

For the attention of all Station and Revenue Control Staff

Ticketing

NOVEMBER #113 2018

UNDERGROUND

& Revenue Update

INSIDE THIS EDITION

IN THE NEWS

Pages 1-5 → [Mi-apps changes](#) → [New OSI](#) → [PAYG on HEX](#) → [Charity update](#) → [Polymer notes](#) →

ASK OLLY!

Pages 6-7 → [More of your letters answered](#)

SPECIAL FEATURES

Pages 8 → [On Train Fraud Survey](#)

FARES REVISION PREVIEW

Pages 9-12 → [January Fares Revision Preview](#)

PROJECT UPDATES

Pages 13-19 → [Gate Updates](#) → [Exit Threshold Vanguard](#) → [MFM upgrades](#) → [Other projects](#)

AND FINALLY

Page 20 → [Weekly Capping](#) → [Looking Ahead to TRU114](#)

TRIVIA - Pages 2, 4 & 17
Answers on Page 19

JANUARY FARES REVISION PREVIEW

In this month's TRU, we take a first look at what is planned for this year's main Fares Revision on Wednesday 02 January 2019.

This will be the third year of the Mayor Sadiq Khan's "fares freeze", but as we have reported in previous years, this does not mean that all fares will stay unchanged.

The "freeze" only applies to fares which are set by TfL. So there will be no change to Bus & Tram fares again this January and there will also be no increase in the prices of Single and Return fares on LU.

Prices of Travelcard season tickets, Day Travelcards and the daily and weekly PAYG caps, which are set in conjunction with other operators, will increase generally in line with inflation.

JANUARY FARES REVISION

Price rises across the rail industry are based on the July Retail Price Index (RPI), which this year was 3.2%.

Further details on the changes planned for January are outlined on [Pages 9 to 12](#). Although at this stage, some of this is provisional and subject to possible changes before January.



Full information on 2019 fares will be included in the *January 2019 Fares Revision Circular*, which we hope to publish in early December.

We will also provide a final update on the fares revision changes in our next edition, TRU114 in December.



KEY STORIES INSIDE

Page 3 [PAYG EXTENDED TO HEX](#)

We provide you with details of the extension of PAYG acceptance to Heathrow Express services from Thursday 22 November.

Page 4 [CHARITY UPDATE](#)

We report on the recent London Poppy Day collection and arrangements for processing money through our CHDs at a number of stations.

Pages 13-16 [GATE UPGRADES](#)

We outline details of a number of different upgrades taking place to improve gate performance.

Pages 18 [BNA REPLACEMENT](#)

We provide details of the planned trial of 3 possible replacement units for MFMs with BNA units.

Page 20 [WEEKLY CAPPING ON OYSTER](#)

The launch of weekly capping on Oyster has been further delayed, we explain why.

IN THE NEWS...

TIME CHANGES



The recent switch from British Summer Time back to Greenwich Mean Time, which took place in the early hours of Sunday 28 October, went extremely smoothly with no reported incidents on the Sunday morning.

All devices across the network appear to have correctly switched time and reverted back by an hour as required.



Mi-APPS CHANGES

We've made some changes to the Missed Collection Notification on Mi-apps. From the 24 September, if you complete a Missed Collection Notification it will automatically also now be sent to the CSMs for the area concerned. Previously it was only automatically copied to the Area Manager, possibly leaving the CSM in the dark.

In the same update we have also changed the drop down list of stations and accounting units to include some new locations; Bond Street (Marylebone Lane), Waterloo (Southbank) and Moorgate (Met) ready for their planned openings.

We have also updated the app used for ordering ticketing consumable items to take account of the recent changes to the administrative support structure. Items such as Multi-safe bags, V&C bags and V&C sacks, security seals and controlled stationery, will now be routed to the relevant Admin Hub, for them to raise a SAP order for the items you have requested. Queries on orders for these items should therefore be initially routed to your Admin Hub team.

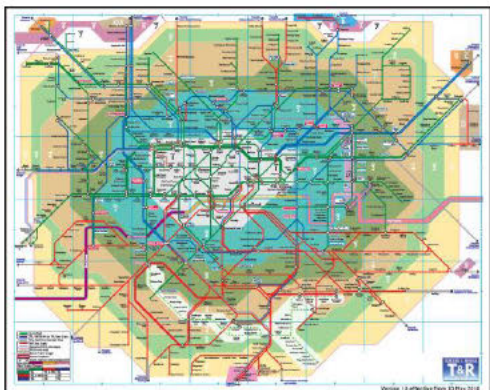


NEW BANK ↔ CANNON STREET OSI

In [TRU111](#), we outlined that as part of the September Fares Revision the temporary Out of Station Interchange (OSI) between Cannon Street and Mansion House was being withdrawn.

From Sunday 04 November, an additional OSI will be added to allow customers to interchange at street level between Cannon Street (LU) station and the new Bank (Bloomberg) ticket hall, which is situated very close to Cannon Street, ready for when this opens on 30 November.

Although customers can already interchange between the District / Circle and Central, DLR and Waterloo & City lines via the Bank / Monument complex, it is felt that some customers may prefer to take advantage of the new entrance and change via the short walk at surface level.



An OSI already exists between Bank / Monument and Cannon Street (NR).

The new Bank (Bloomberg) ticket hall is currently scheduled to open on Friday 30 November and will be equipped with a new E2 gateline and 2 QBMs. So like several other secondary entrances at other stations, it will not have facilities for cash sales or for the issue of new Oyster cards or magnetic tickets.

Customers requiring these will need to use either Cannon Street or one of the other entrances to the Bank / Monument complex.

Part I – Linked to the article on Page 3 opposite regarding PAYG on HEX...

Q1)

After 22 November, on which 4 rail services will higher than normal PAYG charges apply?

Ticketing & Revenue

T&R
Trivia

[Answers on Page 19](#)

PAYG ON HEATHROW EXPRESS

From Thursday 22 November, customers will be able to use PAYG for journeys on Heathrow Express services between Paddington and Heathrow Airport.

Since the May 2018 fares revision, customers have already been able to use PAYG on the TfL Rail stopping service from Paddington, but they will now also be able to use PAYG on the non-stop service as well.

Like the Gatwick Express and Southeastern High Speed services where PAYG is already accepted, journeys will be charged at a higher premium fare, to reflect the much faster journey times on these routes. PAYG fares are shown in the table below.

THE KEY POINTS



- ▶ Travelcards are not valid
- ▶ Higher fares will apply
- ▶ Will not count towards daily or weekly capping
- ▶ Privilege fares available

Standard PAYG (M-F 06:30 – 09:30 and 16:00–19:00 excl Bank Holidays)	Reduced rate PAYG (all other times)
Adult PAYG	Adult PAYG
£25.00	£22.00
Children under 16 travel free at all times on Heathrow Express, as long as they travel with a fare-paying adult. Those with Oyster cards will need to touch-in and out as normal, but will be charged a Zero fare for their journey.	

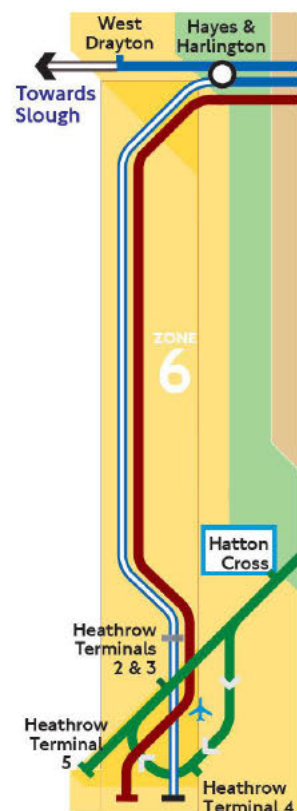
Journeys made on Heathrow Express (HEX) will also fall outside of the normal daily and weekly capping arrangements.

In a similar manner to how the premium fares on the Gatwick Express service are implemented, the higher Heathrow Express fare will be deducted when customers touch-in or out on the gates leading to the dedicated HEX platforms at Paddington (NR). The free inter terminal travel within Heathrow Airport, means that a Zero entry charge is applied by all of the gates at the airport stations, so the £22 or £25 fare will only be deducted when the customer touches out at Paddington.



**Heathrow
Express**

In the event of another service being diverted into the HEX platforms, station staff at Paddington will allow customers to transfer to one of the other platforms where standard exit charges will be applied. If a Heathrow Express train is routed to another platform, any PAYG users will get the benefit of the cheaper TfL Rail fare.



As a result of this latest PAYG extension, our PAYG map has been further updated to show the availability of PAYG on HEX services to Heathrow.

The services on which non-standard PAYG fares are charged have also been clarified by indicating the Express services with higher fares as "Premium fares". In addition to the HEX change the latest version also includes some minor corrections to the previous edition.

The latest edition of the PAYG map can be accessed from 22 November 2018.

Please remember that Staff and Nominee Oyster cards will not be valid on Heathrow Express, but can be used for free travel on TfL Rail and Piccadilly line services to / from Heathrow.

Railway staff who have either the *Priv All Rail* or *Priv NR* discount entitlements set on their Oyster cards will pay a quarter of the Adult PAYG fare, but there will be no discount for holders of the *Priv TfL Rail* discount entitlement.

Holders of NR Railcards will be eligible for a 34% reduction on the PAYG fare on Heathrow Express, at times that the Reduced rate of PAYG is charged, if they have the appropriate discount loaded on their Oyster card.



Please Note – Staff Passes, Travelcards, Freedom Passes and Oyster Photocards are not accepted on Heathrow Express services

Further Information will be included in an updated version of T&R Book 2 (Issue 15) when this is available.

IN THE NEWS...

A BIG THANK YOU

A big thank you to everyone who helped with the processing of the money collected on our stations during the recent London Poppy day on Thursday 01 November.



At the 29 stations which processed the collection money through the CHD and TOM / SAF a total of over £277k was banked for the Royal British Legion. This represents a significant increase in the volume of money processed last year.

A breakdown of the amounts processed at each station is shown in the table on the left.

All of the money processed will be transferred to the British Legion once a full reconciliation has been completed by the Financial Services Centre (FSC).

Thanks also to Suzohapp, whose engineers supported the stations and dealt with a number of device issues during the day.

A number of lessons have been learnt from the recent exercise, which will hopefully be taken on board if we offer the facility again next year. Some issues that did cause us problems were:

- Wet money, where collections had taken place outside the station
- Money being tipped directly into the CHD, rather than being decanted into the dispense tray first
- Paying in times need to be staggered and avoid peak periods.




Although this isn't a facility that we intend to offer to charities generally, approval has been given for one further charity collection this year to be processed via the CHD at a number of stations.

This will be for the Help for Heroes charity on Thursday 06 December, following on from the one that was undertaken in June, the results of which we reported back in [TRU111](#).

The stations that will be involved are listed in the table below.

Station	Collected
ALDGATE	£4,291.03
BAKER STREET	£2,144.12
BLACKFRIARS	£3,553.69
BOND STREET	£12,138.77
CANNON STREET	£12,352.61
CHANCERY LANE	£5,585.76
CHARING CROSS	£11,296.32
EUSTON	£9,226.89
FARRINGDON	£5,768.27
GREAT PORTLAND ST	£453.49
GREEN PARK	£14,172.31
HOLBORN	£6,864.52
KINGS CROSS	£11,340.88
KNIGHTSBRIDGE	£5,067.55
LEICESTER SQUARE	£8,958.11
LIVERPOOL STREET	£47,269.75
MANSION HOUSE	£5,423.70
OXFORD CIRCUS	£10,677.31
PICCADILLY CIRCUS	£6,947.51
SLOANE SQUARE	£7,708.16
ST JAMES PARK	£7,655.52
ST PAULS	£5,919.21
STRATFORD	£3,078.24
TEMPLE	£5,040.06
TOTTENHAM CRT RD	£6,674.72
VAUXHALL	£7,590.99
VICTORIA	£23,703.34
WARREN STREET	£3,453.41
WATERLOO (MAIN)	£22,657.49
GRAND TOTAL	£277,013.73

Stations			
BAKER STREET	BANK / MONUMENT	BOND STREET	
CANARY WHARF	CHARING CROSS	EUSTON	
GREEN PARK	HOLBORN	KINGS CROSS	
LIVERPOOL STREET	LONDON BRIDGE	PADDINGTON	
PADDINGTON (SUB)	ST JAMES PARK	TOTTENHAM COURT RD	
VICTORIA	WATERLOO	WESTMINSTER	

Part 2 – Following on from Question 1...

Q2) Journeys on which of these services will count towards a Daily Cap?

- | | | | |
|---|-----------------------|---|----------------------|
| A | Heathrow Express | B | TfL Rail to Heathrow |
| C | Thames River Services | D | Emirates Airline |

Ticketing & Revenue

T&R
Trivia

[Answers on Page 19](#)

POLYMER NOTES

Since the introduction of the polymer £5 note in September 2016, plenty of column inches within previous editions of TRU have been devoted to the subject of polymer bank notes.

We had some fairly significant problems on MFM's fitted with the Bank Note Acceptor (BNA) units, caused by notes becoming jammed within the device and in particular as they were transferred into the note vault.

Thankfully the worst of the problems we have seen with the acceptance of polymer notes are now behind us and we are now in a period where devices have to handle both polymer £5 and £10 notes and paper £20 notes, until the new polymer £20 note is introduced in 2020.

Ahead of that there are some forthcoming changes to the notes issued by Ulster Bank, one of the note issuing banks in Northern Ireland.

The new notes are due to be introduced in 2019 and will be distinctive in that the notes will be printed vertically rather than the tradition horizontal orientation, as illustrated in the images below. The new notes will gradually replace the current paper notes which have been in circulation for over 40 years.

MFM's fitted with Bank Note Recycler (BNR) units currently accept Scottish and Irish notes, but these will require a new set of note images to be loaded onto each device, to enable them to be able to accept the new designs of note. The Cash Handling Devices at stations that have MFM's with BNR units will also need to be updated with the new notes, to enable them to be accepted and banked.



Ulster Bank



Further information on these upgrades will be included in the TRU, once arrangements have been finalised.

COMMON DESIGN FEATURES

- The designs of both new notes follow a "Living in Nature | Our Place in this Place" theme developed by a panel of experts comprising historians, botanists, artists, architects and members of the Northern Irish public.
- The designs of the notes are themed around the migration of the animals and people of Northern Ireland as well as its indigenous plants and creatures.
- Both notes feature a King scallop from Stranford Lough and an Ulster Glade potato.
- A shift was made to represent the decline of segregation in Northern Ireland – namely between those who belong to the Roman Catholic and Protestant churches – and how, while divisions still remain an issue, political tensions have gradually improved over time.

FIVE POUND NOTE

- The £5 note focuses on Northern Ireland as a place that people pass through and visit, highlighting the importance of the sea and migration.
- The design of the £5 note features the Brent Goose and fuchsia flower.
- The back of the note features the Strangford Lough sea loch in County Down as well as people running down the beach.
- The banknote's colours of blue and green conforms with other £5 sterling notes issued within the United Kingdom
- When a UV light is shone on the note, another set of people appear to represent families coming back together again.
- A raised texture security feature of greywacke sandstone represents the country's geology.

TEN POUND NOTE

- The £10 note focuses on Northern Ireland as a place of growth, both in terms of agriculture and heritage.
- The design features the Irish hare and Guelder-rose shrubs.
- The back of the note features a countryside theme with hedgerows and horses ploughing through farmland.
- The banknote's brown colour conforms with other £10 sterling notes issued within the United Kingdom
- Under UV light, an Ulster glade potato appears.
- The raised security texture has carboniferous limestone features



askolly@tube.tfl.gov.uk

From: [REDACTED]
Sent: 04 October 2018 00:56
To: Ask Olly
Subject: Wimbledon interchange

Hi Olly,

Being on the Fulham Broadway area, Wimbledon station is a commonly used station by our customers. Could you please advise us on the use of the various validators at that station?

I did have a customer with a monthly Zone 2&3 Travelcard on Oyster at Putney Bridge, who was charged a Zone 1 fare when travelling from Streatham (can't remember which one) to Putney Bridge via Wimbledon. When asked if he had touched pink reader he had not. His response was he was going back to a paper ticket.

I travel through Wimbledon to get to and from work as do some of my colleagues and no one seems to know the answer. Everyone has their own guess at what is correct. If staff don't know what is correct how can our customers know?

Regards

[REDACTED]
CSS2
Fulham Broadway area

Hi [REDACTED]

Thank you for your email and a very interesting query.

To explain a little further how things works at Wimbledon.

Validation on the reader on the Tram platform before boarding the tram, is basically similar to a bus validation and charges the standard bus/tram PAYG fare rather than opening a PAYG rail journey with a maximum fare and then requiring the customer to touch out at their destination in order to be charged the correct fare. If the customer is making a journey involving both rail and tram travel, they have to validate as shown below, in order that they don't incur an incomplete journey and a maximum fare.

ENTER FROM STREET TO MAKE TRAM JOURNEY

- Touch in on Entry Gate
- Validate on PVal on Tram platform before boarding tram (Only charged a tram fare)

MAKE TRAM JOURNEY TO WIMBLEDON AND EXIT TO STREET

- Validate on PVal at Tram platform where starting journey, before boarding tram
- Proceed to exit gates on arrival at Wimbledon
- Touch out on Exit Gate, no further charge made (Only charged a tram fare)

MAKE RAIL JOURNEY TO WIMBLEDON AND CHANGE TO TRAM

- Validate on gate or PVal at start of rail journey
- On arrival at Wimbledon, touch-out on PVal on NR/LU platforms to complete rail journey
- Validate on PVal on Tram platform before boarding tram (Charged rail fare plus tram fare)

MAKE TRAM JOURNEY TO WIMBLEDON AND CHANGE ONTO NR or LU SERVICE

- Validate on PVal at Tram platform where starting journey, before boarding tram
- On arrival at Wimbledon, touch-in on PVal on NR/LU platforms to start rail journey
- Validate on gate or PVal at end of rail journey (Charged rail fare plus tram fare)

Hope this clarifies things for you and your colleagues

Regards

Olly Oyster

Hi [REDACTED]

Thank you for your email.

As we explained in the reply to David, they do now have to buy at least one adult ticket, but this could be for another member of their group.

In the case of the Gold Card holder travelling with just one 11-16 year old child, then it is going to be cheaper for them to just buy a Child Day Travelcard (£6.30) rather than buying an adult ticket they don't need. Alternatively, if the child has a Zip card, to use PAYG at Child rate, which is capped at £1.50 and is therefore actually cheaper than the cost of the Discounted Day Travelcard.

You may feel that this is unfair, but the conditions of the Gold Card offer are now in line with other types of Railcard.

Regards

Olly Oyster

From: [REDACTED]
Sent: 06 October 2018 10:27
To: Ask Olly
Subject: Goldcard

Hi Olly

I was reading your answer to David Stevenson Revenue Control Inspector's question.

So regardless of Zone, Gold Card holders now have to buy an adult ticket. What if the Gold Card holder is travelling themselves with a 11-16 year child. It means the Gold Card holder will be paying double fare. I think it's unfair.

Regards

[REDACTED]
CSS
Hainault Area

From: [REDACTED]
 Sent: 24 October 2018 17:32
 To: Ask Olly
 Subject: Oyster Refunds

Good evening Olly,

Recently myself and colleagues at Paddington underground station are having an issue where customers have had their Oyster for more than 24 hours, and the refund button either doesn't appear or will not allow them to refund the card.

The balances are under £10 and are not registered etc. so they should be eligible for a refund.

If you could shed some light on this issue, that would be greatly appreciated!

Kind regards

[REDACTED]
 CSA
 Paddington

Hi [REDACTED]

Thank you for your email and query. This is a subject that we have had a couple of queries on from staff at other stations too.

Unfortunately it isn't possible to give you a definitive answer as to why a particular card could not be refunded, without the details of the card involved. If you or your colleagues are able to note the Oyster card number or take a picture of the card number using your iPad, then we can investigate further.

In your email you do mention about the refund button not appearing. If this occurs it may be down to the device not having sufficient change to make a refund. The triggers for a device to give refunds and that to put it into "change giving" mode are different.

It might also be an indication that the device is not able to communicate with the server that it checks the card history with, before the refund is processed. In such cases, it may be worth getting the customer to try a different MFM or try later on?

The actual rules that govern whether a refund is made or not are actually quite complex and take into account the transaction in which the card was purchased and how the card has been used.

If a large number of cards have been bought with the same bankcard and some are now trying to be refunded quickly with little or no usage, a refund is likely to be refused until more time has elapsed.

Hope this explains some of the reasons why a customer may not be able to get a refund on a card in less than 48 hours.

Regards

Olly Oyster

Hi [REDACTED]

Thank you for your email and highlighting your concern.

Although there is a current push to recover revenue lost through multiple Reject Code 36 validations, the current targets are not based on a 100% of Codes 36's on exit resulting in a Fare paid transaction on the POM.

This takes account of the fact that there will be occasions, such as the customer presenting the wrong card with no PAYG on it and then using another card to exit, where there is no fare to collect.

Hope this puts your minds at rest.

Regards

Olly Oyster

From: [REDACTED]
 Sent: 17 August 2018 12:40
 To: Ask Olly
 Subject: Code 36

Hi Olly,

When you get all the data re-code 36, within a small window of time you look at whether a manual charge was done on a POM, but what us staff see every day, is customers touching out and getting a code 36, But sometimes before we get there, they touch another card. Sometimes when we do get there, the customers says sorry wrong card, so there will not be a manual charge needed but your data will be looking for one.

Some staff are worried that this will go against them.

Regards

[REDACTED]
 CSS
 Hendon Central area



Join our **email Distribution List** to ensure you get the benefits from;

- the most recent edition of the TRU, on the same day it goes to the printers.
- having your own personal copy.
- access to archived copies.

- Send an email to; [REDACTED] today.





TICKET IRREGULARITY SURVEY

The results of the May 2018 On-train Ticket Irregularity Survey have been published by the TfL Transport Strategy team. This survey was conducted throughout that month by RCI, following set criteria for each line. Customers were surveyed on LU trains 7 days per week; from the first train out of a depot to the last one back in at night. A total of **46,634** customers were checked, of which **2.03%** had a ticket irregularity of one form or another.

Below we have provided a detailed line by line breakdown of the number of customers surveyed in May and listed the number of offences encountered.

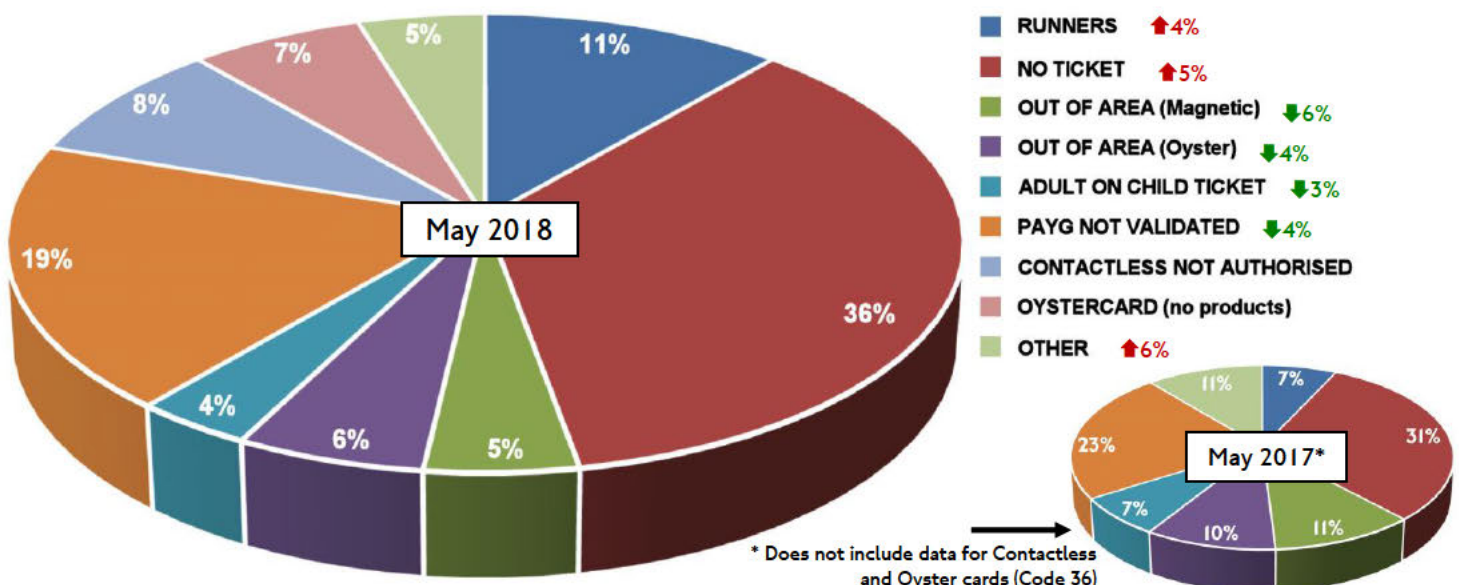
Comparing the results from May 2018 to the previous survey, we have learned that;

- The number of recorded "Runners" increased significantly from 73 to 126.
- The number of customers found to have no products on their Oyster card has increased from 26 to 73.
- This survey recorded the lowest level of fraud over the past 12 months.
- The Metropolitan Line recorded the highest proportion of irregularities and the Piccadilly line the least.

Survey Date	On train irregularity	Estimated revenue loss
May 2017	2.22%	1.30%
November 2017	2.42%	1.30%
February 2018	2.46%	1.47%
MAY 2018	2.03%	1.11%
12 month average	2.30%	1.29%

Line	Best Worst	No checked	R	NT	OAM	OAO	AC	PNV	CPNA	ONP	O	Total	% Invalid
BAKERLOO		4601	9	22	1	3	1	14	16	0	0	66	1.43
CENTRAL		5331	1	47	1	5	4	22	16	7	12	115	2.15
CIRCLE		1925	4	16	4	0	2	5	0	3	1	35	1.78
DISTRICT		8791	48	96	2	27	3	55	22	0	2	255	2.88
HAMM & CITY		1954	13	20	2	1	8	9	2	7	2	64	3.07
JUBILEE		4367	1	27	3	3	0	15	15	5	11	80	1.83
METROPOLITAN		3970	34	43	18	0	13	17	8	19	10	162	4.01
NORTHERN		6170	10	62	4	4	4	48	1	1	0	134	2.12
PICCADILLY		5364	5	22	2	10	2	12	3	2	14	72	1.33
VICTORIA		4161	1	42	15	11	3	13	11	29	1	126	3.02
Total (all lines)		46634	126	397	52	64	40	210	94	73	53	1109	2.36
Key	R = Runners OAM = Out of Area (Magnetic) AC = Adult on Child ticket CPNA – Contactless Payment not authorised NT = No Ticket OAO = Out of Area (Oyster) PNV – PAYG not validated ONP – Oyster Card no products O = Other												

The charts below show the percentage of each irregularity recorded and compares results from this year's survey with the one recorded in May 2017. Back then the survey did not include categories for contactless payments or Oyster cards that were presented for inspection without any products loaded on them (Code 36).



JANUARY FARES REVISION PRE

PRICE CHANGES

↓ TRAVELCARD SEASON TICKETS

Unlike Bus & Tram fares which are set exclusively by TfL, Travelcard prices cannot be frozen, as fares covering National Rail journeys are not covered by the Mayor's Fares Freeze.

ZONES	ADULT 7 DAY T/CARD & WEEKLY CAP		
	2018	2019	Increase
1+2	£34.10	£35.10	2.85%
1-3	£40.00	£41.10	2.68%
1-4	£49.00	£50.50	2.97%
1-5	£58.20	£60.00	3.00%
1-6	£62.30	£64.20	2.96%

ZONES	ADULT 7 DAY T/CARD & WEEKLY CAP		
	2018	2019	Increase
2-3, 3-4, 4-5, 5-6	£25.50	£26.30	3.05%
2-4, 3-5, 4-6	£28.20	£29.10	3.10%
2-5, 3-6	£33.90	£34.90	2.87%
2-6	£42.60	£43.90	2.97%

As a result, the prices of Travelcard season tickets will increase by an average of 3.0%.

This year's increases reflect a Department of Transport (DfT) directive that no regulated fares, such as season tickets may exceed 3.2%, in line with the July 2018 Retail Price Index (RPI).

The Weekly PAYG caps for users of contactless payments will also increase by the same amounts.

PAYG FARES →

PAYG charges for journeys wholly on TfL services will again be frozen at the 2016 prices.

NR journeys and through journeys involving travel on both TfL and NR services will increase as a result of the TOC element being increased.

ZONES	TfL PAYG Standard		TfL PAYG Reduced	
	2018	2019	2018	2019
1	£2.40	£2.40	£2.40	£2.40
1+2	£2.90	£2.90	£2.40	£2.40
1-3	£3.30	£3.30	£2.80	£2.80
1-4	£3.90	£3.90	£2.80	£2.80
1-5	£4.70	£4.70	£3.10	£3.10
1-6	£5.10	£5.10	£3.10	£3.10
2+3	£1.70	£1.70	£1.50	£1.50
2-4	£2.40	£2.40	£1.50	£1.50
2-5	£2.80	£2.80	£1.50	£1.50
2-6	£2.80	£2.80	£1.50	£1.50

DAILY PAYG CAPS →

In line with fares increases on the NR network, the prices of the Anytime Daily PAYG caps will rise between 20p and 40p depending upon the zones chosen.

These will generally continue to be 20% of the cost of the corresponding 7 Day Travelcard.

ZONES	ADULT DAILY CAP		
	2018	2019	Increase
1+2	£6.80	£7.00	2.9%
1-3	£8.00	£8.20	2.5%
1-4	£9.80	£10.10	3.0%
1-5	£11.60	£12.00	3.3%
1-6	£12.50	£12.80	2.3%

← DAY TRAVELCARDS

The prices of One Day Travelcards will increase in accordance with the Retail Price Index (RPI).

This means that One Day Travelcards within Zones 1-6 will increase by either 40p or 50p and within Zones 1-9 by either 30p (Off Peak) or 60p (Anytime).

ZONES	ADULT DAY TRAVELCARD			
	(ANYTIME)		(OFF PEAK)	
	2018	2019	2018	2019
1+2				
1-4	£12.70	£13.10		
1-6	£18.10	£18.60	£12.70	£13.10
1-9	£22.90	£23.50	£13.60	£13.90

SINGLE & RETURN FARES →

The cost of Single and Return tickets for journeys on LU will also remain unchanged and PAYG continues to offer best value for customers, with a saving of £2.50 on a journey wholly within Zone 1.

JANUARY FARES REVISION **PRE**

FORTHCOMING PAYG EXTENSIONS

As part of the January Fares Revision changes, fares and settings will be pre-loaded in readiness for two planned extensions of PAYG acceptance on NR services.

The sections of line affected are:

- On GTR services to Hertford North (PAYG is already valid on Greater Anglia services to Hertford East) and the intermediate stations Cuffley and Bayford which are between the last station in Zone 6 (Crews Hill) and Hertford North
- On Southern / South Western services to Epsom (Freedom Passes are already valid at this station even though it is beyond the Zone 6 boundary)



The current "Go live" date for both of these extensions is Sunday 17 February 2019 (subject to confirmation). There are no changes to free travel arrangements for TfL Staff Oyster card holders as a result of this.



STRATFORD GATE CHANGES

Since the opening of the Westfield Shopping Centre at Stratford, there have been continuing issues with NR magnetic tickets being rejected by our gates. This generally resulted from NR customers wanting to break their journey at Stratford and do a spot of shopping, before continuing on their journey either to London or home.

NR ticket holders can break and then resume their journey at any station on the route covered by their ticket when they are making a wholly NR journey. Unfortunately at our stations that are served directly by NR services, the gate logic causes NR tickets that have been used to exit, to be rejected when the customer tries to resume their journey. This means that on the way-in, tickets need to be visually inspected and the customer allowed through the gate to continue their journey. Please note that this arrangement does not apply to customers with Cross London transfer tickets, who are allowed to break their journey at an LU station, but are not able to resume their journey from an LU station unless they pay an additional fare.

Although we are not able to resolve this issue completely, gateline settings at Stratford will be changed from 02 January 2019, to allow customers who have travelled to Stratford International on Southeastern High Speed Services valid to London Terminals to be able to resume their journey at Stratford and travel on to Liverpool Street via the Central line of TfL Rail services. Providing they have not used their ticket to exit an LU gate, these tickets will now be accepted by entry gates at Stratford.

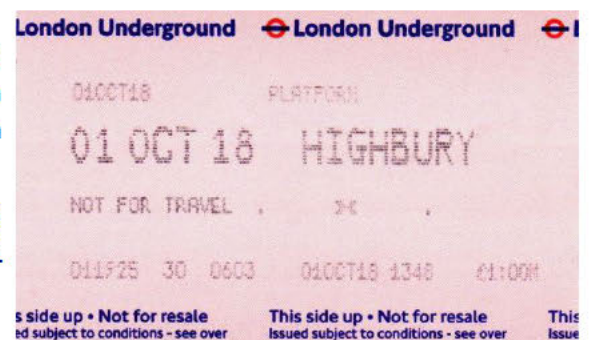


PLATFORM TICKETS

Although Platform tickets will still remain available from POMs, in order to counter a growth in the use of platform tickets to gain access to the network at stations with well-managed gatelines a change to settings will be made at all stations.

Platform tickets will no longer be accepted by gates on entry and legitimate holders will have to be allowed in by staff after visual inspection of their ticket.

Platform tickets will continue to operate gates on exit as now.



CHARGEABLE ROUTES



VISITOR TICKETING TRIAL

London Underground London Underground

03 DAYS VISITOR PASS STD

07 JUN 18 »123456«

3DAYVISITORPASS==NOT VALID ON HR OFF-PEAK

000006 84 0628 05JUN18 1435 238:10M

This side up • Not for resale
Issued subject to conditions - see over

This side up • Not for resale
Issued subject to conditions - see over

The start of the trial was delayed, so hasn't yet run as long as was originally intended, so this additional four month period should allow additional sales data to be obtained to evaluate the value of these products. A decision will then be made by TfL on whether the initiative should be retained, extended or withdrawn.



SAME PIER INTERCHANGES

Although the change is not really related to LU, one of the changes included within the fares revision involves the concept of interchange between different services on the River Thames. From 02 January, what are termed “Same Pier Interchanges” will be introduced at:

ST GEORGES WHARF PIER (Vauxhall)	WESTMINSTER PIER	EMBANKMENT PIER	BLACKFRIARS PIER
----------------------------------	------------------	-----------------	------------------

These will function in a very similar way to Out of Station Interchanges (OSIs) between stations and will allow a PAYG customer travelling on Thames river services, to alight from one service at one of these piers, touch-out and then touch-in again before boarding another service at the same pier.

Their journey covering two boats will then be treated as one continuous journey from the pier that they started their journey to the pier at which they finally disembark.

BARBICAN GATE CHANGES

In another change to gateline settings, from 02 January 2019 the gates at Barbican will be set to reject National Rail issued tickets to the destination "London Thameslink". These had previously been valid at the station when Thameslink service from Luton and Bedford ran through to Moorgate via the City Widened lines.



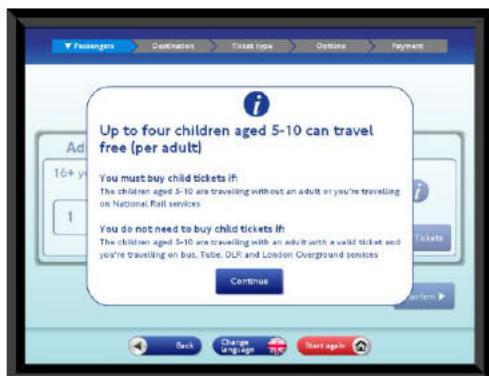
NR customers wishing to travel to Barbican will have to purchase a ticket to Underground Zone 1 in future, or alight at Farringdon where Thameslink tickets are valid.

JANUARY FARES REVISION PRE

7 DAY MAGNETIC TRAVELCARDS

From 02 January 2019 the TfL TVMs at all London Overground and TfL Rail stations will no longer issue magnetic 7 Day Travelcards valid within the zonal area. In future customers at these stations will only be able to buy a 7 Day Travelcard for travel within Zones 1-6 on Oyster. These TVMs already only offer Bus & Tram Passes and Monthly and longer period Travelcards on Oyster.

This change follows the mandating of 7 Day Travelcards onto Oyster on LU in 2005 and should reduce opportunities for forged 7 Day Travelcards, as many of the examples reported recently purport to be from stations that will no longer issue magnetic 7 Day Travelcards after 02 January.



SCREEN CHANGES

Linked to the fares revision, we will also be taking the opportunity of making some minor changes to POM screens. The implementation dates for some of these changes are yet to be confirmed, as Cubic are keen to spread some of their workload away from the fares revision date and to implement some aspects before or after the 02 January. Some of the changes to be implemented are based on suggestions made by station staff and include the following changes:

CLARIFICATION OF CHILD TICKET REQUIREMENTS

The pop-up displayed when a customer selects the purchase of a child rate ticket, will be amended to advise the customer when a child ticket is required. The message that will be displayed in future will be:

You must buy child tickets if:

The children aged 5-10 are travelling without a fare paying adult or are travelling on most National Rail services

You do not need to buy child tickets if:

The children aged 5-10 are travelling by bus or tram, or with a fare paying adult on Tube, DLR, London Overground or TfL Rail services

EXTENSION TICKET MESSAGE FOR STAFF OYSTER AND FREEDOM PASS HOLDERS

To remove confusion regarding their validity, the current screen displayed when an Extension ticket is selected and a Staff Oyster or Freedom Pass is presented to the RTD will be changed. This was an issue that we touched upon in our [Oyster Explained](#) feature in [TRU112](#). For destinations within the PAYG area, the current screen messages which say "You can use your Travelcard to travel to your destination" the current PAYG balance and the top-up button will all be removed. Instead of this Staff Oyster card holders will receive the following new message:

No extension ticket available. You will need to buy a ticket or use a different Oyster/contactless card for any part of the journey not covered by your Pass.

For destinations outside of the PAYG area, the following additional message will be displayed:

Your Pass must be valid on the services you plan to use within Zones 1-6. If not, you will need to buy a ticket for the whole journey.

COMPLETION OF TRANSACTION REMINDER

We still get customers who in their haste to catch their train, forget to re-present their Oyster card to the RTD when topping-up. To try and avoid this, some additional text is to be inserted on the payment screen to remind customers that they need to touch their Oyster card onto the reader at the end of the transaction.

REFUND SCREENS

A correction will be made to the Oyster card refund screen where an old card that has no card deposit on it is presented for a refund. In future the screen will correctly show the Deposit = £0.00 when there is no deposit to be refunded.



GATE UPGRADES

It has been a busy period for upgrades to our gates, with a number of different programmes and initiatives aimed at improving performance and reliability of each type of gate.

Over the following three pages, we run through all of the current upgrades, to bring you up to speed with each one and let you know where we are, where changes are being implemented and when these are scheduled to take place.

The forthcoming change freeze ahead of the January Fares Revision means that there is likely to be a flurry of work undertaken during November in an effort to complete as much as possible before the fares revision moratorium starts.

ERROR 1 FIX

Since the completion of the rollout of the LCP3 to all gate types, we have had continuing issues with gates failing due to an Error 01, which requires a technician to resolve. This particular issue generally occurs when a gate fails to shut down correctly during a power failure situation, resulting in some of the configuration settings not being saved and the gate then being unable to restart itself.

To address this issue a new version of software has been developed by Cubic, which causes the gate to save its settings more regularly and in the event of one of these being incomplete, to fall back to the previous saved version. This means that the gate should be able to restart itself, even if the back-up battery that powers the LCP3 is defective or disconnected.

Testing of the new software for E2 gates and WAGs has recently been completed and approval given to start a Vanguard at the following eight locations during the first week of November:

Station		E2 Gate												WAG			
EMBANKMENT		40	41	42	43	44	45	46	47					21	22	23	
STRATFORD (North)		80	81	82	83	84	85	86	87	88	89	90		20	21	78	Mon 05 Nov
														79			
EUSTON SQUARE		46	47	48										21			Wed 07 Nov
KINGS CROSS	(Northern)	40	41	42	43	44	45	46	47	48	49	50	51	21	22	23	
		52	53	54	55	56	57	58	59								
	(Tubes)	41	42	43	44	45	46	47	48	49	50	51	52	21	22	23	
		54	55	56													
	(Western)	51	52	53	54	55	56	57	58	59				21	22		
VICTORIA	(North)	70	71	72	73	74	75	76						20			
	(Vic)	40	41	42	43	44	45	46	47	48	49	50	51	21	22	23	
		52	53	54	55	56	57	58	59	60	61	62					

Most of the locations chosen have seen high levels of Error 01 being reported, but we have also taken the opportunity of upgrading some sites that are involved in other Vanguards involving E2 Gates, so that we minimise the number of locations that are operating with non-standard versions of software.

Of the stations shown above, Embankment, Euston Square and Stratford (North) have all been selected as they had already been selected for the separate Vanguard of new Paddle Control software on E2 gates (as outlined on Page 15 opposite).

If the new software eradicates the Error 01 issue as hoped, we will then look to deploy the software to other stations with E2 gates and to WAGs across the network.

Similar software is also being developed for both E1 gates and the older Pneumatic gates. These are not as far advanced in terms of testing and similar vanguards for these two gate types are not scheduled to start until later in November.

Currently a Vanguard on Pneumatic gates is scheduled to start around 19 November, whilst the E1 Vanguard is currently planned to start just over a week later, around 28 November. The locations to be used for each of these Vanguards are yet to be finalised with Cubic.

PADDLE CONTROL SOFTWARE VANGUARD

In [TRU110](#), we outlined a Vanguard of a new version of paddle control software which has been in use on E2 gates at Euston Square and Stratford (North) since June.

The new software had been deployed at these two locations in preparation for a planned trial of a new design of E2 gate paddle, which was scheduled to take place at Embankment towards the end of the year. Unfortunately development work on the new paddles is running behind schedule as the initial material used failed the fire testing which it has to go through and this will now have to be repeated before we can move forward with the vanguard on operational gates.

In parallel with this, cubic have been looking more closely at the operation of the actual gate paddles, to try and bring them into line with the current EU standards, which were implemented for all new gates, after the current designs of gates were introduced. The main focus of this work is to reduce the potential impact and injury/damage, should a customer or their property become trapped between the gate paddles as they close.

Currently on automatic gates, if an obstruction is detected as the paddles close an alarm will sound and after 3 seconds the paddles will release slightly giving the opportunity for the trapped item to be removed.



The paddles will then hold for a period of 30 seconds before fully opening. If someone or something is trapped between the paddles, this is quite a long time and it is not uncommon for the customer or helpful staff members to be seen wrestling with the paddles in a vain attempt to release them. In such circumstances the most effective means of freeing the customer or their property is via the “One Shot Release” facility.

The changes currently being tested by Cubic, feature a much quicker release of the paddles when an obstruction is detected, with a partial release after $\frac{3}{4}$ second and the paddles being completely released after 7 seconds.

The change greatly reduces the time a customer will be held by the paddles and should reduce the number and severity of injuries or damage when a customer is trapped by the paddles. The downside of the proposal is that the very rapid partial release of the paddles, makes it considerably easier for a customer attempting to “double up” behind another customer and wriggle through the paddles as they close. Given the current focus on trying to reduce revenue loss, this would probably not be seen as their most helpful development.

After a recent witness testing event at their test facility, Cubic have been asked to do some further work to see if the angle the paddles release could be changed to make it less easy for someone that had not validated, to get through the gate. Following a further review, it is planned to deploy the revised software at the two current Vanguard stations and then to Embankment in readiness for the forthcoming Gate Paddle Vanguard there. There are also plans to deploy the Paddle Control software to a busier E2 site, with a higher number of previously reported customer accidents. Unfortunately the sites that best fit the bill in terms of usage and customer incidents all have E1 gates and revised software for this type of gate is not yet available for testing.

E2 GATE LID REPLACEMENT

Work is now underway on a programme to replace the lids on each of our E2 gates and WAGs across the network, as reported in [TRU112](#).

Since the programme kicked off on Sunday 07 October, Cubic have been upgrading around 8 gates per night and have already completed the work at a number of our bigger stations with large numbers of E2 gates, including Kings Cross, Victoria and Tottenham Court Road.

The new lids which feature both soft close and self-locking facilities are a considerable improvement on the original design, which had a risk of injury if the lids was released or dropped. At stations where the upgrade is yet to take place, staff should be reminded of the hazard as outlined on the E2 gate safety briefing.

([Click here to access E2 Gate Servicing information](#))



READER UPGRADE



The latest upgrade of the card readers (RTDs) on our gates (Strategic Release 6 or SR6+) was scheduled to be implemented from start of traffic on Monday 05 November, but a last minute issue discovered during final testing caused the implementation to be postponed for one week. It will now be implemented in two phases, with the first batch of 13 LU stations due to be implemented on the night of Monday 12 November.

Providing that there are no issues identified with the upgrade at these sites, the SR6+ release will be sent to all Rail readers on the night of Friday 16 November, to take effect from start of traffic on Saturday 17 November.

This RTD upgrade includes changes that have previously been Vanguarded at Leicester Square, London Bridge and Waterloo, aimed mainly at reducing the level of reader freezes. As previously reported in [TRU111](#), event logs were previously extracted from gates at London Bridge, where enhanced logging software had been installed, had enabled Cubic to identify a communications issue between the RTD and the master module of the gate which controls it.

This had randomly resulted in gate readers around the network either freezing showing a red or amber LED and preventing customers validating their cards whilst the gate tried unsuccessfully to reset the reader. As this is a global release, all RTDs will be upgraded remotely overnight on the same night.

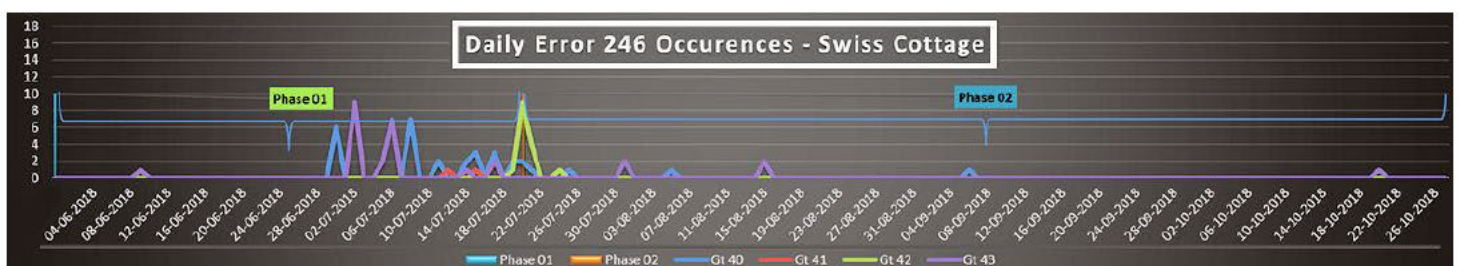
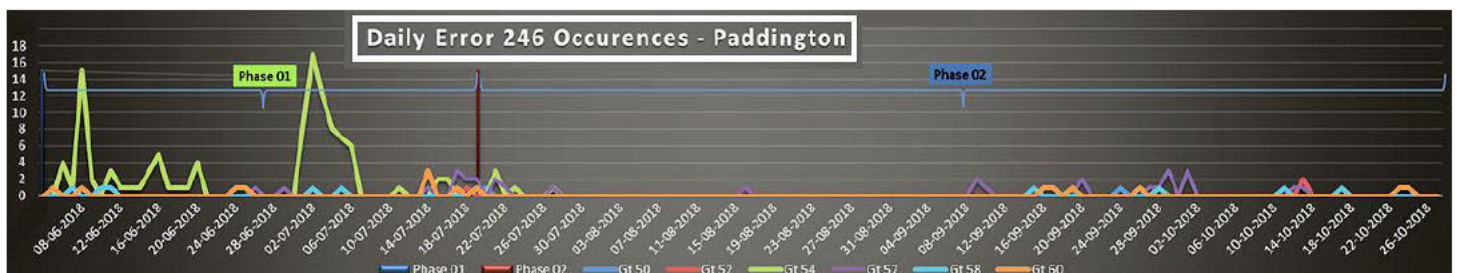
EI GATE BLU UPGRADE

As we have previously reported in a number of editions of TRU, the second phase of the Vanguard of changes to the light beams that control customer movements through the gates, has continued at both Swiss Cottage and Paddington (Main).

This second phase has continued a lot longer than we had originally planned, due to delays to the supply of the new shrouds which are to be fitted within Phase 3.

The good news is that at both of these stations the level of gate failures with error 246 has continued to be extremely low, apart from a slight blip during September at Paddington where 3 gates reported issues.

As can be seen from the graphs below, there has been considerable improvement since Phase 1 of the project.



Phase 3 will see the redesigned shrouds fitted to the vanguard gates at Swiss Cottage and Paddington (Main) and the extension of the Vanguard to include two further locations which historically have experienced high levels of dust and Beam Logic Unit (BLU) failures.

The additional stations to be included are Manor House and London Bridge (Jubilee) gateline. All of the new units are due to be fitted between Monday 12 November and Thursday 15 November.



VANGUARD OF CHANGES TO EXIT THRESHOLD

In conjunction with the planned SR6+ reader upgrade, it is planned to Vanguard a change to the PAYG "Exit Threshold" at a number of stations.

Currently at all stations, the Entry and Exit Thresholds for PAYG users are set at the same amount, which is normally the minimum PAYG fare from the station (£2.40 in Zone 1 or £1.70/£1.50 depending upon the time of the validation in other zones). The system allows for these to be set individually for each location and there are several stations where different entry and exit thresholds apply, such as the Heathrow Airport stations where the Entry Threshold is set at £0.00 to facilitate free travel between Heathrow T4, Heathrow T5 and Heathrow T2&3. It is not currently possible to set different thresholds on exit to those that apply on entry.

To briefly explain:

- **Entry Threshold** – the amount of PAYG that a customer needs to have on their Oyster card before they can start a journey. As stated above, this is normally the minimum PAYG fare from that location. If the card balance is below the Entry Threshold, then the card will be rejected on entry with reject code 36. The customer will then need to top-up their card before being able to travel.
- **Exit Threshold** – if a customer has touched in correctly they should always be able to exit regardless of the balance on their Oyster card. If they do not have a valid entry validation, then the Exit Threshold is amount that they must have on their card to be able to exit. If the customer has more PAYG than the Exit Threshold, they will be allowed to exit and a Maximum fare will be deducted from their PAYG balance. If they do not have at least the minimum fare, then their card will be rejected on exit and reject code 36 will again be displayed. In this scenario the customer should be charged for the journey they have made, by using the Manual Charge facility on the AFM or MFM.

As part of the SR6+ release, the ability to have different Entry and Exit Thresholds has been introduced and initially a lower Exit Threshold will be set initially at **East Ham** on Monday 19 November and then two nights later at the remainder of the 18 locations listed below.

BANK / MONUMENT	BOND STREET	BRIXTON	EUSTON
HOLBORN	KINGS CROSS (Northern)	KINGS CROSS (Tubes)	KINGS CROSS (Western)
LIVERPOOL STREET	LONDON BRIDGE	OXFORD CIRCUS	PADDINGTON
STRATFORD	TOTTENHAM COURT ROAD	VICTORIA (District)	VICTORIA (Vic)
WATERLOO (Colonnade)	WATERLOO (Main)		

At these stations the Exit Threshold will be reduced to **-£2.00** with effect start of traffic on Thursday 22 November. This will have the effect of reducing the number of cards rejected with code 36 on exit, by effectively allowing the customer to make one more journey than they would previously have been able to do (in a similar manner to the latest software on busses now enables customers to go into a negative balance).

So providing the customer who has failed to touch-in, has more than the revised Exit Threshold, they will be able to exit, a maximum fare will be deducted and their card will go into a negative balance, preventing further journeys being made. As a vast majority of code 36 transactions are where customers have accidentally failed to top-up and touch-in on one journey, it should effectively allow the customer to temporarily dip into their card deposit until they top their card up again. The major differences to staff at the stations concerned will be:

- **Less cards rejected on exit with Code 36**
- **Less need to charge customers via the Manual Charge facility**
- **Some customers incurring incomplete journeys, where their card would have previously been rejected**
- **Potentially higher negative balances appearing on some cards**

Please note that there is no change to the procedures for resolving Incomplete PAYG Journeys. Unless the customer meets the criteria for resolving the journey, the incomplete journey must be closed off with the maximum fare in place and the customer advised to contact the Customer Contact Centre for a refund.



Full procedures for POM Staff Functions and PAYG Operations are provided in [T&R Book 3, Section 7](#).

During the Vanguard usage of the facility at the stations concerned will be monitored to gauge its success in reducing the number of cards rejected with code 36 on exit and to ensure that there is not an increase in cards that are "abandoned" and not used again once they have gone into a negative balance. This data will then be used to determine the level that the Exit Threshold should be set at stations across the network.

BOND STREET TVMS GO LIVE

As we reported in [TRU112](#), the Vanguard of LU TVMs was extended to Bond Street, with the installation of two new devices in the Bond Street (Marylebone Lane) ticket hall on the night of Monday 01 October.

The devices entered service in 'card only' mode initially to allow a short period for staff to be briefed on the new equipment. They are due to go into full service once the IM connection for the associated Cash Handling Device has been provided. This aspect of the work was originally overlooked and is proving difficult to get completed.

The Vanguard at Stratford (Mezzanine) and Bond Street will continue as there are still concerns over the general performance and reliability of TVMs installed elsewhere on the TfL network.

It is now also looking increasingly likely that a number of sites interfacing with the Elizabeth line that were due to have POMs replaced with new TVMs are now likely to keep their existing POMs. New ticket halls being built at some of these locations will still see TVMs installed when they open.



MFM SOFTWARE UPGRADE

Further to our report in [TRU112](#) concerning the Vanguard of new software on 11 MFMs, following a short vanguard, approval was given on Monday 15 October for this software build to be deployed to all other MFMs.

A change freeze in the run up to the switch from British Summer Time to Greenwich Mean Time meant that we were unable to start the deployment of the new software until after the clocks had gone back. Rollout was therefore scheduled to start on the night of Monday 29 October, with 20 MFMs being updated. As with previous software upgrades, from the following night the number of devices being upgraded was increased to 50 per night.

Priority was given initially to upgrading the remainder of the 99 MFMs with Bank Note Recycler (BNR) units, as one of the major changes included in this release, was to address an issue that occurred on a number of devices involving the BNR unit sending an old message regarding the vault contents, causing inaccurate information to be displayed on the Service Panel when interrogated.

The MFM software deployment then continued at a rate of 50 devices each night, except Saturday night. Devices to be upgraded on Friday night/Saturday morning, being selected from stations not served by night tube services.

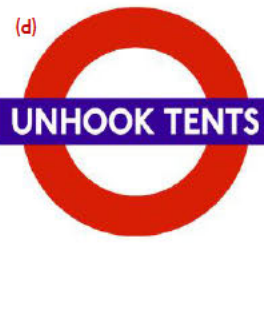
The last devices on the north end of the Northern line and the eastern and western ends of the Central line were scheduled to be completed on the night of Monday 05 November.

The new software will also facilitate the trial of a number of different designs of potential replacement units for the current MFM Bank Note Acceptor (BNA) as outlined in more detail on [Page 18](#).

LAL MXIDE PU

Part 3 – We've mixed up the letters in these station names. Can you work them out?

Ticketing & Revenue
T&R
Trivia



REVENUE PROJECTS

BNA REPLACEMENT - THE SEARCH BEGINS

Since the introduction of polymer bank notes, we have had a number of reliability issues with the current MFM Bank Note Acceptor (BNA) units. Although we are now thankfully through the worst of these issues, there are still on-going concerns about reliability of the BNA.

These units are now quite old and although various key components have been replaced over recent years, there is a view that elements of the units are now reaching the end of their operational life.

To address this, Cubic have started the process of finding a replacement Note Acceptor. This work is very much in its infancy and they are currently evaluating three possible units from different manufacturers.

The three units which are to be evaluated are:

- **Innovative Smart Payout** – (this is the unit currently used in Cubic TVMs)
- A brand new design of unit produced by **CI Tech** (the manufacturers of the current BNA)
- A unit produced by **Suzohapp** (manufacturers of the CHD) this unit is already used extensively in other note accepting equipment around the world

The CI Tech and Suzohapp units will initially be configured as Note Acceptor units for this trial, but both have the capability of being converted into Note Recyclers. The Innovative unit will function as a Note Recycler as it does on the TVM, but this unit is much slower and has a lower capacity than the BNR units we have in MFMs at some of our busier stations.



The development work requires changes to the MFM software to enable devices to be able to interact with the current BNA and BNR units and the three new units being evaluated. The necessary changes were incorporated within the recent MFM software release (see Page 17) which was scheduled to be deployed to all MFMs by start of traffic on Tuesday 06 November.

Once integration testing by Cubic has been completed, this will pave the way for us to test each of the new models in MFMs in the field. The plan is to trial one of each model at different stations, to gauge performance and reliability.

Two of the units are currently close to the stage where we will shortly be able to deploy the new units. These are likely to be staggered, with the first unit being installed in late November, followed by the second model in early December.

The third units manufactured by Suzohapp, requires some further work to enable the unit to physically fit into the MFM and to interact with the device.

The stations chosen for the trials have been selected as they each have two conventional MFMs with BNA units. This should help us to compare the new unit with the existing BNA unit at the location.

The MFMs selected for the trial are:

VAUXHALL	MFM 31	HIGHBURY & ISLINGTON	MFM 31	MOORGATE (Northern)	MFM 31
----------	--------	----------------------	--------	---------------------	--------

Further details will be provided to the stations concerned ahead of the planned installation dates.

GATE OPERATION RESEARCH PROJECT

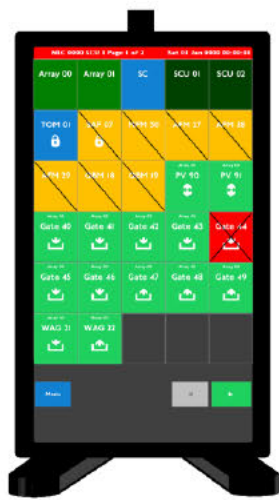
Cubic and the University of Portsmouth are undertaking a research study into the use of camera collected data to measure customer flows and to then use this to recommend the best balance of entry and exit gates to handle the customers at any given point in time.



As part of the proof of concept for this, they have installed a number of additional cameras within the ticket hall at Blackhorse Road station, from which they have been gathering data to use for testing at an off-system research facility.

The new software does not directly control the gates but sends suggestions to change the direction of individual gates to a lap-top which mimics the existing SCU. The member of staff on the gateline can then either reject the suggested change or accept it, after which the gate will switch direction.

Ahead of a full trial at Blackhorse Road (probably early in 2019), a demonstration is to be arranged using the technology installed to recommend optimum gate settings for using simulated customer flows, during engineering hours towards the end of November. The demonstration will take place between 25.00 hours and start of traffic, whilst the station is closed to customers.



UPDATE ON SCU UPGRADE

Further to our updates in previous editions of TRU, the planned start to the Vanguard of the new PC based SCU has been further delayed. Although most testing has been completed, an issue was identified with some of the new screens freezing.

These events have been relatively rare and it is felt that when used on a simulated station, periods where there is no activity may contribute to a freeze occurring. On an actual station, status is continually being checked with devices, so idle periods don't really occur, so it is hoped that this will prevent similar issues occurring.

We are currently pushing both Tech & Data and Cubic to enable us to get the SCU Vanguard started, as we believe that we can learn more from getting the equipment into use on stations, rather than through continued tests in an off system "testing environment".

We are hopeful of being able to introduce the SCU at the first of the Vanguard sites in early December and then possibly extend to a further location after a period of monitoring. The remaining Vanguard sites are now likely to be upgraded after the January Fares Revision has been completed. Given a Vanguard of at least four weeks at some of the busier and more complex Vanguard sites, this is likely to mean that the planned rollout will probably not now commence until late February.

In readiness for this, we are currently working with Cubic to prioritise sites to be completed at the start of the rollout, avoiding sites where we know other works are due to take place shortly.

ANSWERS TO T&R TRIVIA

Q.1

1. Gatwick Express
2. Heathrow Express
3. Southeastern High Speed
4. TfL Rail to Heathrow

Q.2

B Only TfL Rail to Heathrow

Pt.3

LAL MIXIDE PU

(a)

(b)

(c)

(d)

(e)

HARLESDEN

KENSAL GREEN

NORTH WEMBLEY

SOUTH KENTON

STONEBRIDGE PARK

Is there a connection? – All are stations in the Queens Park Area

How did you do?

...AND FINALLY!

WEEKLY CAPPING ON OYSTER

In [TRU112](#), we optimistically reported on the approach of the public launch of weekly capping for Oyster card users, to bring them in to line with customers using contactless payments, who already benefit from a weekly cap on a fixed Monday to Sunday week.

Although our technical preparations have been completed, the implementation of the weekly cap has been delayed due to the need to reach agreement with all of the London area Train Operating Companies (TOCs) on the apportionment of revenue, which is potentially impacted by the introduction of weekly caps.

Although all but two of the TOCs have now reached agreement with TfL, the need to conclude arrangements with the final two has prevented us launching the weekly cap on the Rail network as planned.

As Bus and Tram services are not affected by these agreements, the current plan is to proceed with the launch of weekly capping for Bus and Tram users only, provisionally from Sunday 10 December. This will mean that Oyster users travelling on buses and trams would be capped at £21.20, the price of a 7 Day Bus & Tram Pass, removing the need to buy a 7 Day Bus Pass for many that use it for travel Monday to Friday.



It also has the advantage that implementation on buses is much simpler than on the rail network, as all journeys are charged at £1.50 and details are held on the Oyster card, avoiding the need to make retrospective refunds to customers after end of day processing in the back office.

We are planning to include a more in depth outline of the operation of weekly capping on Oyster in an [Oyster Explained](#) feature in [TRU114](#).

OVERSEAS REFUNDS

The Customer Contact Centre has developed a new process to more efficiently deal with refunds to customers who are not resident in the UK. This has previous been an issue that was difficult to deal with at gateway stations, where the customer was unable to obtain a refund on their Oyster card before leaving the country.



Customers can now obtain refunds on Oyster or Visitor Oyster cards by completing a web form at: www.tfl.gov.uk/contact

When completing the form, the customer will be required to provide the following information:

Customer's name	Customer's overseas address	Oyster card number (photo of front and rear of card)	Email address
-----------------	-----------------------------	--	---------------

On receipt of this information, the Customer Contact Centre's International Refunds team will process the refund by sending the customer an online link.

When the customer clicks on this link, they will then be required to enter their bank details and should then receive their refund within 7 days.



LOOKING AHEAD TO TRU114

Our next edition will be published in mid-December and will therefore be the last edition of 2018.

- In [TRU114](#) we will bring you a final round up of fares revision related issues, together with special arrangements over the Christmas and New Year holiday period.
- Subject to space being available we also hope to be able to include the delayed [Oyster Explained](#) feature on [Weekly Capping](#).
- As is traditional for our last edition of the year, we will be including a [Look Ahead to 2019](#) and replacing our usual [T&R Trivia](#) with a [Christmas T&R Quiz](#), to test your knowledge on some of the things that [TRU](#) had covered during 2018.
- We will also update you on other [T&R](#) news and a selection of our other regular features.

