

Finance Report

Period II, 2023/24

Management results from 1 April 2023 – 3 February 2024

TfL Finance Committee

13 March 2024



We are on track to deliver an operating surplus in 2023/24

Our 2023 TfL Business Plan set out our strategy for rebuilding our finances, improving efficiency and helping to secure our future. The 2023/24 Budget built on this, demonstrating how we will become operationally financially sustainable this year. We have successfully delivered that strategy so far this year:

Actively grow passenger demand, while creating new sources of revenue to reduce our reliance on fares income

- Cumulative journey growth of almost 7% in the year to date. We are targeting 6% year-on-year journey growth over the full year, on top of the 31% increase in 2022/23
- Passenger journeys are relatively steady at 90% of pre-pandemic levels, up from 85% at the end of 2022/23
- Total revenue is within 0.4% of our budget

Continue to deliver recurring cost savings to remain affordable for customers and taxpayers

- Operating costs 2% lower than Budget, mainly from contingency – held to mitigate risks on operating income which we have now retired
- Like-for-like operating costs falling in real terms: 6% higher than last year despite year-on-year inflation of 8%

Create and grow an operating surplus based on our own sources of income

- Our operating surplus is £145m, £67m up on Budget in the year to date
- Some small risks remain – on operating income and savings delivery – but we expect to manage these. We have retired the majority of our central contingency
- Remain on track to deliver an operating surplus in 2023/24.

Fully fund our capital programme with a long-term Government settlement and an affordable level of debt

- Capital renewals within 1% of budget – the full year outturn is expected to be around £750m, with some acceleration of works in this year.
- With no inflation support provided by Government, capital enhancements expenditure has had to slip – we expect to end the year between £80m-£90m lower than Budget
- In December 2023, the DfT confirmed a capital settlement of £250m for 2024/25. The 2024 Business Plan was revised to mitigate the £250m shortfall to our original assumption.

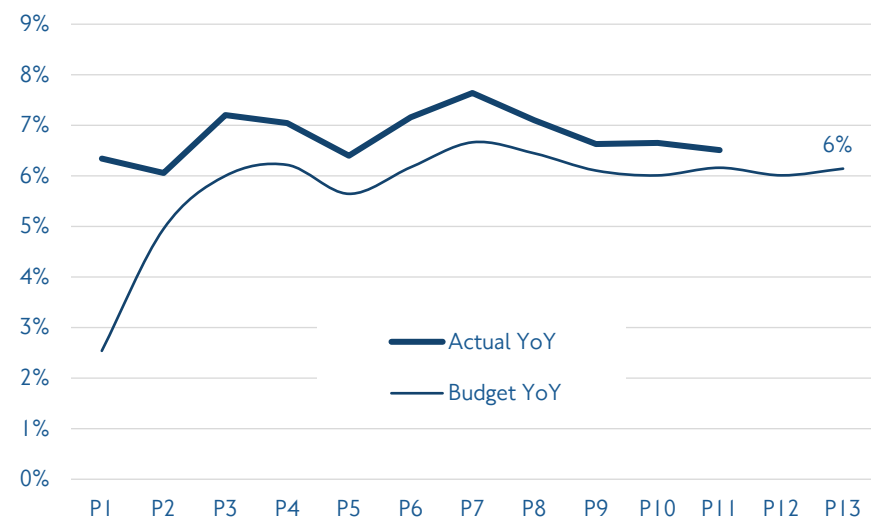
Maintain cash reserves to make payments and protect against shocks

- Cash balances are £1.2bn, within Budget and as required in the August 2022 funding settlement
- We are forecasting to end the year at around £1.3bn of cash, as allowed in the August 2022 funding settlement
- The GLA financing facility of £500m has been maintained (until 31 March 2024) for additional protection against shocks and risks.



Headlines

Total passenger journeys up almost 7% year-on-year to Period 10, 90% of pre-pandemic levels. Targeting 6% year on year growth over the full year



Passenger income higher than pre-pandemic levels in cash terms, from combination of journey recovery and Elizabeth line services

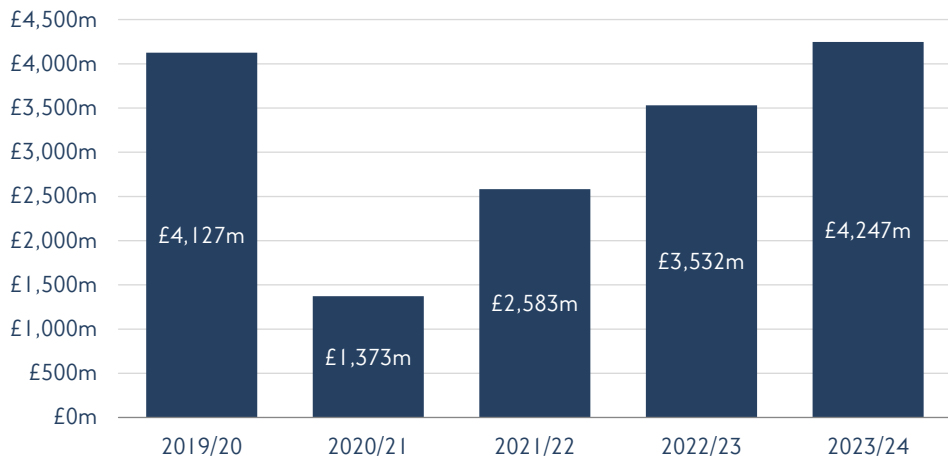
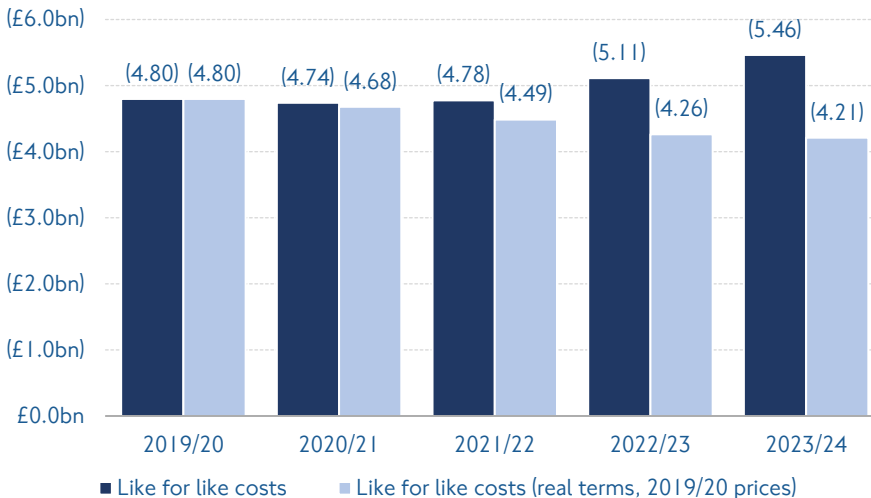
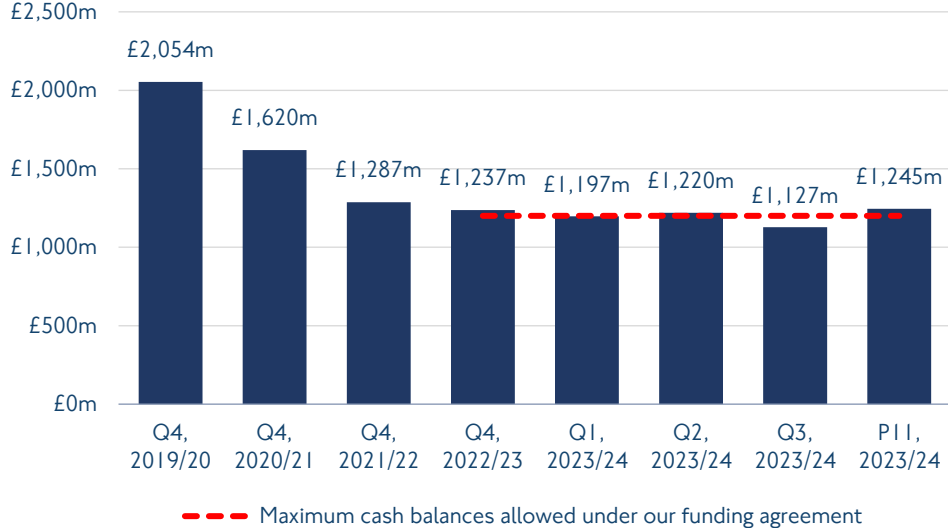


Chart shows results to end of Period 11 for each year

Like-for-like operating costs 6.4% higher than last year, but down in real terms as inflation at 8.1%



We continue to maintain average cash balances below £1.2bn in line with the funding settlement condition



Passenger journeys

In 2023/24 we have budgeted 6% underlying year on year growth in demand. Journeys to date are positive, with cumulative growth of over 6%.

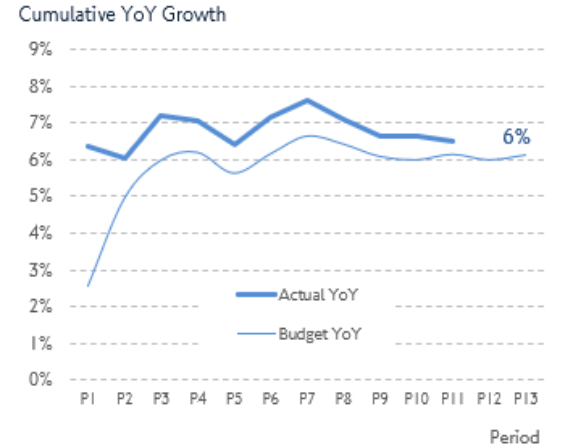
TfL passenger journeys are almost 10 million better than Budget. LU and Rail journeys continue to perform strongly in the year to date, offsetting slower growth on buses, where we have seen lower demand from passengers with concessionary tickets.

LU and DLR journeys are higher than expected as the assumed impact of Elizabeth line new services to these modes is less than expected.

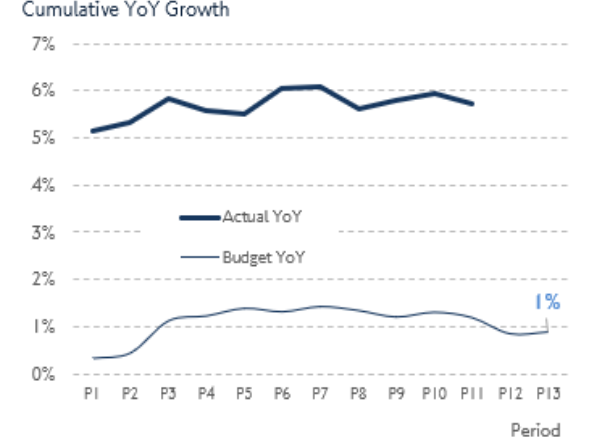


Passenger journeys year-on-year growth and comparison to Budget

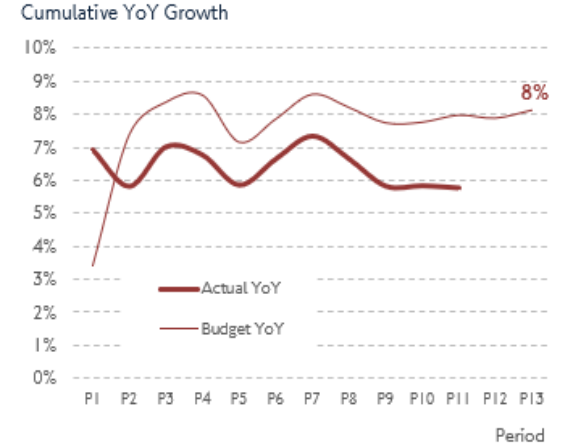
TfL	% Growth period / budget		Absolute m		Var to Bud m
	5.1%	7.7%	P	271	(6.7)
			Y	2,993	9.7



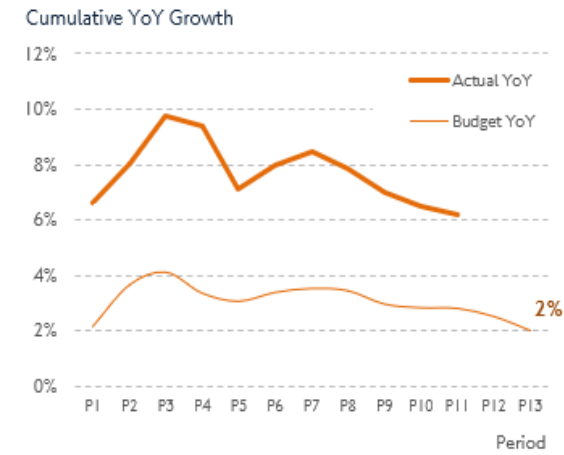
LU	% Growth period / budget		Absolute m		Var to Bud m
	4%	0%	P	89	3.1
			Y	995	42.6



Bus	% Growth period / budget		Absolute m		Var to Bud m
	5%	10%	P	143	(6.8)
			Y	1,569	(32.7)



Rail	% Growth period / budget		Absolute m		Var to Bud m
	3%	3%	P	23	0.0
			Y	254	8.0

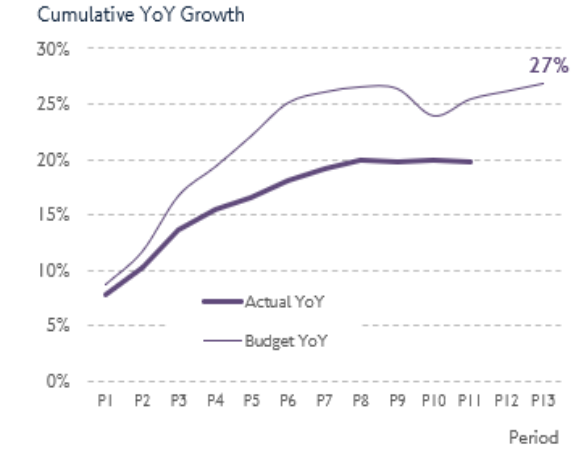


LO	% Growth period / budget		Absolute m		Var to Bud m
	5%	5%	P	13	(0.1)
			Y	153	4.6

DLR	% Growth period / budget		Absolute m		Var to Bud m
	-1%	-6%	P	7	0.3
			Y	84	5.8

Tram	% Growth period / budget		Absolute m		Var to Bud m
	3%	19%	P	2	(0.2)
			Y	17	(2.4)

EL	% Growth period / budget		Absolute m		Var to Bud m
	18%	40%	P	16	(3.0)
			Y	176	(8.2)



EL journeys are estimates and are subject to revision

Income statement

Total revenue is broadly in line with Budget. Passenger income is £67m higher, which is offset by lower revenue top up from Government.

Operating costs are £101m lower than Budget. We are seeing some cost pressures within Operations, higher ULEZ scrappage payments with the scheme expanded from £110m to £160m, which was confirmed after the Budget was approved (offset by grant shown in other revenue grants). These cost pressures have been offset by performance savings, one offs, as well as central contingency – held to mitigate uncertainty on other operating income – which has now been retired.

Capital renewals are £5m higher than Budget. We expect delivery to be higher than Budget this year.

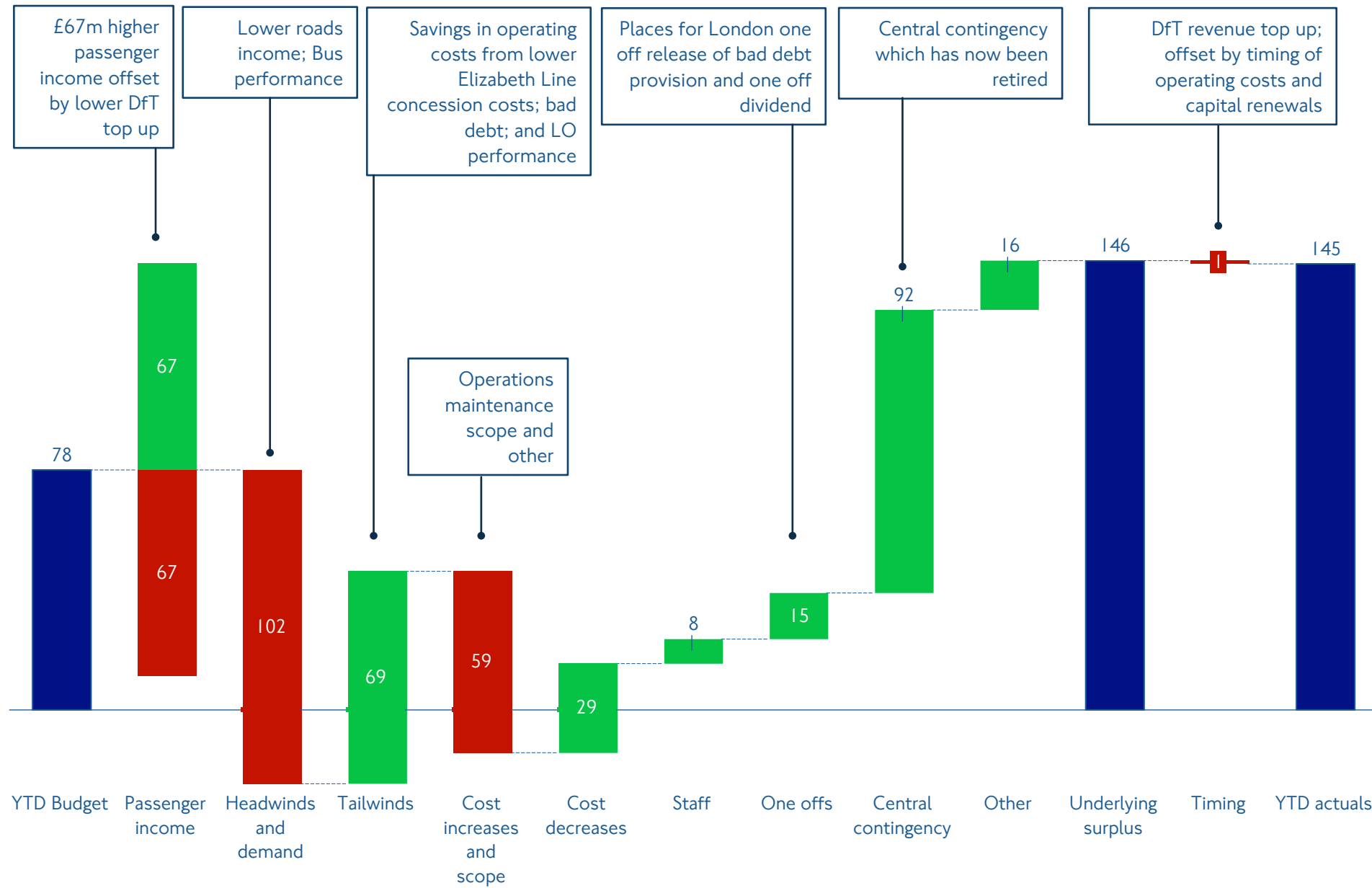
Income statement (£m)

	£m	Year to date, 2023/24			Year to date, 2022/23		
		Actuals	Budget	Variance to Budget	Last year	Variance to last year	
Underlying passenger income		4,247	4,181	67 2%	3,532	716 20%	
DfT revenue top up		162	242	(80) -33%	157	5 3%	
Passenger income		4,409	4,422	(13) 0%	3,689	721 20%	
Other operating income		1,298	1,385	(86) -6%	1,298	1 0%	
Business Rates Retention		1,619	1,619	0 0%	1,593	26 2%	
Other revenue grants		308	240	68 28%	732	(424) -58%	
Revenue		7,634	7,666	(32) 0%	7,311	323 4%	
Operating cost		(6,516)	(6,616)	101 2%	(5,919)	(597) -10%	
Operating surplus before interest and renewals		1,119	1,050	69 7%	1,393	(274) -20%	
Capital renewals		(626)	(621)	(5) -1%	(472)	(154) -33%	
Net interest costs		(348)	(351)	3 1%	(362)	14 4%	
Operating surplus / (deficit)		145	78	67 104%	559	(414) -661%	

Income statement includes Places for London

The underlying surplus is £146m, £68m better than Budget

Income statement variances by cause (£m)



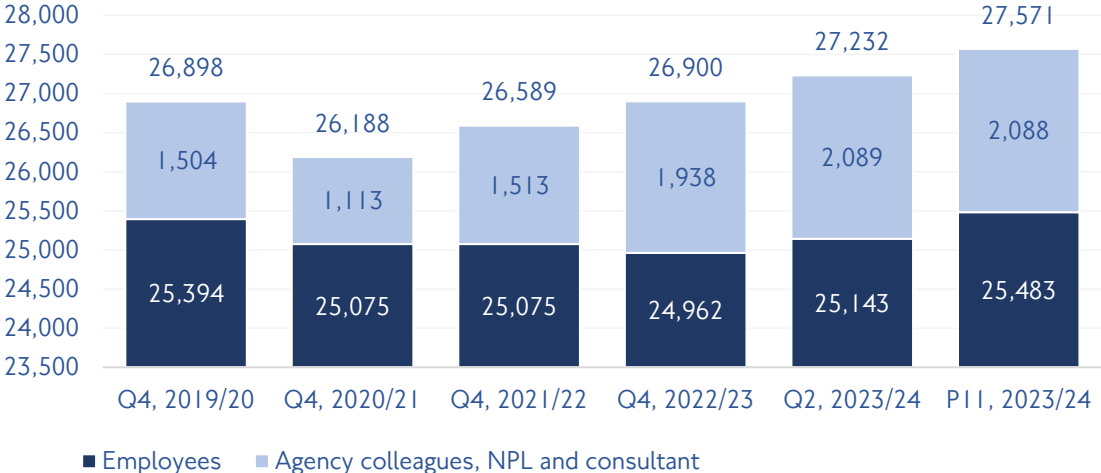
Colleagues

The increase in headcount reflects the ramp up of our capital programme and new services introduced in the last three years, including the Elizabeth line, Northern Line Extension and Barking Riverside extension.

Permanent employee numbers are broadly in line with pre-pandemic levels, and up on last year, driven by recruitment of graduates and apprenticeship trainees.

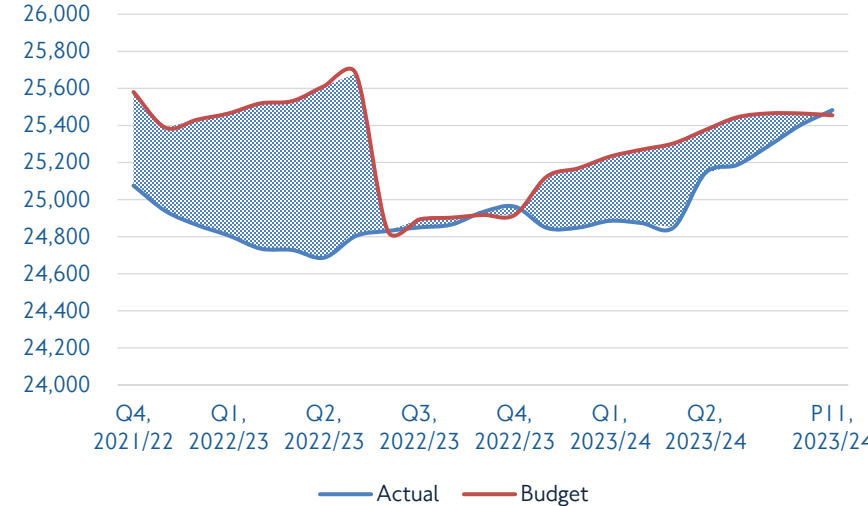
Agency and NPL colleagues have increased by almost 600 since the end of 2019/20, but remain significantly lower than 2015/16 levels. NPL offers flexibility, particularly through time of change and temporary peaks in demand.

Headcount trends since 2019/20



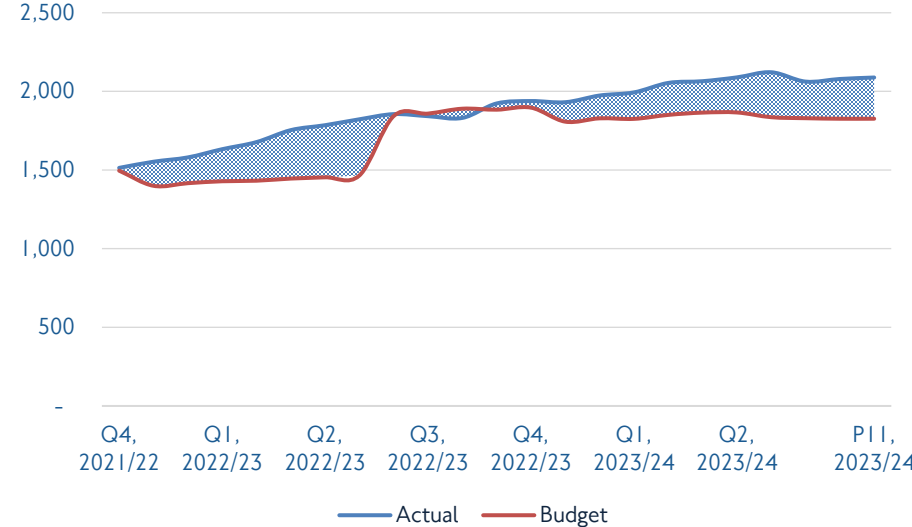
Permanent colleagues (FTE): actuals and Budget

Permanent employees up by over 500 since the end of 2022/23, mostly driven by the recruitment of graduate and apprenticeship trainees. Staff levels are slightly above Budget in P11, for the first time this year.



Agency and NPL colleagues (FTE): actuals and Budget

Agency and NPL FTE up by 150 since the end of 2022/23, and are slightly higher than Budget in P11. This is driven by labour market challenges.



Capital renewals

Capital renewals are £5m (1%) higher than Budget in the year to date and a third higher than last year. We have proactively managed the allocation of our available funding across our programmes to maximise delivery.

Renewals delivery has been strong during 2023/24, with some early underspend caught up over the last quarter. This run rate is expected to continue and our current trajectory is to deliver at least £750m for the full year as set out in our 2024 Business Plan.

This will be slightly higher than the original budget of £745m, with the early receipt of Government capital funding for 2024/25 supporting the accelerated delivery of our programme.

£m	Year to date, 2023/24				Year to date, 2022/23		
	Actuals	Budget	Variance to Budget		Last year	Variance to last year	
Major Projects	(5)	(4)	(1)	-31%	(3)	(2)	-73%
Four Lines Modernisation	(4)	(4)	(1)	-19%	(3)	(2)	(1)
Silvertown Tunnel	(0)	0	(0)	0%	0	(0)	0%
Programmes	(621)	(617)	(4)	-1%	(469)	(152)	-32%
Safe & Healthy Streets	(0)	(1)	1	100%	0	(0)	101%
Streets, Bus & RSS Renewals	(135)	(143)	9	6%	(119)	(15)	-13%
Environment	(15)	(20)	5	23%	(10)	(5)	-55%
Rail & Station Enhancements	(2)	(7)	5	67%	(6)	4	63%
LU Renewals	(342)	(308)	(34)	-11%	(247)	(95)	-39%
Technology	(112)	(127)	15	12%	(83)	(29)	-35%
Estates Directorate	(12)	(8)	(3)	-41%	(1)	(11)	-1563%
Elizabeth Line	0	0	0	0%	(1)	1	100%
Other (TPH, City Planning, Group etc)	(4)	(3)	(1)	-44%	(4)	0	0%
Total	(626)	(621)	(5)	-1%	(472)	(154)	-33%

Capital enhancements

Enhancements spend is £88m lower than Budget, driven by:

- DLR RS: £30m underspend driven by rephasing delivery of the Maintenance Facility Building to align with contractor's latest programme.
- Piccadilly Line Upgrade: YTD £10m lower than Budget, mainly due to contract costs being slipped to future years as a result of the recent acceptance of the contractor's programme in HV Package A.
- Environment: YTD £28m underspend largely in the LW-ULEZ programme driven by timing of cameras delivery, and accounting for mobile camera response costs as operating costs.
- Technology: YTD £43m slippage largely driven by change in delivery approach of Telecoms Commercialisation Project 2 (simultaneous delivery of 4G and 5G): a third party funded project.

We are expecting to end the year between £80m to £90m lower than Budget, following the Government's decision not to provide additional inflation support for 2023/24.

£m	Year to date, 2023/24				Year to date, 2022/23		
	Actuals	Budget	Variance to Budget		Last year	Variance to last year	
Major Rolling Stock and Signalling	(623)	(657)	35	5%	(382)	(241)	-63%
Four Lines Modernisation	(87)	(82)	(6)	-7%	(96)	9	10%
DLR Rolling Stock Replacement	(184)	(214)	30	14%	(94)	(90)	-96%
Piccadilly Line Upgrade	(349)	(359)	10	3%	(190)	(159)	-84%
Bakerloo Line Trains	0	0	0	0%	0	0	0%
Trams - project	(2)	(3)	1	28%	(1)	(1)	-105%
Other Enhancements	(284)	(337)	54	16%	(238)	(46)	-19%
Silvertown Tunnel	(12)	(12)	1	5%	(16)	4	25%
Northern Line Extension	0	(0)	0	1	(0)	0	1
Barking Riverside	(1)	4	(5)	123%	(4)	3	78%
Bank Station Capacity Upgrade	(7)	(8)	1	17%	(53)	47	88%
Elizabeth Line	(1)	(3)	2	65%	2	(3)	143%
Safe & Healthy Streets	(96)	(98)	2	2%	(55)	(42)	-76%
Environment	(73)	(101)	28	28%	(41)	(32)	-79%
Streets, Bus & RSS Renewals	(1)	0	(1)	0%	(3)	2	61%
LU Renewals PIC Programme	(5)	(14)	10	67%	(9)	5	51%
Estates Directorate	(2)	(3)	1	33%	(1)	(1)	-258%
Rail & Station Enhancements (excl. Trams)	(42)	(38)	(3)	-9%	(15)	(26)	-170%
Technology	(45)	(88)	43	49%	(49)	4	8%
Network Development & Third Party Pipeline	(2)	(1)	(0)	-34%	(0)	(1)	-5731%
Other (TPH, City Planning, OP, Group etc)	2	27	(24)	92%	6	(4)	65%
London Transport Museum	(1)	(1)	1	44%	(0)	(0)	-142%
Total TfL excl Places and Crossrail	(906)	(995)	88	9%	(620)	(287)	-46%
Places for London	(80)	(117)	37	31%	(52)	(28)	-53%
Crossrail	(42)	(78)	35	45%	(191)	148	78%
Total	(1,029)	(1,189)	160	13%	(863)	(166)	-19%

Cash flow statement

Cash balances are just under £1.25bn at the end of Period I I, almost £50m higher than Budget. In P I I, we received the first £100m instalment of the £250m capital funding settlement with Government.

Cash balances

	£m	Year to date, 2023/24			Year to date, 2022/23		
		Actuals	Variance to Budget		Actuals	Variance to last year	
Opening balance		1,237	37	3%	1,287	(50)	-4%
Change in cash balance		8	8	1000%	9	(1)	-13%
Closing balance		1,245	46	4%	1,296	(51)	-4%

Cash flow statement

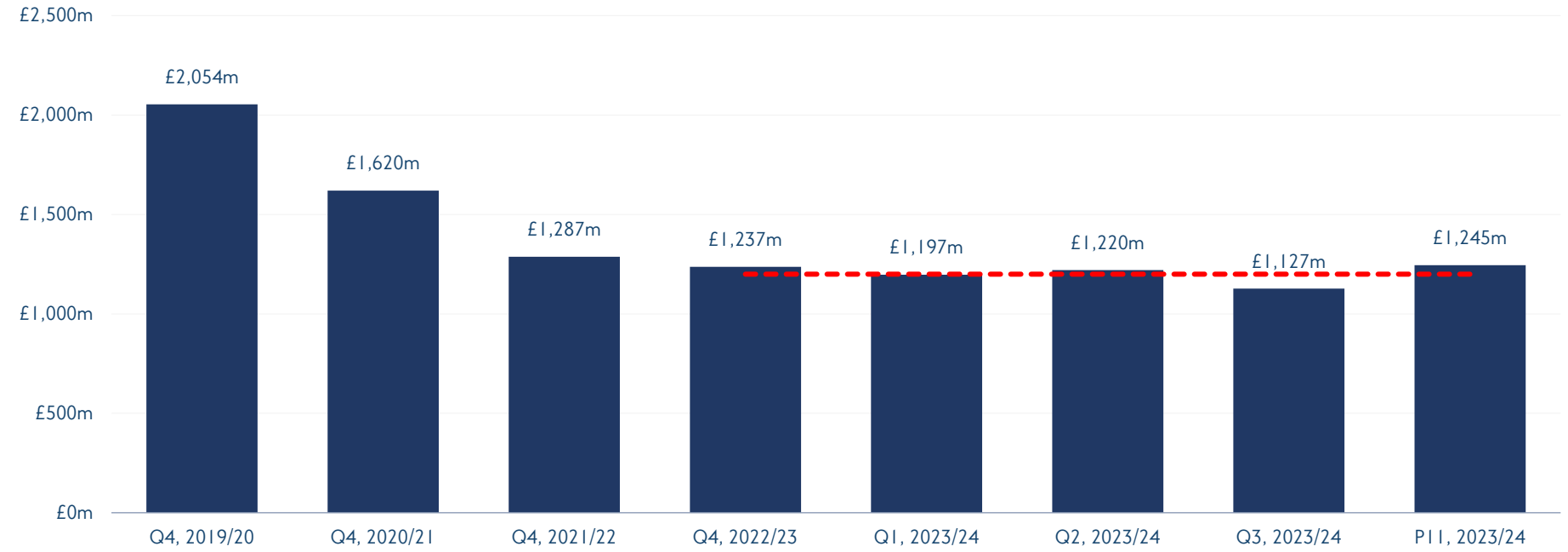
	£m	Year to date, 2023/24			Year to date, 2022/23		
		Actuals	Variance to Budget		Actuals	Variance to last year	
Operating surplus before capital renewals and interest		1,119	69	7%	1,393	(274)	-20%
Less Places, LTIG and LTM		(32)	(15)	-86%	(39)	7	19%
<i>Cash generated / (used) from operating activities</i>		1,087	55	5%	1,354	(267)	-20%
Capital renewals		(626)	(5)	1%	(472)	(154)	-33%
New capital investment		(906)	88	9%	(620)	(287)	-46%
Investment grants and ring-fenced funding		741	(34)	-4%	69	672	971%
Working capital movements		162	(31)	-16%	312	(149)	-48%
<i>Cash generated / (used) from investing activities</i>		(628)	19	3%	(711)	82	12%
Free cash flow		459	73	19%	643	(184)	-29%
Net interest costs		(348)	3	1%	(362)	14	4%
Existing debt maturing		(129)	0	0%	(1,349)	1,220	90%
New debt issued		100	6	6%	1,223	(1,123)	-92%
Short-term net borrowing change		(74)	(74)	N/A	(146)	72	49%
<i>Cash generated / (used) from financing activities</i>		(451)	(65)	-17%	(634)	183	29%
Change in cash balance		8	8	1000%	9	(1)	-13%

Cash balances

Total cash balances (excl. cash balances identified for Crossrail construction) are just under £1.25bn at the end of Period 11, broadly in line with the end of last year.

Under our 30 August 2022 Funding Settlement our maximum cash balance, in average, has been limited to £1.2bn, although we can exit the funding period at £1.3bn.

Cash balances



--- Maximum cash balances allowed under our funding agreement

Reserves

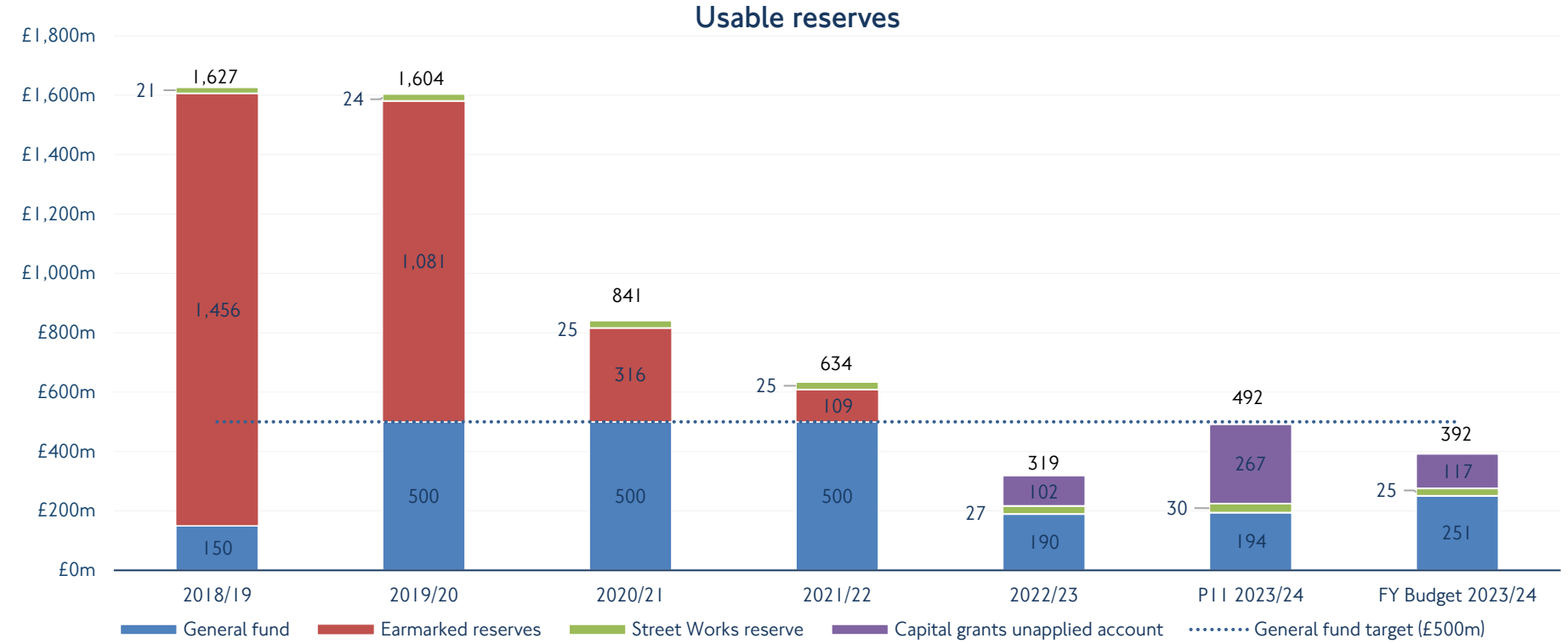
The pandemic has seen a material reduction in TfL's usable reserves, which primarily consist of its General Fund, Earmarked Reserves and Capital Grants Unapplied.

Usable reserves are generally lower than TfL's cash balance, as elements of cash will be restricted for certain purposes and because cash payments are made in arrears in-line with supplier payment terms.

At the end of 2022/23, TfL's General Fund reserves fell below our target of £500m. This was largely driven by the purchase of the Class 378 rolling stock. The savings from this purchase over the remaining life of the assets will further support TfL as it rebuilds its usable reserves.

The 2024 Business Plan sets out our plan to grow usable reserves back to target levels by the end of 2025/26.

Usable reserves (£m)



- Usable reserves of the Corporation are those that can be applied to fund future expenditure. They are made up of the General Fund, Earmarked Reserves, the Capital Grants Unapplied Account and the Street Works Reserve
- The General Fund represents sufficient cash-backed reserves held by the Group to cover risks that may arise. The Group has a target General Fund balance of £500m, which was increased from £150m at the start of the pandemic in March 2020
- The primary reason for falling below the benchmark at the end of the 2022/23 financial year was the transaction in March 2023 to purchase the Class 378 rolling stock for £277m. The saving in lease financing over the life of the asset will further support TfL as it rebuilds its usable reserves

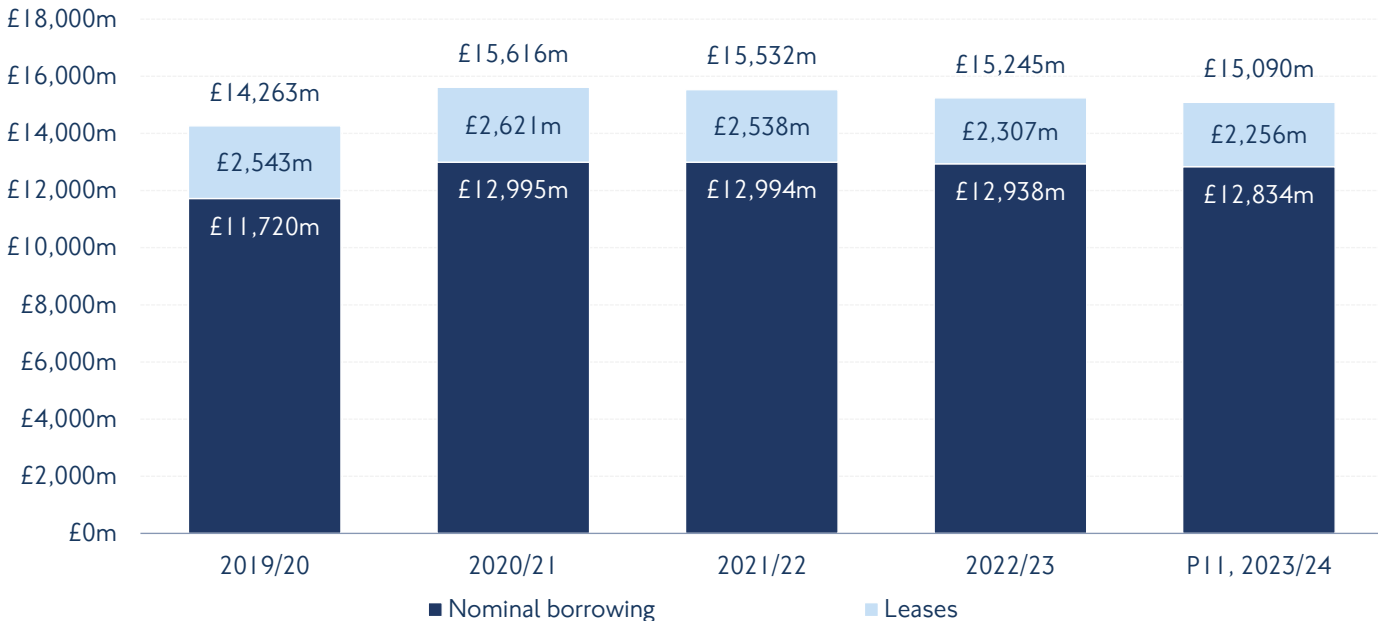
Debt

We have borrowed from a range of sources to help fund our capital programme, including Crossrail and major upgrades to our tube network.

Our level of outstanding borrowing has decreased by £104m for the year up to end of P11, bringing our total borrowing balance to £12,834m. This is largely driven by a reduction in our short-term borrowing, to suit our cash and liquidity needs.

Under the new capital funding agreement with Government in December 2023, we have received £195m to date, £50m of this will be received before the end of the 2023/24 financial year, with the remaining £5m to be received in 2024/25. Consequently, we expect to defer some borrowing planned for this year into 2024/25 as set out in our 2024 Business Plan.

Total debt (£m)



93%

93% of our borrowing is at a fixed rate of interest

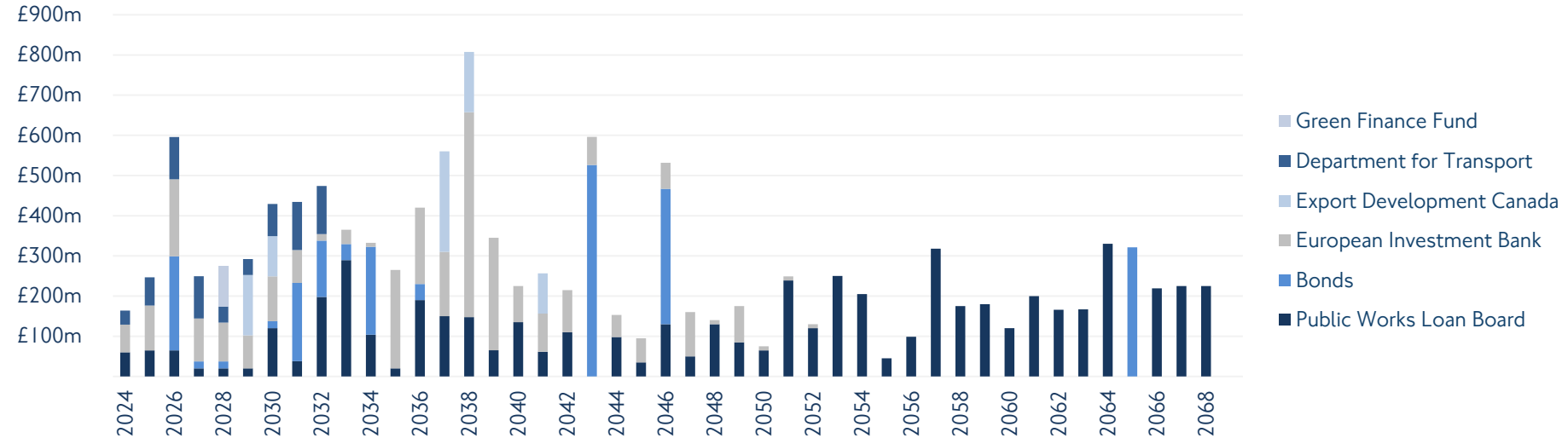
3.5%

The weighted average interest rate on our borrowing is 3.5%

19.0 years

The weighted average tenor of our borrowing is 19.0 years

TfL borrowing maturity profile



The borrowing maturity profile excludes £461m of short-term borrowing, which we generally continue to re-issue on a rolling basis.

Credit ratings

We are rated by three major credit rating agencies. This allows us to attract interest from a wide pool of investors and gives us access to a range of funding sources.

There have been no changes since our Q3 update to the Board.

	Standard & Poor's	Moody's	Fitch
Long-term rating	A+	A3	AA-
Outlook	Positive	Positive	Negative
Short-term rating	A-1	P-2	F1+
Last changed/affirmed	May 2023	November 2023	January 2024

Standard and Poor's (S&P)

- S&P affirmed our credit rating at A+/A-1 in May 2023 and revised the outlook to positive (from stable). This is a positive movement on the outlook and reflects S&P's view that recovering ridership and cost controls should result in higher financial flexibility. S&P issued the bulletin "Transport for London Fare Freeze: Yet Another Twist" on 22 January 2024. S&P confirmed the fares freeze is fully funded and their expectation that TfL will continue to improve its operating account. However, S&P are concerned over the continued lack of predictability, and the residual uncertainty over LT capital funding.

Moody's

- On 15 November 2023, Moody's upgraded our long-term credit rating from Baa1 to A3 and changed the outlook from stable to positive. This reflects the recovery to date and the work into achieving ongoing financial sustainability. The positive outlook reflects Moody's expectation that we will continue to build our financial surplus. A sustained improvement in operating performance and a multi-year funding agreement with Government with minimal conditions could lead to a further upgrade.

Fitch

- On 26 January 2023, Fitch upgraded our long-term credit rating from A+ to AA-. This reflects our improving financial profile and Fitch's assessment of the link between TfL and the UK Government. Fitch have assigned a negative outlook, which reflects the negative outlook they have assigned to the UK Government's credit rating. Fitch has reaffirmed our credit rating in January 2024.

Divisional summaries



London Underground

Tube journeys are 6% up on 2022/23. Journeys are showing strong growth and are 43 million higher than Budget. Passenger income is (£13m) down Budget, a result of lower ticket yield compared to Budget.

Operating costs are (£1,901m) in the year to date, (£9m) higher than Budget. This is mainly driven by maintenance cost pressures and timing, offset by lower staff costs.

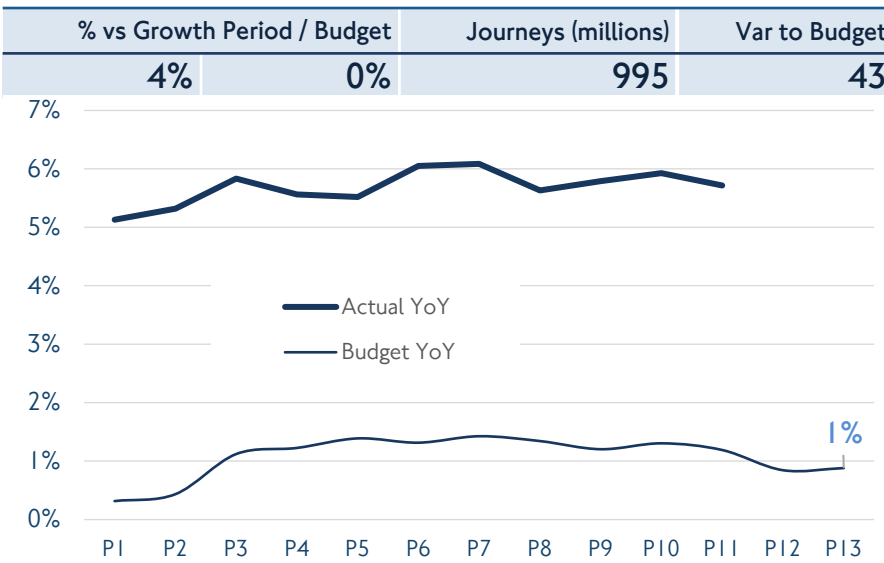
Capital renewals are (£39m) higher than Budget in the year to date, driven by higher spend to increase the level of delivery of critical track and rolling stock renewal.

Income statement (£m)	
Passenger income	2,112
Other operating income	24
Revenue	2,136
Operating costs	(1,901)
Net contribution	235
Indirect costs	(370)
Net financing costs	(226)
Capital renewals	(382)
Operating surplus / (deficit)	(743)
New capital investment	(483)

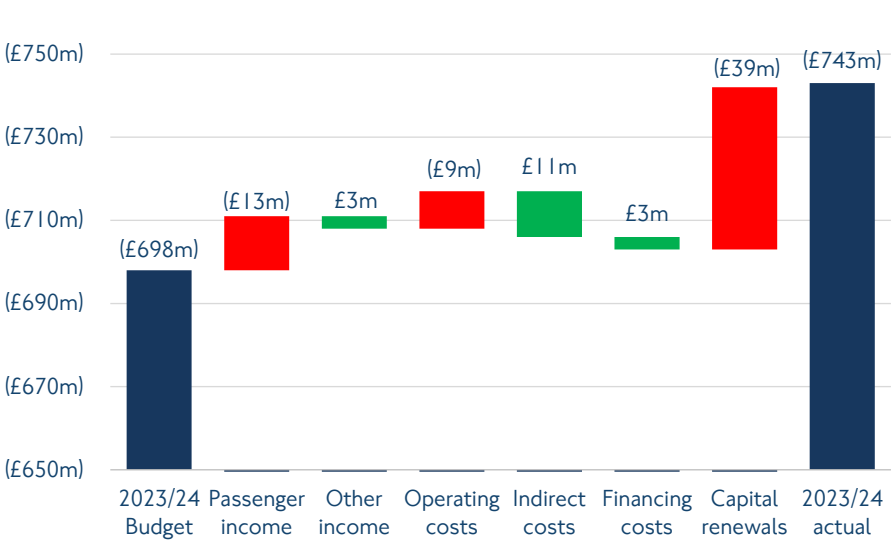
Year to date, 2023/24			
Actuals	Budget	Variance to Budget	
2,112	2,125	(13)	-1%
24	21	3	14%
2,136	2,146	(10)	0%
(1,901)	(1,892)	(9)	0%
235	254	(19)	-7%
(370)	(381)	11	3%
(226)	(229)	3	1%
(382)	(342)	(39)	-11%
(743)	(698)	(44)	-6%
(483)	(501)	18	4%

Year to date, 2022/23		
Last year	Variance to last year	
1,853	259	14%
26	(2)	-8%
1,879	257	14%
(1,757)	(144)	-8%
122	113	93%
(340)	(30)	-9%
(237)	11	5%
(276)	(106)	-38%
(731)	(12)	-2%
(388)	(95)	-24%

Tube journeys year-on-year growth



Operating surplus/ (deficit) compared to Budget



Elizabeth line

Elizabeth line journeys are showing strong growth, with cumulative journeys around 20% up on last year. Passenger income is £64m higher than Budget.

Operating costs are £14m lower than Budget, driven by lower concession costs.

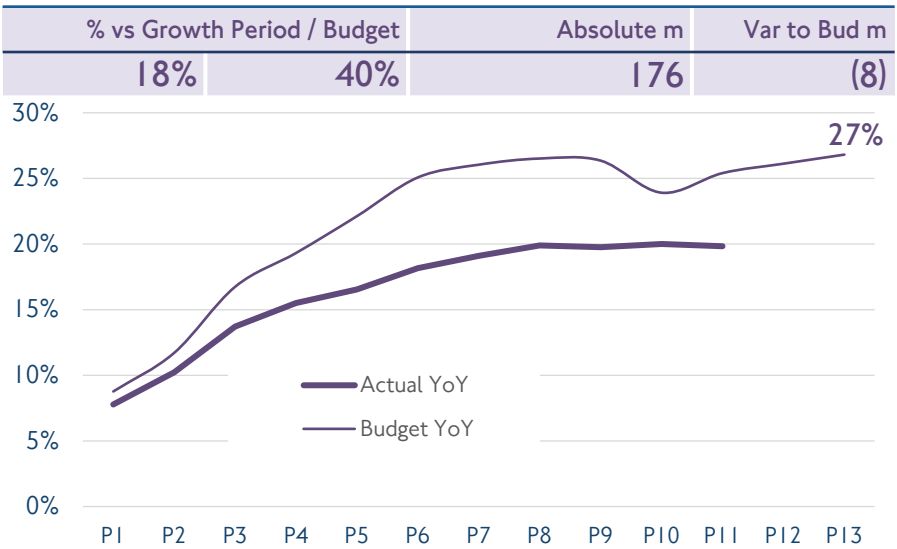
The Elizabeth line is delivering a positive net contribution, and is within £20m of covering its indirect costs, financing costs and renewals.

Income statement (£m)	
Passenger income	508
Other operating income	6
Revenue	514
Operating costs	(447)
Net contribution	67
Indirect costs	(11)
Net financing costs	(69)
Capital renewals	(7)
Operating surplus / (deficit)	(20)
New capital investment	(1)
Crossrail project	(42)
Total new capital investment	(43)

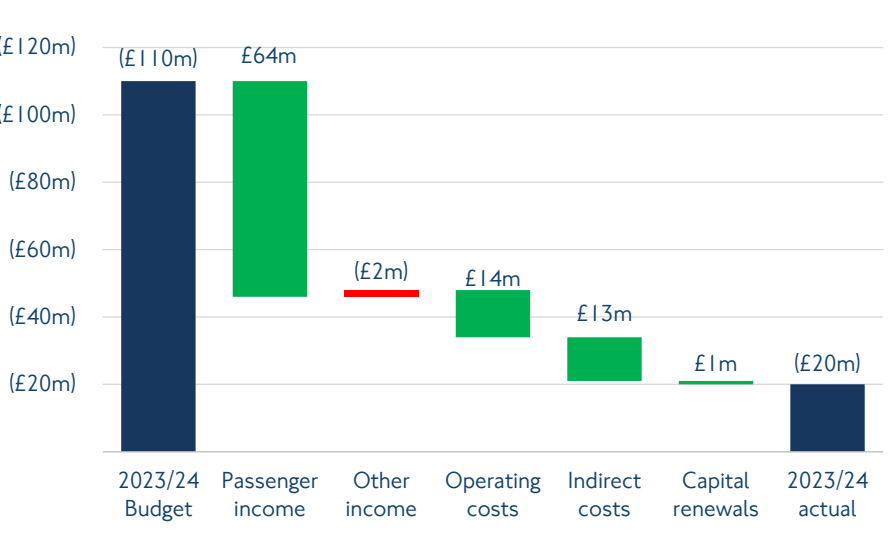
Year to date, 2023/24			
Actuals	Budget	Variance to Budget	
508	444	64	14%
6	8	(2)	-25%
514	452	62	14%
(447)	(461)	14	3%
67	(9)	76	844%
(11)	(24)	13	54%
(69)	(69)	-	0%
(7)	(8)	1	15%
(20)	(110)	90	82%
(1)	(7)	6	87%
(42)	(78)	35	45%
(43)	(85)	41	49%

Year to date, 2022/23		
Last year	Variance to last year	
242	266	110%
15	(9)	-60%
257	257	100%
(415)	(32)	-8%
(158)	225	142%
(12)	1	8%
(72)	3	4%
(1)	(5)	-448%
(243)	224	92%
1	(2)	-204%
(191)	148	78%
(190)	147	77%

EL journeys year-on-year growth



Operating surplus/ (deficit) compared to Budget



EL journeys are estimates and are subject to revision

Buses, Streets & Other operations

Including Congestion Charge, Low Emission Zone (LEZ) and Ultra Low Emission Zone (ULEZ)

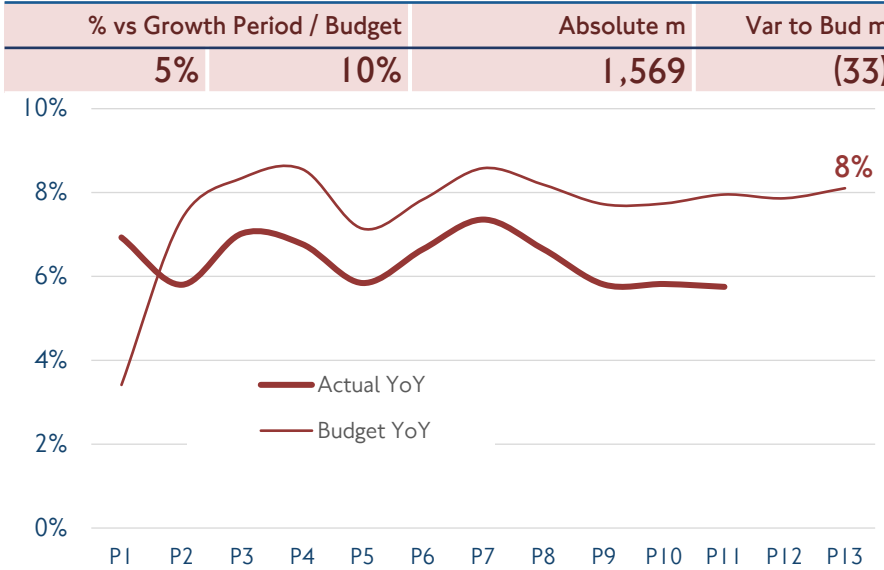
Bus journeys have seen an 6% increase in growth since last year, but is lower than expected. Journeys are 33 million lower than Budget in the year to date.

Other operating income is (£104m) below Budget. This is driven by lower ULEZ enforcement income (due to lower volumes) and cycle hire income.

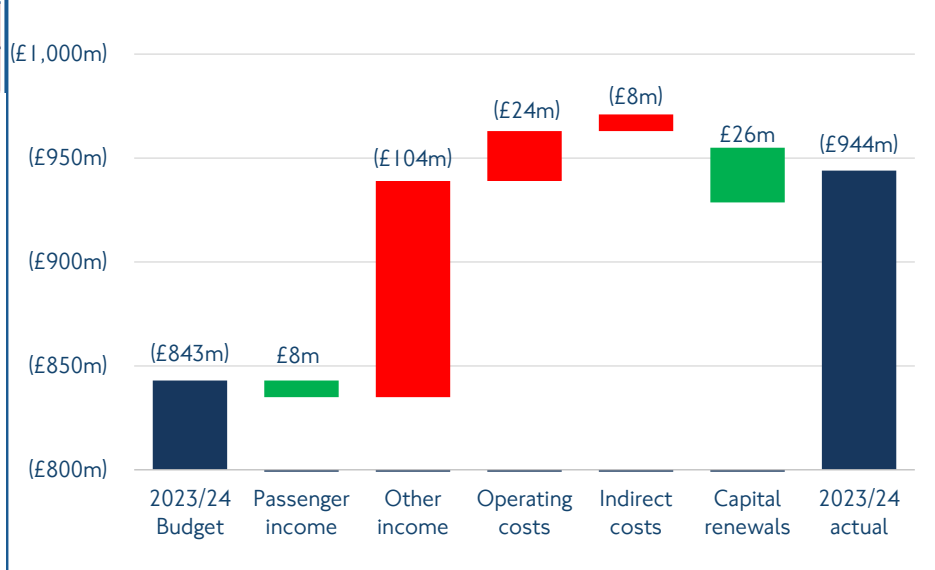
Operating costs are (£24m) higher than Budget, mainly from the expansion of ULEZ scrappage scheme application. We have also seen higher bus performance payments to operators offset by savings, including lower bad debt (driven by lower enforcement income above).

Income statement (£m)	Year to date, 2023/24				Year to date, 2022/23		
	Actuals	Budget	Variance to Budget		Last year	Variance to last year	
Passenger income	1,278	1,270	8	1%	1,156	122	11%
Other operating income	955	1,059	(104)	-10%	942	13	1%
Revenue	2,233	2,329	(96)	-4%	2,098	135	6%
Operating costs	(2,949)	(2,925)	(24)	-1%	(2,610)	(339)	-13%
Net contribution	(716)	(596)	(120)	-20%	(512)	(204)	-40%
Indirect costs	(73)	(65)	(8)	-12%	(65)	(8)	-12%
Net financing costs	(21)	(21)	-	0%	(22)	1	5%
Capital renewals	(134)	(161)	26	16%	(127)	(7)	-6%
Operating surplus / (deficit)	(944)	(843)	(102)	-12%	(726)	(218)	-30%
New capital investment	(192)	(231)	39	17%	(120)	(72)	-60%

Bus journeys year-on-year growth



Operating surplus/ (deficit) compared to Budget



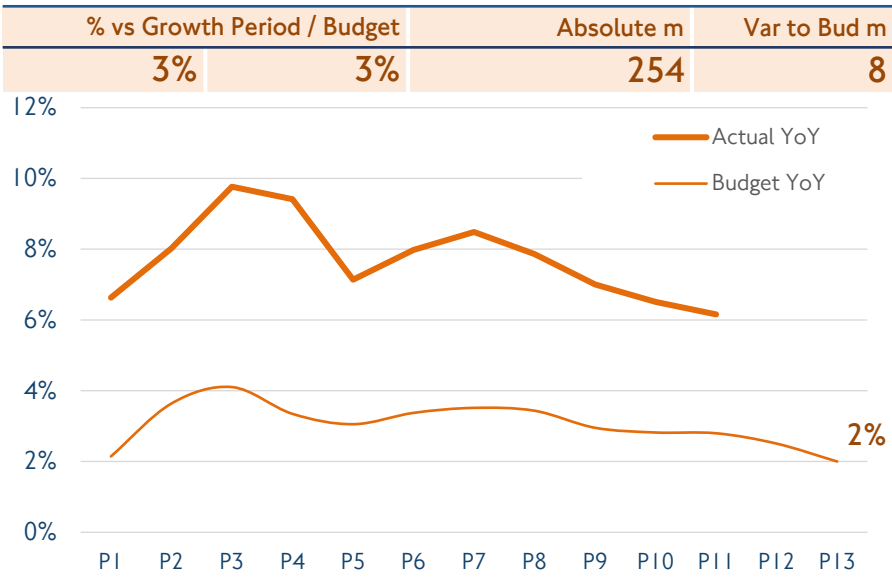
Rail

Rail journeys are showing strong growth and are around 6% up on last year. Journeys are 8 million higher than Budget in the year to date. Passenger income is also £5m up on Budget, reflecting this strong performance.

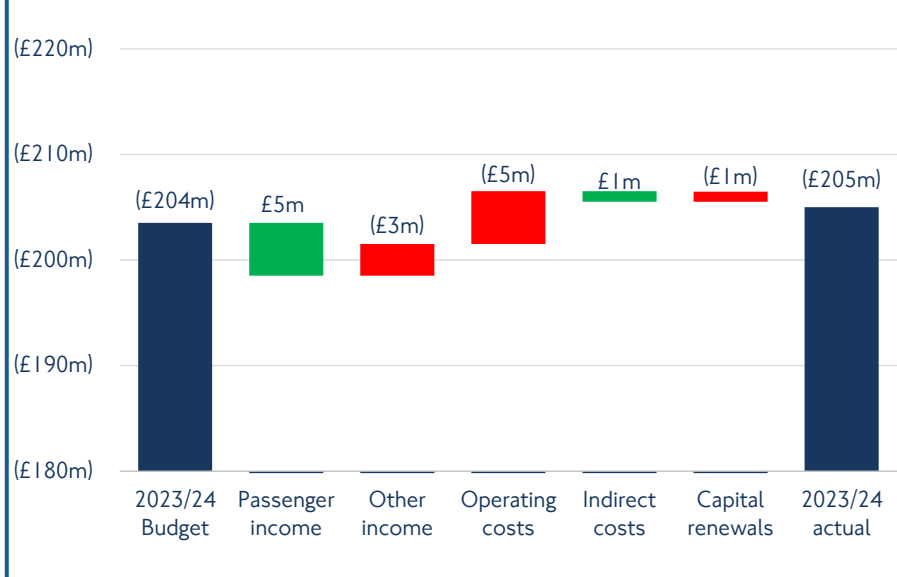
Operating costs are (£464m) in the year to date, and are broadly in line with Budget.

Income statement (£m)	Year to date, 2023/24				Year to date, 2022/23		
	Actuals	Budget	Variance to Budget		Last year	Variance to last year	
Passenger income	347	342	5	1%	299	48	16%
Other operating income	9	12	(3)	-25%	22	(13)	-59%
Revenue	356	354	2	1%	321	35	11%
Operating costs	(464)	(459)	(5)	-1%	(459)	(5)	-1%
Net contribution	(108)	(105)	(3)	-3%	(138)	30	22%
Indirect costs	(22)	(23)	1	4%	(22)	-	0%
Net financing costs	(29)	(29)	-	0%	(30)	1	3%
Capital renewals	(46)	(47)	1	2%	(33)	(13)	-39%
Operating surplus / (deficit)	(205)	(204)	(1)	-1%	(223)	18	8%
New capital investment	(211)	(227)	15	7%	(106)	(105)	-100%

Rail journeys year-on-year growth



Operating surplus/ (deficit) compared to Budget



Key Project updates

DLR rolling stock and systems integration



Manufacturing of the new rolling stock in Spain is continuing, with 22 trains completed. Main line testing is also progressing and signalling integration testing of the onboard vehicle signalling control system is underway.

The modifications to the train control software reduce the fixed power assets required to support the new trains. This will reduce embedded carbon in construction and provide an energy saving over the trains' lifespan. We estimate the carbon saving from reduced construction activity to be 358 tCO₂e and work is ongoing to quantify the operational energy saving.

We encountered some challenges during integration testing works towards the end of 2023 which we are currently investigating. This has had an impact on delivery dates. We now expect the new trains to begin entering passenger service in Quarter 1, 2024/25. Importantly, the end date for the renewal of the full fleet remains Quarter 2, 2026/27.

Piccadilly line rolling stock upgrade

The manufacturing contract with Siemens Mobility Limited is progressing well, with the first fully assembled train continuing to be tested at Siemens' test and validation centre in Westphalia, Germany. The new train is undergoing pre-delivery performance and reliability proving prior to series production. The new train design had a media launch in November.

A rephasing of the timing of payments has been agreed in principle under the contract with Siemens Mobility Limited. This will not affect the delivery of the first train in 2024 for testing in London ahead of entering service in 2025 and will protect the planned Piccadilly line timetable uplift in 2027, ensuring Londoners will benefit from the new, higher-capacity walk-through trains.

East London line enhancement programme



Balfour Beatty has been appointed to deliver the signalling enhancement to the East London line funded by the Housing Infrastructure Fund, and the detailed design is complete. Following procurement of the necessary power infrastructure reinforcement, we have progressed the design elements of the work. We are also continuing to work on the necessary signalling upgrades, with a series of signal diversions completed successfully and wayside installations ongoing.

