

Date: 19 July 2023

Title: Rail and Station Enhancements Programme

This paper will be considered in public

1 Summary

	Existing Financial Authority (£m)*	Estimated Final Cost (EFC)** (£m)	Existing Programme and Project Authority (£m)	Additional Requested (£m)	Total Programme and Project Authority (£m)
Gross Cost***	£1,005.4	£1,110.4	£1,002.1	£19.8	£1,021.9
Gross Income	£609.2	£649.5	£574.6	£37.9	£612.5
Net Cost	£396.2	£460.9	£427.5	-£18.1	£409.4

Table 1 – Summary of Programme and Project Authority

* Existing Financial Authority includes P13 2022/23, 2023/24 Budget, Business Plan 2024/25 and 2025/26. The above table excludes Financial Authority which had been unbudgeted but which was given at previous Committees of £7.2m.

** The Estimated Final Cost includes spend outside the current business plan period.

*** Gross value is total TfL expenditure, including expenditure recovered from external parties and income from third parties.

1.1 This paper provides an update to the Committee on the achievements and progress of the Rail and Station Enhancements Programme (the Programme). This paper focuses on enhancements which were previously part of the London Underground (LU) Enhancements, Public Transport and standalone programmes.

1.2 The Committee is requested to approve an increase in Programme and Project Authority of £19.8m in total to reflect proposed adjustments, income and transfers as described in the paper. The total Programme and Project Authority including transfers and new requests is a total of £1021.9

2 Recommendation

2.1 The Committee is asked to note the paper and:

- (a) approve an increase of Programme and Project Authority of £19.8m (which includes an adjustment for an additional £37.9m third-party income) for the Rail and Station Enhancements Programme;

- (b) approve the inclusion of the Battersea Power Station Western Entrance project within this Programme, with Programme and Project Authority of £22.5m, having previously been within the Northern Line Extension Programme;
- (c) approve the inclusion of budgeted scope from Acton Works' AC14 project with Programme and Project Authority of £0.36m having previously been within the Train Systems programme;
- (d) note that the total Programme and Project Authority for the Programme including the matters listed above is £1021.9m;
- (e) note that matters for which Authorities are sought above include commitments that extend beyond the period of the 2023/24 Budget and provision will, therefore, need to be made for those commitments in future Budgets; and
- (f) note that Procurement Authority for the various initiatives will be sought at officer level in accordance with Standing Orders.

3 Background

- 3.1 The formation of the new Rail and Station Enhancements Programme was approved by the Committee on 17 May 2023.
- 3.2 The Programme is formed from the LU Enhancements Programme (including Elephant and Castle and High Speed 2 (HS2) along with enhancements from the Public Transport Programme such as East London Line (ELL) Housing Infrastructure Fund (HIF), Docklands Light Railway (DLR) Royal Docks and Trams Fleet replacement.
- 3.3 The creation of this new programme will help streamline governance, allow for better collaboration and sharing lessons on station enhancements and leveraging third-party funding. This paper brings together projects from various programmes which will have last been to the Committee at different points in the year. As a result of the nature of this programme, this paper differs from other submissions by including additional information in section four on the specific projects, their status and planned next steps.

Strategic Context

- 3.4 The Programme aims to make rail related public transport attractive and easy for all to use. This will support delivery of the three key Mayor's Transport Strategy (MTS) themes:
 - (a) **A Good Public Transport Experience:** Improving accessibility, reliability, safety, and capacity enabling a better customer experience;
 - (b) **New Homes and Jobs:** Investment in public transport capacity and reliability is crucial to supporting London's growth and unlocks sustainable development and;
 - (c) **Healthy Streets and Healthy People:** Half of walking in London takes place as part of a longer public transport journey. By providing attractive and reliable services, we can support more active travel as part of multi-modal journeys.

- 3.5 The programme will achieve this by delivering a range of outcomes to enhance our network and address known barriers to public transport usage, including:
- (a) measures to improve accessibility to public transport, such as step-free access (SFA);
 - (b) measures to address overcrowding issues and improve reliability on the network, such as capacity improvements at Elephant and Castle and Paddington station;
 - (c) measures to optimise investments in infrastructure such as a new Western Entrance at Battersea Power Station on the Northern line extension and improvements to the ELL that provides increased frequency and station enhancement on the London Overground and;
 - (d) initiatives to enhance customer safety, including improvements to the tram network and upgrading the fleet
- 3.6 A significant number of schemes within this programme are partially or fully third-party funded; thereby reducing costs to TfL to deliver these enhancements, and/or reflecting the opportunity to upgrade infrastructure due to third party development. Between 2016 and 2023 the component parts of this programme have successfully leveraged hundreds of millions of pounds of external investment. This is from a wide range of sources including the Government's Levelling Up Fund (LUF) and HIF private developers and funding from the Crossrail programme. This programme supports TfL's drive for financial sustainability, including actively growing passenger demand while creating new sources of revenue to reduce reliance on fares income.

3.7 Programme Scope

The projects and sub-programmes covered in the new Rail and Station Enhancement Portfolio are listed below:

- (a) LU Enhancements and SFA;
- (b) HS2;
- (c) Elephant and Castle;
- (d) Battersea Power Station Western Entrance;
- (e) ELL HIF;
- (f) DLR Royal Docks enhancements;
- (g) Trams enhancements (including Tram Replacement Rolling Stock and Sandilands programme);
- (h) London Overground Capital Investment Programme (LOCIP);
- (i) Rail and Sponsored Services (RSS) initiation projects;
- (j) A collection of smaller RSS legacy projects that are being closed out.

4 Programme delivery since last submission and planned delivery for 2023/24

4.1 Progress on key projects and programmes within the portfolio are set out below:

4.1.1 LU station enhancements and Step-Free Access (SFA)

- (a) The Committee received an update on LU Enhancements in March 2023, including details of progress on projects within that programme. Good progress has been made in a number of areas since this update. Key highlights include the improvements at Paddington where a developer is completing work on the new Bakerloo Line ticket hall to provide step free access. There has also been a start of works on the new south western entrance at Stratford station which is due to open by the end of 2023/24
- (b) As part of the close out of the legacy SFA work, Programme and Project Authority of £4.1m is being released to align the Programme and Project Authority with the EFC of £108.7m.
- (c) The only LU projects requiring additional Programme and Project Authority since the March 2023 update are outlined below:
 - (i) Leyton and Colindale Station capacity enhancement and SFA**
 - (a) Both the Leyton and Colindale projects use borough and LUF investment to deliver step-free access from street to train, as well as increasing the capacity of both stations. These entrances provide the capacity to support future demand increases driven by committed and planned developments around the stations. In the case of Colindale, 11,000 additional homes have already been built.
 - (b) The projects both deliver significantly improved station ambience with improved safety and security. Within the Colindale project, relocating the ticket hall over the tracks releases the current station building site for development by TfL's wholly owned property subsidiary, as part of a wider development plan using adjacent land to maximise the potential value. The additional LUF investment on top of funding from London boroughs of Barnet and Waltham Forest allows for completion of detailed design for Leyton and construction in full of both Leyton and Colindale. Since the project update to the Committee in March 2023, work has started to prepare a DfT-compliant business case. This is required to allow for the release of the £43.2m LUF that was successfully secured in January 2023the Outline Business Case will be submitted to the DfT for assessment in July to secure release of LUF funds. Authority is requested to receive this income and to also receive £9m in grant funding from the London Borough of Waltham Forest.
 - (c) Subject to DfT approval of the business case and entering into the grant funding agreement for Leyton with Waltham Forest, the main works would commence during spring 2024 for Colindale and summer 2024 for Leyton.
 - (d) For the Colindale project, we are requesting additional Programme and Project Authority of £29.7m, with additional income authority of £22.4m to align with forecasted cost and income. This funds the construction stage to completion.

Leyton is requesting additional Programme and Project Authority of £8.0m, with additional income authority of £20.8m to align with EFC and secured income. This with investment from London Borough of Waltham Forest allows for completion of detailed design and construction. The additional income for these projects is over and above that included in previously granted authorities is included in the Authority sums requested in this paper.

(ii) Acton Works AC02 building demolition

- (a) The final stages of demolition and sterilisation of the now disused 'AC02' building will be completed to plan in the first quarter of 2023/24.
- (b) This project has taken on additional scope on the neighbouring Train Modification Building to deliver a new vehicle security and safety barrier as part of the same works. This will enable more efficient delivery than a separate project and reduce overall cost to TfL. The Committee is asked to approve the transfer of this budgeted scope and supporting Programme and Project Authority of £0.36m from LU Train Systems Programme to the Rail and Stations Enhancements Programme.

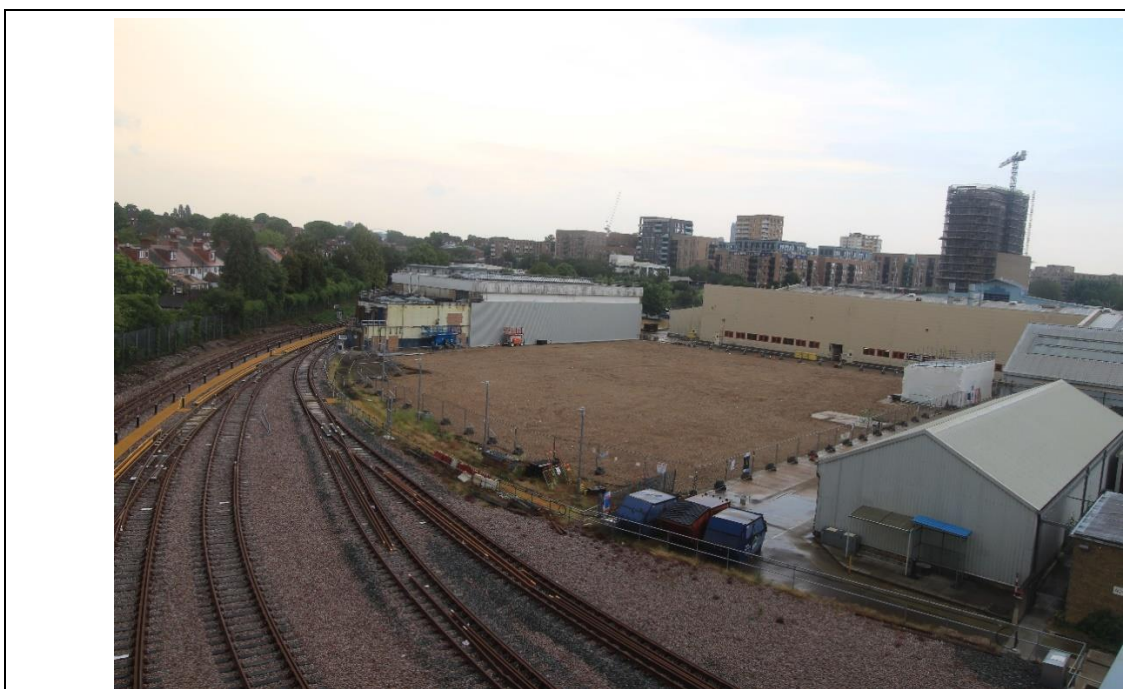
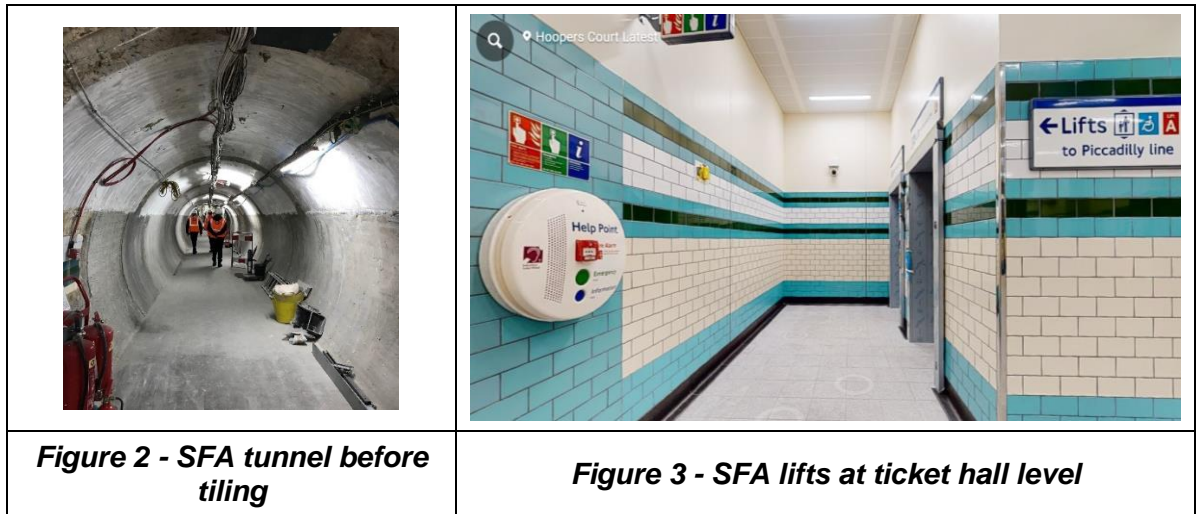


Figure 1 - Acton's former AC02 site awaiting final sterilisation

(iii) Knightsbridge Underground station

- (a) The opening of the new step-free entrance is now scheduled for spring 2024. This has moved from the last reported date of late 2023. This is because additional design work is required to enable the installation of new station systems and infrastructure works within the original Victorian tunnelling section. These works are a critical path activity to enable the systems integration of the newly incorporated assets delivered as part of this project.
- (b) The lifts which will provide step-free access have been successfully installed, tested and commissioned and will be ready to be brought into service upon completion of the wider station fit-out works. The project team, working

collaboratively with our supply chain partners have identified mitigation opportunities to improve current opening date and will be working to realise these throughout quarter 2/3.



4.1.2 High Speed 2

- (a) Since the last submission to the Committee in May 2022, the Government has announced a pause on the programme at Euston due to increased costs and affordability.
- (b) This decision will place additional pressure on Old Oak Common, a key interchange station for HS2, the Elizabeth line, and other existing rail services. The use of Old Oak Common as the HS2 temporary terminus affects the Elizabeth line which connects Reading and Heathrow Airport in the west to Shenfield and Abbey Wood in the east, passing through central London. The Elizabeth line has only been fully operational for a little over a year and already accounts for one in six of all rail journeys in the UK each day.
- (c) TfL has written to the Secretary of State and the DfT to raise significant concerns around the need for additional Elizabeth line rolling stock and provision of level boarding at Old Oak Common station.
- (d) TfL will work closely with the DfT and HS2 Ltd on a review to identify opportunities to reduce costs at Euston. This work will be undertaken to determine what is acceptable against the requirements and undertakings agreed through the Hybrid Bill. We are requesting an increase in Programme and Project Authority for this project of £4.5m with additional income authority of £4.5m, which will cover these and other HS2 related activities during 2023/24.

4.1.3 Elephant and Castle

- (a) In October 2022, the Committee approved an increase of £5.5m of Programme and Project Authority to cover inflationary increases and to bring forward scope from the later stage two to lower the risk of future communication works.

- (b) Since October, procurement arrangements for the new tunnels have progressed, with an invitation to tender issued in June 2023. A contract award for essential pre-tunnelling ancillary works was completed in April 2023.
- (c) All of these works, plus the station box, are known as stage one works and are fully third party funded. However, stage two works which contain the station box fit-out are currently unfunded. A decision on funding is required by autumn 2024 to enable seamless delivery.
- (d) During the remainder of 2023/24 a feasibility study for stage two cost and scope will be completed. Further enabling works will also be undertaken for essential pre-tunnelling and preparation for tunnelling contract award, including an industry day.

4.1.4 Battersea Power Station Western Entrance

- (a) The Battersea Power Station Western Entrance (WE) project is a legacy project from the Northern Line Extension (NLE). The project will fit-out a second entrance to Battersea Power Station including providing additional SFA. The Committee has previously been informed of the transfer of the WE project out of the NLE programme in July 2022 which will now be included in this programme.
- (b) Since July 2022 funding has been secured and a Funding and Development Agreement between TfL and Battersea Power Station Development Company has been entered into to facilitate the delivery of the WE project including an integrated construction and design team.
- (c) The WE project recently achieved TfL design acceptance and enabling works are due to commence in October 2023. Subject to delivery, the new station entrance is due to open to the public in spring 2025.
- (d) We will be requesting an increase in Programme and Project Authority for this project of £0.5m to £23m. This includes the total funding envelope of the project (£22.5m) as well as internal TfL risk provision for specific risks (£0.5m).

4.1.5 East London Line (ELL) Enhancements Programme

- (a) The main contract for detailed design and build of Surrey Quays station enhancements was awarded in December 2022, and early works commenced in May 2023 achieving the Department for Levelling Up, Housing and Communities (DLUHC) milestones. The signalling implementation contract was awarded in June 2023 with procurement for the power upgrade underway. Canada Water Bus Station concept design completed in August 2022 and procurement commenced for detailed design and build in Spring 2023. Early works also commenced in spring 2023 with completion of these works expected by the end of the financial year.
- (b) Full mobilisation of Surrey Quays station works and start on-site for power upgrades is expected by the end of the 2023.

- (c) The programme has full Programme and Project Authority but will continue to provide annual updates to the Committee.

4.1.6 DLR Royal Docks Programme

4.1.6.1 The programme scope includes the feasibility of a new station at Thames Wharf, capacity enhancements at Pontoon Dock Station and improvements at Royal Victoria Station.

- (a) **Thames Wharf:** Feasibility and value engineering have now concluded for a new station at Thames Wharf in-line with the revised masterplan for the Thameside West development. Work on the scheme will now be paused and the project will complete the necessary assurance processes. All feasibility and design information will be retained and we will return to the Committee for further Programme and Project Authority when further third-party funding is secured.
- (b) **Pontoon Dock:** Concept design for Pontoon Dock station enhancement was completed in 2022/23 but following significant cost pressures the project team have reviewed the post-Covid station passenger demand forecasts and are undertaking detailed option and value engineering assessments to reduce costs. During 2023/24 and 2024/25 a revised concept design will be finalised. Then, subject to available funding and approval from the Committee planning and procurement will be undertaken for detailed design and build.
- (c) **Royal Victoria:** During 2022/23 concept design and an invitation for tender for detailed design and build was completed for canopy upgrades at Royal Victoria Station. However, the scheme is currently paused due to reprioritisation of the Royal Docks funding.

4.1.7 Trams Enhancements

4.1.7.1 The scope of the trams enhancements work includes the Trams Replacement Rolling Stock (TRRS) Programme and the Sandilands Programme.

4.1.7.2 TRRS Programme

- (a) Our older trams have declining reliability which has resulted in lack of available fleet. This is leading to big gaps between services, crowding and poor reliability. Although we are in the process of procuring new trams, this has a long timescale to completion. To help mitigate the issues in the shorter term and minimise the impact on passengers, we are working with the operator to provide as reliable a service as possible.
- (b) Replacement of the tram fleet was endorsed by TfL Investment Group in January 2023 as the preferred single option. The programme team has undertaken early market engagement to understand market and help inform technical requirements.
- (c) The project is developing and it is intended that a concept design in the next year it is not therefore not possible to ascertain at this stage the full Programme and Project Authority that will be required.

- (d) The procurement process will commence later this financial year and design development will continue with related work including depot stabling and network power upgrades. The core proposal is to purchase trams to replace the original CR4000 fleet, but options for additional trams will also form part of the procurement process. An additional £7.7m of Programme and Project Authority is being requested to cover these activities. Next year, the programme will return to the Committee to request full Programme and Project Authority.

4.1.7.3 Sandilands

- (a) The outstanding initiatives from the Sandilands programme were due to be completed in 2022/23. However, final elements of this programme were unfortunately delayed due to technical problems with the trams power supply which led to a change in delivery strategy.
- (b) During autumn 2023/24 the track and tunnel lighting improvements are planned to be completed concurrently to minimise disruption to customers. In addition, the I-tram system will progress to improve operational reporting by providing real-time performance, accurate tram geographical location data and tram drivers will get an overspeed alert. An additional £1.43m of Programme and Project Authority is being requested to cover these activities. The EFC has increased from £19.2m to £21.5m due to programme prolongation and additional power requirements.

4.1.8 London Overground Capital Investment Programme (LOCIP)

- (a) LOCIP includes the completion of legacy works to allow assets to be handed over to Network Rail (NR). Legacy projects which require close out are London Overground Correct Side Door Enabling (LOCSDE), Willesden Power Supply Plant (PSP) Unit Shelter and Highbury and Islington (H&I) Telecoms.
- (b) During 2022/23, LOCSDE survey works commenced and permits were agreed with NR including negotiations of suitable possessions; Willesden PSP Unit Shelter procurement routing were agreed, and H&I Telecoms works were completed, and the Health and Safety file is being completed for handover.
- (c) In 2023/24, further survey works will be completed to allow works to be delivered. NR will be provided with spares and equipment, as-built drawings and handover documents and the programme will be closed. An additional £612k of Programme and Project Authority is being requested to cover these activities over 2023/24.

4.1.9 Rail and Sponsored Services Initiation projects

- (a) During 2023/24, the initiation of a pipeline for rail and sponsored services enhancements projects is planned, responding to opportunities that are arising. Many of these are fully or partially third-party funded but require initial support and development. These activities include scoping, requirements gathering, planning and estimating. £40k Programme and

Project Authority is being requested to develop these projects over 2023/24 and 2024/25.

5 Performance against milestones

5.1 Table 2 below reports progress against the Scorecard Milestones in 2022/23 and Q1 of 2023/24 showing that all target dates have been met for the programme.

Scorecard Milestone	Target Date	Progress Update
Whitechapel ticket hall dismantling completed	28/07/2022	Achieved early on 17/06/2022
Knightsbridge opening of Brompton Road entrance	25/09/2022	Achieved early on 30/08/2022
Tram Replacement Rolling Stock Programme- Gate 2 Option Selection Review (T2 scorecard)	20/12/2022	Achieved early on 19/12/2022
ELL - Signalling works Mobilisation (T2 scorecard)	13/06/2023	Achieved 13/06/2023
Surrey Quays Station - Start on Site	17/06/2023	Achieved early on 26/05/2022

Table 2 - 2022/23 and Q1 of 2023/24 Progress against Scorecard

6 Equalities Implications

6.1 TfL has an obligation under the Equality Act 2010 to:

- (a) eliminate discrimination, harassment, victimisation, and any other conduct that is prohibited by or under the Equality Act 2010;
- (b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it; and,
- (c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

6.2 The programme is delivered in accordance with the Equality Act 2010. Each Station Enhancement project undertakes Equality Impact Assessments on the impact of the proposals on each of the groups of people with protected characteristics. Schemes may have a temporary impact during delivery, but in the long term all enhancements have positive impacts on addressing equality issues across the network including the provision of SFA.

7 Financial Implications

7.1 As a result of the income requests detailed in this paper, TfL will receive a total of £43.2m from the LUF, £9m from the London Borough of Waltham Forest and £4.5m from HS2, in addition to the significant third-party funding previously secured. Table 3 shows the summary of the additional income to be received and the adjustments in existing authority to receive Income.

Additional Income	£m	Commitment
Levelling Up Fund (Colindale and Leyton)	43.2	Memorandum of Understanding will commit TfL to deliver Leyton and Colindale with TfL holding the cost overrun risk
Waltham Forest Funding (Leyton)	9.0	Refund LBWF money (including any funds spent) if project not delivered
HS2	4.5	Funding is subject to the terms set out in the Repayment of Costs Agreement with HS2. HS2 are required to pay our reasonable costs in line with the Protective Provision Agreement (PPA) secured as part of the HS2 Act
Total:	56.7	
Existing uncommitted income authority	18.7	
Total additional income authority requested	37.9	

Table 3 – Summary of additional Income

7.2 The Programme’s Financial Authority and forecast summary by year is outlined in Table 4 below

Rail and Station Enhancements		Prior Years	TfL Budget	TfL Plan					Future Years	Total	Total Years to 25/26
			2023/24	2024/25	2025/26	2026/27	2027/28				
Financial authority	<i>Budget or Business Plan</i>	£'m	£'m	£'m	£'m	£'m	£'m	£'m	£'m	£'m	
	Gross Cost	705.5	86.5	119.8	93.6	67.7	49.8	12.3	1135.2	1005.4	
	Net Total	350.0	23.6	7.4	15.3	49.2	37.7	0.0	483.1	396.2	
	Income	355.6	63.0	112.4	78.3	18.5	12.1	12.3	652.1	609.2	
Forecast	<i>P2 23/24 Forecast</i>										
	Gross Cost	705.5	81.5	105.3	64.2	98.2	46.6	9.1	1110.4	956.5	
	Net Total	350.0	8.7	20.7	6.0	41.0	34.5	0.0	460.9	385.4	
	Income	355.6	72.8	84.6	58.2	57.3	12.0	9.1	649.5	571.2	

Table 4 - Summary of the Programme’s Financial Authority and Forecast broken down by year

7.3 There are a number of Programme and Project Authority adjustments proposed within this paper that are detailed within the table in Appendix 1. These include some project close outs where unused Programme and Project Authority is being returned, removal of projects from the Programme and transfers of projects into the Programme.

7.4 The prior year financial data reflect those programmes which are seeking authority. The figures exclude projects that are now completed.

- 7.5 Many activities will continue into 2024/25 any expenditure will be subject to scope and commitments developed in 2023/24 and therefore future commitments will be subject to available funding.
- 7.6 Existing Programme and Project Authority for projects was granted under the old programme structure. Appendix 2 outlines the legacy programmes that the projects and programmes within this paper (and their authorities) have been transferred from.

8 Opportunities, Challenges and Lessons Learnt

Opportunities

- 8.1 The success of this Programme is significantly reliant on securing third-party funding. We will continue to work closely with London boroughs, the Greater London Authority, government and developers to negotiate and leverage future funding opportunities for enhancements. To ensure we can be as responsive to future funding opportunities, we are developing prioritised pipelines across LU and Rail and Sponsored Services that aligns with The MTS.
- 8.2 Where third-party developments create additional passenger demand, mitigation can be sought through the planning process with direct funding contributions or work delivered directly by third party developers.
- 8.3 We are working closely with TfL's wholly owned property development company to ensure a co-ordinated approach to developing their property portfolio. This will allow TfL to optimise the benefits to the customer facing network that can be realised through these development opportunities.

Challenges and Key Risks

- 8.4 Despite successfully leveraging significant third-party funding, affordability remains a key challenge for the Programme. In the current economic climate, inflationary pressure on materials and increased labour costs are significantly impacting the construction industry. Project teams are working hard to ensure these cost pressures are forecasted in revised cost estimates. However, there is a risk that in-flight projects do not have sufficient risk allocation to cover these increases.
- 8.5 The top risks associated with delivery of the Programme are shown in Table 5 below.

Project/Programme	Risk Description	Mitigation Actions
High Speed 2	Insufficient infrastructure being delivered by HS2 due to Euston programme pause and cost constraints.	- Regular engagement with HS2, NR and DfT to set out our red lines (minimum infrastructure requirements)
Elephant and Castle	Affordability- risk that tender returns will exceed budget	- Early market engagement, including industry day events

Project/Programme	Risk Description	Mitigation Actions
Battersea Power Station Western Entrance	Increase in TfL resource costs to manage the works as part of the integrated construction and design team	<ul style="list-style-type: none"> - Periodic review of resource forecast - Tight fiscal control of timesheet bookings
ELL Programme	Programme Prolongation and cost increases. Projects are delayed and there is resulting staff prolongation or Acceleration may be required to meet funding obligations which would increase costs.	<ul style="list-style-type: none"> - Interface with operational Stakeholders and planned closure of ELL to support works - Active management of NEC contract and programme for acceptance.
DLR Royal Docks	Lack of available funding and or delay in obtaining funding for future implementation	<ul style="list-style-type: none"> - Early engagement with GLA to seek upfront drafting of future funding agreements - Robust estimates updated during stages design - Value Engineering
Trams Enhancements	Affordability – risk that full funding is not available. Supply chain problems, cost increases and delays due to socio-political events may occur during the programme, resulting in increases in cost and delays	<ul style="list-style-type: none"> - Early market engagement - Continue to monitor foreign exchange forward curves and inflation indices with Corporate Finance and Estimating teams
SFA programme	Achieving programme objectives within budget depends on ongoing success at leveraging third-party funding	<ul style="list-style-type: none"> - Building a larger workbank than we have funding for to enable us to pursue the best value opportunities - Engagement with partners (and potential partners) to build the case for SFA

Table 5 – Top project risks

Lessons Learnt

- 8.6 Underpinning the current LU Capital delivery approach is an integrated delivery partner model with multi-stage engagement, flexible contractual and commercial models to drive optimum performance through incentivisation and an equitable approach to risk whilst harnessing Early Contractor Involvement and end-to-end design engagement to drive affordable design from concept through delivery and promote innovation. This model was developed following a robust assessment of legacy project performance and was positively received by the Independent Investment Programme Advisory Group (IIPAG) during a review in October 2022 and was the model that was identified in the paper to the March 2023 meeting of the Committee. This model has been applied to the new station entrance project now ongoing at Stratford and, while the delivery is still in very early stages, the

project has mobilised to site on plan and is progressing well. The true benefit of applying the lessons learned here should be demonstrated by completing the project without the delivery stage cost volatility that have occurred historically. The same model has been applied to the current design stages of both Colindale and Leyton, and this is expected to bring benefit in the construction stages of both schemes.

- 8.7 Lessons learnt have been carried out on six major station upgrades including Bank, Northern Line Extension, Barking Riverside Extension, Victoria and Tottenham Court Road. These lessons have been reviewed and applied to HS2 LU works, ELL Surrey Quays station and Elephant and Castle. They include key lessons on early contractor engagement, robust construction strategies and ensuring requirements focus on good outcomes for end users and customers.
- 8.8 For the Trams TRRS programme, lessons are being learnt from the DLR Rolling Stock Replacement Programme. We have also developed close links with other UK light rail operators to inform the best procurement approach and requirements setting.

9 Commercial

- 9.1 The projects within the programme will have different procurement strategies dependent on mode, scale and complexity.
- 9.2 For LU station improvements, TfL's Civils and Tunnelling works Framework agreement is in use for projects currently in design stages and in delivery such as at Stratford. This framework applies the commercial lessons learned from historical projects by employing Early Contractor Involvement to avoid late scope and design changes. By ensuring the possible constructor of the end state works is also the designer, the framework builds in a right-first-time approach.
- 9.3 Most RSS enhancement projects will utilise TfL's existing Surface Rail Infrastructure Improvement Framework. This has been successfully used recently for two projects under the ELL HIF programme. In December 2022, TfL issued a notice to proceed to Morgan Sindall Infrastructure for the design and build of the Surrey Quays Station Upgrade. In June 2023 TfL awarded the ELL signalling contract to Balfour Beatty for delivery.
- 9.4 Some of our third-party projects have elements delivered externally such as Elephant and Castle stage 1 works (station box and tunnelling). The station box is being delivered by the shopping centre developer and these works are subject of a development agreement. The tunnelling works will be delivered by TfL and the tender for these works was issued in June 2023 with contract award expected in May 2024.
- 9.5 Projects such as HS2 are fully delivered externally. Works to existing TfL assets and new infrastructure are provided to TfL by HS2 and are procured and delivered by HS2 and it's sub-contractors. TfL's costs are paid by HS2 and are covered by a purchase order from HS2.

10 Assurance

- 10.1 As this is a brand new portfolio, assurance reviews have been undertaken within the previous programme structure or as standalone projects.

- 10.2 A TfL Assurance and IIPAG Integrated Assurance Review took place on LU enhancements in November 2022. No critical issues were found and the assurance report was shared with the Committee in March 2023.
- 10.3 A TfL Assurance and IIPAG Integrated Assurance Review will take place on Elephant and Castle later this year in line with their annual review. Additionally, a review will take place on Colindale in advance of the request to draw down against granted Programme and Project Authority subject to the approval requested in this paper).
- 10.4 A TfL Assurance and IIPAG Integrated Assurance Review was undertaken on the former Public Transport portfolio (which includes the Royal Docks programme and ELL programme) in May 2023 and no critical issues were found.

List of appendices to this report:

Appendix 1: List of schemes with financial information

Appendix 2: Legacy Portfolio transfer to New Programme

List of Background Papers:

Programme Structure Committee paper May 2023

LU Enhancements Committee paper March 2023

TfL Project Assurance Reports

Management response to TfL Project Assurance Report

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Appendix 1

Table of schemes with financial information

Project	Gross Financial Authority £'m	Gross EFC £'m	Existing Authority £'m	Requested Authority £'m	Total Authority £'m
Elephant and Castle	£63.0	£86.2	£86.7	£0.0	£86.7
Western Entrance	£26.5	£19.9	£22.5	£0.5	£23.0
HS2	£52.6	£68.1	£33.7	£4.5	£38.2
ELL Enhancement Programme	£69.7	£82.0	£90.9	£0.0	£90.9
Tram Replacement Rolling Stock	£41.6	£80.4	£7.2	£7.7	£14.9
Royal Docks Station Upgrade Programme	£35.0	£38.9	£9.9	£0.0	£9.9
Other Enhancements	£139.1	£171.2	£160.5	£-9.1	£151.5
Colindale SFA and capacity increase	£44.8	£44.7	£26.9	£17.8	£44.7
Leyton SFA and capacity increase	£25.3	£25.3	£17.3	£8.0	£25.3
Knightsbridge SFA and capacity increase	£33.5	£30.9	£33.7	£0.0	£33.7
Paddington SFA and capacity increase	£15.1	£15.6	£16.6	£0.0	£16.6
South Kensington SFA and capacity increase	£5.8	£5.8	£39.0	£0.0	£39.0
Stratford (Southwest Entrance)	£8.7	£8.7	£8.7	£0.0	£8.7
Tottenham Hale ticket hall and entrance	£49.9	£49.9	£50.8	£0.0	£50.8
Works undertaken on behalf of Crossrail (LUCT)	£198.5	£198.5	£198.5	£0.0	£198.5
Thameslink enabling works	£37.6	£37.6	£37.6	£0.0	£37.6
Tower Hill	£8.2	£8.4	£8.9	£0.0	£8.9
Baker Street PTI	£0.0	£0.0	£5.5	£-5.5	£0.0
Moorgate OSD	£8.0	£8.1	£8.4	£0.0	£8.4
West Ham Stephenson Street	£1.8	£1.8	£2.6	£0.0	£2.6
North Greenwich Knight Dragon	£0.3	£0.3	£0.6	£0.0	£0.6
Waterloo Shell	£4.3	£4.4	£4.5	£0.0	£4.5
Waterloo International Terminal	£0.0	£0.0	£0.1	£0.0	£0.1
White City St. James	£2.4	£2.4	£2.4	£0.0	£2.4
King's Cross (Belgrove House)	£1.0	£0.9	£3.4	£0.0	£3.4
Ladbroke Grove option selection	£0.1	£0.1	£0.1	£0.0	£0.1
London Bridge (New City Court)	£0.7	£0.6	£0.5	£0.0	£0.5
Hounslow West option selection	£0.3	£0.3	£1.0	£0.0	£1.0
Finsbury Park Additional Work Items	£0.4	£0.6	£0.5	£0.0	£0.5
Paddington (Enstar House) SFA and Capacity	£1.5	£0.2	£0.5	£0.0	£0.5
Borough minor works	£1.3	£1.3	£1.3	£0.0	£1.3
Walthamstow Central	£0.0	£0.0	£0.0	£0.0	£0.0
Waterloo Elizabeth House	£0.3	£0.4	£0.5	£0.0	£0.5
Acton Works AC02 Demolition & Rebuild	£8.1	£5.9	£5.9	£0.0	£5.9
SFA Close out	£108.9	£108.7	£112.8	£-4.1	£108.7
SFA Development	£11.0	£2.0	£2.0	£0.0	£2.0
Total	£1,005.4	£1,110.4	£1,002.1	£19.8	£1,021.9

In May 2023, the Committee approved the removal of Walthamstow station Enhancements from this programme, and £0.36m of Programme and Project Authority has been brought into the LU Enhancements programme from renewals to allow for scope transfer from AC14 project to AC02 project. These adjustments have been included in the figures representing 'existing Programme and Project Authority for the LU Enhancements sub programme.

Also note the following adjustments are included in the above table: As part of the close out of the legacy SFA work, Programme and Project Authority of £4.1m has been released from SFA close-out, to align the Programme and Project Authority with EFC. As Baker Street Platform Train Interface project has been allocated to the LU Renewals portfolio, a further £5.5m can be reallocated in programme with the consequent adjustment shown in Financial Authority.

In addition, a number of DLR and LO projects have been completed and £9.1m of unused Programme and Project Authority is being released. This included in the "other enhancements" row.

Appendix 2: Legacy Portfolio transfer to New Committee Programme

Legacy LU Enhancements Portfolio transfer to new P&IC Programme (£'m)	Existing Financial Authority	Estimated Final Cost	Existing Programme and Project Authority	Additional Programme and Project Authority Requested	Total Authority	May PIC Transfer of Existing Authority	Change since May
Rail & Station Enhancements	£578.0	£563.6	£590.7	£16.2	£606.8	£578.4	−£12.3
Network Development and Third Party Pipeline	£2.5	£2.5	£4.3	£0.0	£4.3	£4.3	£0.0
LU Renewals	£1.4	£1.4	£1.9	£0.0	£1.9	£1.9	£0.0

* May PIC excluded historic authority (£11.9m) and additional authority granted by Chair's action for TMU AC14 (£0.4m) for LU Enhancements

Transfer to new P&IC Programme: Rail and Station Enhancements (£'m)	Existing Financial Authority	Estimated Final Cost	Existing Programme and Project Authority	Additional Programme and Project Authority Requested	Total Authority	May PIC Transfer of Existing Authority	Change since May
Major Stations	£142.1	£174.2	£142.9	£5.0	£147.9	£120.4	−£22.5
Public Transport	£285.3	£372.5	£268.5	−£1.4	£267.1	£268.5	£0.0

* May PIC excluded transfer of Western Entrance from Major Stations

Overall new P&IC Programme: Rail and Station Enhancements (£'m)	Existing Financial Authority	Estimated Final Cost	Existing Programme and Project Authority	Additional Programme and Project Authority Requested	Total Authority	May PIC Transfer of Existing Authority	Change since May
Total	£1,005.4	£1,110.4	£1,002.1	£19.8	£1,021.9	£967.3	−£34.8