in P9 at 98.5 per cent.
- 3.11 Customer satisfaction for the line has to date been extremely high, with the Customer Satisfaction Survey (CSS) score for the Elizabeth line in Quarter 2 of 2022/23 (the first full period in which the COS was running) was at 83 – the highest score across all TfL modes. The score for the central section was exceptional at 87, while the east and west saw CSS scores of 82 (up from 79 in Quarter 1) and 80 (up from 75 in Quarter 1) respectively.

4 Project completion update

- 4.1 The Crossrail project is now in the final phase, with the stage known as Stage 5c, which is on track to be delivered by the end of May 2023.
- 4.2 At this point, the line will move to a peak service frequency of 24 tph in the central section – up from the current 22 tph. This increase will be facilitated by delivery of the auto reverse functionality. This uplift will take place in line with the National Rail timetable change scheduled for 21 May 2023.
- 4.3 A full closure of the Elizabeth line's COS took place during the Christmas 2022 period, with a number of works successfully completed.
- 4.4 The blockade (Westbourne Park – Pudding Mill Lane – Abbey Wood) took place between 01:10 on Sunday 25 December and 04:00 Wednesday 28 December 2022, allowing for commissioning of the major ELR300 signalling software update, as well as upgrades to Central Management System and Station Management System software. Additionally, no service ran between Whitechapel and Shenfield between Wednesday 28 December 2022 and Tuesday 3 January

2023 to allow National Rail power upgrades to take place.

- 4.5 A further signalling upgrade, ELR400, is planned for Easter 2023 to deliver the final configuration for auto reverse and 24 tph.
- 4.6 The handover of Bond Street Elizabeth line station to London Underground took place on 12 January 2023. All contracts are expected to be closed out by Easter 2023 except for signalling and communications software contracts with Siemens and Alstom, which are core to delivering Stage 5c in May 2023.

List of appendices to this report:

None

List of Background Papers:

None

Contact Officer: Howard Smith – Director, Elizabeth Line
Email: HowardSmith@tfl.gov.uk