

Transport for London

Minutes of the Programmes and Investment Committee

Teams Virtual Meeting 10.00am, Wednesday 2 March 2022

Members of the Committee

Ben Story (Chair)
Dr Nelson Ogunshakin OBE (Vice Chair)
Cllr Julian Bell
Seb Dance
Dr Lynn Sloman MBE
Peter Strachan

Government Special Representative

Becky Wood

Executive Committee

Andy Byford	Commissioner
Howard Carter	General Counsel
Stuart Harvey	Chief Capital Officer

Staff

Alexandra Batey	Director of Investment Delivery Planning
Christina Calderato	Director of Transport Strategy and Policy (for Minute 10/03/22)
Daniel Champion	Head of Investment Delivery Planning – Air Quality, Technology and Environment (for Minute 10/03/22)
Michael Cooper	Director, Project Management Office
Patrick Doig	Group Finance Director and statutory Chief Finance Officer
Philip Hewson	Head of Procurement – Strategy and Performance
David Ho	Head of Finance (LU Assets and Engineering)
Lorraine Humphrey	Director of Risk and Assurance
Shamus Kenny	Head of Secretariat
Nick Lawrence	Head of Projects and Programmes (for Minute 10/03/22)
Jamie Mordue	Senior Committee Officer, Secretariat
Collan Murray	Head of Procurement, Major Project Systems
Kumaran Nagiah	Chief of Staff, Major Projects
James Norris	Interim Head of Project Assurance
Jadon Silva	Supply Chain Director
Garry Sterritt	Head of Asset Investment (for Minute 09/03/22)
Shashi Verma	Chief Technology Officer and Director of Strategy
Jonathan Wharfe	Supply Chain Director

Independent Investment Programme Advisory Group (IIPAG)

Alison Munro	Chair, IIPAG
Simon Collins	IIPAG Member

01/03/22 Apologies for Absence and Chair's Announcements

There were no apologies for absence from Members. Simon Kilonback, Chief Finance Officer, Andy Lord, Chief Operating Officer and Gareth Powell, Chief Customer and Strategy Officer were unable to attend the meeting. Patrick Doig attended in place of Simon Kilonback.

The Chair welcomed Cllr Julian Bell, Seb Dance and Peter Strachan as new Members of the Committee and thanked his predecessor, Professor Greg Clark CBE, the Vice-Chair, Dr Nelson Ogunshakin OBE, and key TfL staff for the advice and support he had received from them.

The Chair agreed to accept the item on the Air Quality and Environment Programme as a late paper, as information was not available at time of publication.

As the Committee was unable to meet in person, any decisions required would be taken by Chair's Action, following the discussion of the item with Members at the meeting. The meeting was being broadcast live on TfL's YouTube channel to ensure the public and press could observe the proceedings and decision-making.

Alexandra Batey told the Committee that on 1 March 2022, a cyclist had tragically been killed in a collision with a heavy goods vehicle in Holborn. The thoughts of everybody at TfL was with the friends and family of the deceased. TfL was committed to transforming the junction, which the Walking and Cycling Commissioner had identified as a high priority given the high levels of pedestrian and cyclist activity. The site was complex and interim and long-term changes were being discussed with the London Borough of Camden, to ensure they aligned with the borough's plans for changes to the Holborn gyratory.

Financial Authority was currently provided through the two-year Budget for 2021/2022 and 2022/23, approved by the Board on 28 July 2021. The current funding agreement with Government expired on 24 June 2022. Any Authority granted at this meeting that related to both the current funding period and commitments that extended beyond the period of the Business Plan and Budget may need to be revised as part of future budgets to be considered by the Board. If additional funding was not available, a prioritisation of the TfL Investment Programme would be required and some programmes and projects would not be taken forward and revised authority would be sought as appropriate.

All approvals given would be overseen in accordance with TfL Business controls in respect of draw down.

The Chair reminded those present that safety was paramount at TfL and encouraged Members to raise any safety issues during discussions on a relevant item or with TfL staff after the meeting. No matters were raised.

02/03/22 Declarations of Interests

Members confirmed that their declarations of interests, as published on tfl.gov.uk, were up to date and there were no interests to declare that related specifically to items on the agenda.

03/03/22 Minutes of the Meeting of the Committee held on 15 December 2021

The Committee approved the minutes of the meeting held on 15 December 2021 as a correct record. The minutes would be provided to the Chair for signature at a future date.

04/03/22 Matters Arising and Actions List

Howard Carter introduced the paper, which set out progress against actions agreed at previous meetings of the Committee.

The Committee noted the actions list.

05/03/22 Use of Delegated Authority

Howard Carter introduced the paper, which provided an update on the use of delegated authority by the Committee, through the use of Chair's Action or of Procurement Authority and Programme and Project Authority, in respect of matters within the Committee's remit, granted by the Commissioner and the Chief Finance Officer.

Since the meeting on 15 December 2021, there had been two uses of Chair's Action: one in relation to approval of authority requests at the meeting of the Committee on 15 December 2021, which had been held on Teams; and one to approve authority requests for the Elephant and Castle Station Capacity Upgrade project.

The Commissioner had approved one Procurement Authority request relating to the Cycle Hire – Bike Maintenance and Supply Contract Extension.

The Chief Finance Officer had also approved four Procurement Authority requests relating to: Stops and Shelters, Advertising Shelters Assets – Advertising Panel LED Replacement; Lot 1 of Media Planning and Buying Services from Wavemaker; Maintenance of Platform Edge Doors on the Jubilee line with Knorr-Bremse Rail Systems (UK) Limited; and Jubilee line Heavy Overhaul Programme Lifts Components – Alstom and the Overhaul of Jubilee line – Line Contactors.

There were no Mayoral Directions to TfL within the Committee's remit.

The Committee noted the paper.

06/03/22 Investment Programme Report – Periods 8, 9 and 10, 2021/22

Stuart Harvey introduced the report, which updated the Committee on the progress and performance of Programmes and projects in the Periods 8, 9 and 10, 2021/22 (17 October 2021 – 8 January 2022).

There was a strong safety performance in the periods and trends had improved. The Four Lines Modernisation Programme was now largely focussed on software, as most of the construction had been completed. A strong software control plan was in place, which drove collaboration and identified issues. Colleagues were working hard to deliver the Programme within existing Authority. Completion of migration area five would complete work on the Circle and Hammersmith & City lines, which would improve customer experience.

Manufacture of the 20 car bodies for Docklands Light Railway had begun. The first two trains were complete and had started static testing. Construction of the Northern Sidings for storage of trains had been slightly delayed.

Stage one of assurance had been completed ahead of target on the new trains for the Piccadilly line. In December 2021, the depot delivery integrator contract was awarded to the joint venture of Lendlease Construction (EMEA) Limited and Jacobs UK Limited, which would support the depot project teams to upgrade the depot. Work on the infrastructure to support the trains had started six months late, owing to uncertainty over funding, and so the work on the trains had been rephased correspondingly.

On the Silvertown Tunnel, good progress had been made on both sides of the river, including where the tunnel boring machine launch, rotation and retrieval chambers were to be constructed.

There was confidence that the estimated final cost (EFC) for the Barking Riverside Extension project would be reduced and be delivered within Authority. The tracks had been laid on the viaduct and there was confidence that a systems integration weekend with Network Rail in April 2022 would be a success. TfL had a good working relationship with Network Rail, with a good contractor that was co-located with the project team.

The work at Bank station which required a 17-week blockade of a section of the Northern line had started well. There were inevitable challenges, given the location, but TfL remained on track to reopen the line in May 2022.

Discussions around the new facility at Elephant & Castle station had concluded and a contract was in place to build a new station box and work on the tunnel. Work continued on value engineering for the station fit out.

Alexandra Batey told the Committee that there were red rated milestones for the Central Line Improvement Programme, as it would be completed later than planned and for the Rotherhithe Tunnel due to an active decision on optioneering. The Committee would continue to be updated. Members welcomed the information on amber and red milestones and asked that they be discussed openly as a matter of course.

The major station improvement at Tottenham Hale station was brought into use on 13 December 2021. All remaining works were on schedule for completion and an official opening was planned for spring 2022.

A public consultation had been held from November 2021 to February 2022 on future step-free access (SFA) priorities. Five thousand responses were received and work on a future SFA strategy had begun.

Work continued on the five life expired escalators at South Kensington station. The Piccadilly line was not stopping at the station but Circle and District line services were uninterrupted.

There were EFC changes in the Rolling Stock Programme portfolio, as they approached different delivery gates, such as with the Central line fleet renewals following the completion of the prototype, and increased understanding of the engineering vehicles locomotive works towards the back end of the timeline.

The Fleet Overhaul Programme continued to develop long and short-term improvements to address the state of good repair across the fleets. Changes to the EFC were again related to delivery gates and greater cost clarity. In addition, funding pressures had resulted in TfL looking at more short-term needs.

As London's largest user of electricity, London Underground operated its own high voltage distribution system and backup power generation capabilities. To maintain the power and integrity of the railway, a rolling programme of renewals was enacted and currently focussed on 22 life expired uninterruptable power units.

The five-year forecast on Healthy Streets had reduced since the report submitted to the December 2021 meeting. This reflected the ongoing funding uncertainty and a managed decline scenario.

It was noted that the report submitted to the meeting on 15 December 2021 contained an error in the EFC for Asset Investment and the figure in the report was now accurate and up to date. The reduction in EFC reflected a managed decline scenario, the delivery of cost savings and deferral of some schemes. Work was focussed on the safety critical and highest priority assets.

A 2020 trial indicated that deployable enforcement cameras, delivered through the Surface Technology Programme, improved road-user compliance by up to 60 per cent in six months. The first camera was deployed to Cambridge Road in January 2022 and a further 50 were expected to be operational by the end of May 2022.

Members asked whether the delays to the completion of depots caused a material risk in terms of storing new trains. Stuart Harvey told the Committee that work on the trains had been rephased.

Members requested a graphical presentation of how costs-to-go was changing between reporting periods and narrative where there were large changes, although it was noted that most reflected a managed decline scenario. TfL officers would consider how best to present data to the Committee but advised that it was difficult with some Programmes that had rolling programmes of renewals with thousands of projects. Members stated that it would also be useful for the report to set out what was included in the portfolios. **[Action: Alexandra Batey]**

Members asked whether the right balance had been struck between reducing costs on road safety and on other assets. The Commissioner stated that a paper would be

submitted to a future meeting of the Board that would contain more detail once TfL knew what money was available; the Government and TfL would partner over capital expenditure but Government contribution size or length was not yet known.

The Committee noted the report and the exempt supplementary information on Part 2 of the agenda.

07/03/22 Independent Investment Programme Advisory Group Quarterly Report

James Norris and Alison Munro introduced the paper and supplementary information on Part 2 of the agenda, which provided an update on the work undertaken by the Independent Investment Programme Advisory Group (IIPAG) since the last meeting of the Committee.

Two sub-programme reports had been conducted in the period. Cross-cutting work continued, including on the Project Management Office (PMO) and the Procurement and Supply Chain Improvement Programme.

The second part of a report on asset information, which had synergies with asset renewals, was underway and IIPAG was looking at how TfL handled risk, for both cost and schedule.

Alison Munro welcomed suggestions from Members for future areas of work for IIPAG.

Simon Collins told the Committee that IIPAG had been reviewing TfL Supply Chain Contracts. It found that contract form, including the standard use of the New Engineering Contracts suite, had no direct bearing on the cost and schedule delays and levels of commercial dispute experienced. The main issues identified were immaturity of scope at the point of contract award, immaturity of design, poor risk evaluation and management, insufficient project information, such as site investigation or asset condition, pressure to deliver to a deadline, and accrual of unresolved variations.

The Vice Chair shared that he had been involved in development of the NEC form. This was not considered a conflict of interest.

Members asked that IIPAG work with the PMO to help on reporting when there was a change in project budget or scope.

The Committee noted the paper and the exempt supplementary information on Part 2 of the agenda.

08/03/22 TfL Project Assurance Update

James Norris introduced the paper, which provided an update on the project assurance work undertaken between 9 November 2021 and 21 January 2022.

Three full Programme reviews and five project reviews had been conducted in the period. The Independent Investment Programme Advisory Group (IIPAG) had been involved in the majority.

There was a significant reduction in the number of overdue recommendations since the last meeting and, since the papers for the meeting had been published, the number of overdue recommendations had been reduced further to one made by IIPAG and 10 made by TfL Project Assurance.

The Chair welcomed the progress made and the openness in responding to supportive challenges from the Committee. Reviews usually ran on an annual cycle and a core line of enquiry was the status of previously made recommendations, whether they were open or closed and how they had been embedded. Recommendations were also discussed at periodic portfolio meetings.

The Committee noted the paper and the exempt supplementary information on Part 2 of the agenda.

09/03/22 Asset Renewals

Garry Sterritt introduced the paper, which contained material shared with the Department for Transport (DfT) and the HM Treasury (HMT) as part of the discussions on TfL funding.

The presentation set out the process to ensure there was a consistent approach across TfL for describing asset condition and how this could be related back to a scale for state of good repair (SOGR). A dashboard had been created to flag up issues, such as different business areas not consistently using the same asset terminology.

Where assets were classed as 'obsolete' this did not necessarily translate into a poor SOGR; for example an asset might be functioning well but spare parts were no longer being produced or manufacturer support for the asset had ceased.

Owing to the coronavirus pandemic and resulting lower passenger numbers, the distance travelled before an asset needed maintenance had increased.

Data on asset condition and SOGR would eventually need to be related to the emerging definitions for network service and the Mayor's Transport Strategy. For example, excellent or good levels of service would mean that customers knew they would have a safe, reliable and easily accessible journey. A poor level of service would deliver a safe journey but with reduced reliability and customer satisfaction, as a result of restrictions, closures and unplanned maintenance.

TfL was working to estimate how much it would need to invest in renewals by looking at past spend, run rate and asset modelling. Past spend indicated that TfL needed to spend between £750m-1.1bn on renewals per year. Run rate indicated that TfL needed to spend £840m-1.1bn on renewals per year. Asset modelling used computerised models to assess and predict how assets would behave and degrade under different intervention and investment scenarios. Asset modelling would be a key area of focus for the next nine months, to provide a pan-TfL view of alternative

investment scenarios and their impact on outcomes. Checks and balances would be put in place to ensure the data provided was accurate.

In comparison to other asset-based entities, such as Network Rail or National Highways, TfL had a less formalised process for determining asset condition. When TfL was able to link asset condition to levels of service, TfL might be considered more advanced in the maturity of its process. It was noted that TfL did not operate single networks but was multi-modal, incorporating rail, road and active travel.

Given TfL's funding situation, it was critical to properly understand the consequences of investing less in some areas of the network than others. Traditionally TfL would work to ensure every network was at or above a base level, but the funding constraints meant that some trade-offs might be needed to ensure all networks were safe, despite some possibly performing below a base level.

Work was ongoing with colleagues in Planning and Strategy to assess whether the data could be used to determine how investment in assets ultimately impacted fare revenue.

The Committee stated that the digitalisation of TfL would allow for the determination of pain points and points of opportunity. Investment into technology could pay back initial investments and release value relatively quickly.

Members noted that DfT and HMT were encouraged by the work that TfL had done and appreciated its openness.

Members thanked staff for their work in this area and for the useful discussion.

The Committee noted the paper.

10/03/22 Air Quality and Environment Programme

Alexandra Batey introduced the paper, which provided an update on the Air Quality and Environment (AQE) Programme's delivery of projects since December 2020.

Air pollution was one of the most significant challenges facing London, affecting lung development in children and increasing the risk of strokes, heart and lung disease. A study from Imperial College London stated in 2019 that over 4,000 Londoners died prematurely because of the impact of toxic air.

TfL had made significant progress through the AQE Programme to deliver at the forefront of solutions for air quality and urban health issues. There were 44,000 fewer polluting vehicles in central London as a result of increased compliance with Ultra Low Emission Zone (ULEZ) regulations and the Mayor's Air Quality Fund also realised over 433 tonnes in NO_x savings and over 25 tonnes in PM₁₀ savings. Further to this, the number of schools in areas exceeding legal limits for NO₂ fell by 97 per cent, from 455 in 2016 to 14 in 2019. Key achievements in 2021/22 included Low Emission Zone tightening and delivery of the ULEZ expansion.

The operating model for Road User Charging (RUC) comprised of three service contracts that were due to expire in 2026: Detection and Enforcement Infrastructure;

Business Operations Services; and Enforcement Operations Services. Feasibility work was undertaken to assess the options for delivery and procurement of the contract re-let of existing RUC projects from the contract end date in 2026. The review was expanded to include:

- (a) a potential 2023/24 scheme – four potential approaches to a scheme that could be implemented by May 2024 at the latest;
- (b) a potential acceleration of the Business Operations Services workstream for 2026 re-let, to coordinate with Silvertown and Blackwall Tunnels user charging in 2024;
- (c) the user charging element of the Silvertown and Blackwall Tunnels in 2024/25; and
- (d) early project initiation work on exploring options for the integration of future RUC systems.

The Independent Investment Programme Advisory Group (IIPAG) had conducted a review and focussed on the RUC elements of the paper. It noted that successful delivery of the Programme required strong project management and the agreement of a long-term business strategy, supported by adequate resourcing and governance. TfL accepted the recommendations made by IIPAG and had implemented changes to the governance of the portfolio.

Members welcomed the achievements delivered through the Programme. The Mayor had set the objective for London to be net zero carbon by 2030, which required focus and leadership from senior TfL staff and the Mayor's team, in addition to appropriate resources.

Seb Dance, Deputy Mayor for Transport, said that there were likely to be two phases: interim measures, followed by measures to achieve the longer-term goals for a sophisticated RUC scheme in London. Alexandra Batey confirmed that the team that had previously successfully delivered the ULEZ expansion would lead on delivering the RUC changes.

The Committee stated that it was important to consider potential costs alongside the potential benefits and income; the net revenue potential was larger than Crossrail and, for some options, it was the equivalent of gaining five million customers.

It was also important to locate electric vehicle (EV) charging points where people could access them when needed; London take up of EVs was higher than the national average and it would be essential to keep up with demand. It was noted that while EVs would help to reduce carbon emissions, brake and tire wear still created PM2.5 and PM10 particles, therefore modal shifts were still required to improve air quality.

The Chair would be updated on potential delivery for 2024 onwards. A note would be circulated to Members and a paper would be submitted to a future meeting.

[Action: Alexandra Batey]

The Chair, in consultation with Committee Members, noted the paper and exempt supplemental information on Part 2 of the agenda, and:

- 1 approved the additional Programme and Project Authority of £54.5m to support the delivery of the Air Quality and Environment Programme for 2022/23;**
- 2 approved additional Procurement Authority, in the sums requested in the exempt supplementary paper on Part 2 of the agenda, to extend the contracts with Capita Business Services Limited and Siemens Mobility Limited to continue activities in support of road user charging;**
- 3 approved Procurement Authority, in the sums requested in the exempt supplementary paper on Part 2 of the agenda, to commence contracts with third party suppliers to enable activities in support of road user charging; and**
- 4 noted that the matters for which Authority is sought above included commitments that extended beyond the period of the Business Plan and Budget noted by the Board on 8 December 2021 and provision would, therefore, need to be made for those commitments in future Business Plans and Budgets.**

11/03/22 Technology and Data 2022/23 and 2023/24

Shashi Verma introduced the paper, which provided an update on the Technology and Data (T&D) Programme. The Programme provided core technology for TfL and part of London Underground and Surface Transport.

Funding uncertainty meant that most of the Programme was focussed on renewals, rather than enhancements. This was not ideal, as technology enhancement could be a driver of better outcomes. Should the Programme be shrunk further, it would pose increased risks to TfL. This was especially the case because the drive to reduce costs had seen a consolidation of hosting and networks onto single platforms.

The Programme was vital to establishing a new asset management system for Surface Transport, which would allow TfL to drive value from data. Previously TfL outsourced this system for London Underground assets but, subject to resourcing, TfL was confident it had the capability to deliver the system through in-house solutions.

TfL Project Assurance shared that issues around resourcing were the most critical identified in its reviews.

Gartner, a technological research and consulting firm, had reviewed the T&D delivery and resourcing models. On the delivery model, it found that TfL had 10-20 per cent fewer resources, was spending less than comparable organisations but was delivering at the median. Recommendations made would be incorporated into the programme of change for T&D. Gartner found that, while TfL had difficulty in achieving its operating model due to the difficulty in attracting resource, TfL was

better at finding permanent resources than competitor organisations. In recent months, however, TfL had struggled to attract and retain resource as the salary offered was not competitive. External benchmarking was essential, as it highlighted how TfL could deliver better value for money.

On its technology stack, TfL tried as far as possible to integrate best practice and technologies into its platforms. TfL had made improvements to its networks that resulted in £60-70m savings per year, which was 50 per cent of the overall cost of the programme. In addition, as much of the technology stack as possible had been moved to the cloud.

The Chair, in consultation with Committee Members, noted the paper and exempt supplementary information on Part 2 of the agenda and:

- 1 approved in respect of the Technology and Data Investment Programme (the Programme) an increase in Programme and Project Authority of £7.7m in financial year 2022/23 (bringing the total up to £110.5m) and additional Programme and Project Authority of £102.9m in financial year 2023/24 resulting in total Programme and Project Authority to £110.6m;**
- 2 noted that the matters for which Programme and Project Authority is sought above included commitments that extended beyond the period of the Business Plan and Budget noted by the Board on 8 December 2021 and provision would, therefore, need to be made for those commitments in future Business Plans and Budgets; and**
- 3 noted that Procurement Authority for the various projects in the Programme described in the paper would be sought at officer level in accordance with Standing Orders.**

12/03/22 Enterprise Risk Update – Delivery of Key Projects and Programmes (ER8)

Stuart Harvey introduced the paper, which provided an update on the management of Enterprise Risk 8 – Delivery of Key Projects and Programmes (ER8).

In response to the current funding situation, and the impacts on the supply chains caused by Brexit and the coronavirus pandemic, the overall control effectiveness rating for ER8 had been changed to 'requires improvement'. The main concerns were difficulties in accurate forecasting, increasing overheads, projects stopping and starting, and issues with attracting and retaining resource. Further to this, TfL's supply chain was reconsidering their risk appetite, given TfL's funding position.

To control the risk, the Project Management Office (PMO) was driving consistency and provided first line assurance. A newly established Capital Improvement Group would work in parallel with the PMO to bring capital issues together in one place and drive improvements. In addition, the Capital Efficiencies Programme met periodically to seek greater efficiency, to escalate any issues and encourage openness.

TfL was driving cost efficiencies through three initiatives:

- (a) 'Pounds in the Ground': TfL had introduced smarter approaches in considering what needed to be done and how TfL deployed resources to be in a better position to put more 'pounds in the ground';
- (b) 'How Good can it get': TfL had started to look beyond traditional risk management approaches and explored what would happen if all risks were mitigated and opportunities realised, and the impact of delivering a project below the initial estimated final cost; and
- (c) reviewing the risk in projects: TfL would enhance risk management activities to look at risk occurrence, risk themes and risk mitigation.

A new PMO Director had been appointed, who would ensure greater clarity and consistency across projects and make it easier for project managers to move between projects to share knowledge.

The Chair thanked officers for being open about causes of the change to 'requires improvement'. The Committee would keep in mind this risk when discussing items at future meetings.

The Committee noted the paper and the exempt supplementary information on Part 2 of the agenda.

13/03/22 Members' Suggestions for Future Discussion Items

Howard Carter introduced the current forward plan for the Committee.

Members noted that the Board would be provided with information on TfL's cyber security and that it was likely that papers on road user charging would be submitted to future meetings of the Committee. Members requested a future item on electric vehicle demand and strategy. **[Action: Secretariat]**

The Chair would speak with the Chief Technology Officer and Director of Strategy on how information on dependencies within the Technology and Data Programme would be presented to the Committee.

The Committee noted the paper.

14/03/22 Any Other Business the Chair Considers Urgent

There was no urgent business.

15/03/22 Date of Next Meeting

The next scheduled meeting was due to be held on Wednesday 18 May 2022 at 10.00am.

16/03/22 Exclusion of the Press and Public

The Chair, following consultation with the Committee, agreed to exclude the press and public from the meeting, in accordance with paragraphs 3 and 5 of Schedule 12A to the Local Government Act 1972 (as amended), when it considered the exempt information in relation to the items on: Investment Programme Report – Periods 8, 9 and 10, 2021/22; Independent Investment Programme Advisory Group Quarterly Report; TfL Project Assurance Update; Air Quality and Environment Programme; Technology and Data 2022/23 and 2023/24; and Enterprise Risk Update – Delivery of Key Projects and Programmes (ER8).

The meeting closed at 1.08pm.

Chair: _____

Date: _____