

TfL Restricted

Friday 11 November 2016

Enclosed is the briefing pack containing content for the WiFi pilot. We propose that the pilot will commence on Monday 21 November and finish on Monday 19 December.

Station Poster: To ensure customers are aware that data is being collected, we will be installing posters in stations included in the pilot. These posters will direct customers to a website for more information about the pilot. Note that this poster has been scaled to A4 to fit into this pack and this has altered the header and margins slightly.

Website Content: To provide further information on the pilot and respond to a number of questions that customers may ask. This website will be launched after the press release but before the pilot begins.

Industrial Relations letter. Due to the sensitive nature of this pilot we will be informing the Trade Unions of our plans. They key message is that any staff using a TfL issued device will have their data excluded from the pilot.

Staff Briefing: We will be informing staff of the pilot through Area and General Mangers. This content will also be used for articles on staff intranets sites.

Contact Centre and Operational Staff FAQ guide: This is very similar to the public website content but with additional guidance on how to contact the project team should we receive frequent questions from customers that we are not able to answer. This also allows for staff to download the information to their device in PDF form.

Press Release: TfL Press Office are agreeing a press release with the GLA Press Office.



Station Poster

WiFi data collection

We are collecting WiFi data at this station to test how it can be used to improve our services, provide better travel information and help prioritise investment.

We will not identify individuals or monitor browsing activity.

We will collect data between Monday 21 November and Monday 19 December.

For more information visit: tfl.gov.uk/privacy







Website Content (ww.tfl.gov.uk/privacy)

WiFi data collection pilot

Between Monday 21 November and Monday 19 December 2016 (inclusive), TfL will be collecting WiFi connection data from mobile devices using the station WiFi at 54 Tube stations in central London. We will not use this data to identify individuals or monitor browsing activity.

- What is WiFi connection data?
- Why is TfL conducting this pilot?
- Why use WiFi connectivity data?
- Will TfL be able to identify me?
- What about my browsing history?
- Can I stop TfL collecting my data?
- Can I request a copy of my data?
- After the pilot
- Stations included in the pilot

TfL has partnered with Virgin Media to bring WiFi access to 250 London Underground stations to provide customers with internet access. Find out more about station WiFi.

We are running a WiFi connection data collection pilot between 21 November and 19 December as WiFi data has the potential to provide us with a far better understanding of how customers move through stations. We will use the data collected to test how useful it could be to improve our services, provide better travel information and help prioritise investment.

What is WiFi connection data?

When a mobile device such as a smartphone or tablet has WiFi enabled, the device will continually search for a WiFi network to connect to. When searching for a WiFi network, the device sends out a probing request which contains an identifier specific to that device known as a Media Access Control (MAC) address.

If the device finds a WiFi network that is known to the device, it will automatically connect to that network. If the device finds unknown networks it will list these in your device settings so you can decide whether to connect to one of them.

When you are near one of our station WiFi access points and you have WiFi enabled, your device will request to connect which will be received by our WiFi network, even if your device does not subsequently connect.

Collecting these device MAC address connections may help us to better understand customer movements through and between stations, by seeing how long it took for a device to travel between stations, the routes the device takes and waiting times at busy periods.

During the 29-day pilot we will collect device MAC addresses at stations within the pilot area listed below. All data collected will be de-personalised (pseudonymised) to ensure TfL is unable to identify any individual.

What about my browsing history?

TfL will not collect any web browsing data, or data from website cookies, generated by your device as part of this pilot.

Why is TfL conducting this pilot?

WiFi data has the potential to provide a greater understanding of crowding and collective travel patterns so we can improve services and information provision for customers. This may enable us to improve the operation, planning and provision of travel information on London Underground. Four potential key benefits have been identified where the analysis of WiFi data could benefit our customers:

Customer information

Providing better customer information for journey planning and avoiding congestion.

Operations and safety information

Understanding how customers move around stations could help us to manage disruptions and events more effectively, deploy staff to best meet customer needs and ensure a safe environment for all.

Transport planning

By better understanding how our customers use the Underground network, we can better plan timetables, station designs and major station upgrades.

Prioritise Investment

By understanding how customers move through and around stations we may be able to increase revenue from companies who advertise on our poster sites and who rent retail units on our property to reinvest in improving your services.

Why use WiFi data?

Although Oyster and Contactless Payment Card ticketing data helps us understand where customers enter and exit the London Underground network (as well as any intermediate validations), it doesn't tell us the platforms and lines customers are using, the stations they interchange at and how they navigated around our stations. Due to the nature of the Tube network, there are many options that customers could take for their journey. Traditional paper surveys are expensive, only provide a snapshot of travel patterns on the day of survey and are unable to provide a continuous flow of information. WiFi data may provide more accurate information to improve our services

Will TfL be able to identify me?

No, we will not be able to identify any individuals. We are trying to understand how customers as a whole use the network, not how specific individuals use it.

Each MAC address collected during the pilot will be de-personalised (pseudonymised) and encrypted to prevent the identification of the original MAC address and associated device. The data will be stored in a restricted area of a secure server and it will not be linked to any other data.

As TfL will not be able to link this data to any other information about you or your device, you will not receive any information by email, text, push message or any other means, as a result this pilot.

Can I opt out of my data being collected?

Yes. If you do not want TfL to collect your MAC address, you can either turn off WiFi on your device or put the device into airplane mode whilst in one of the 54 London Underground stations included in the pilot (listed below). Once you have left the station simply switch WiFi setting back on or turn off airplane mode to re-enable WiFi connectivity.

Can I request a copy of my data?

As we will not be able to identify the original MAC address because we have depersonalised data, we will not be able to identify you and so cannot provide a copy of the WiFi data generated by your device.

After the pilot

TfL will stop collecting this data at 23:59 on Monday 19 December. We will then analyse the data to test how useful it could be to improve our services, provide better travel information and help prioritise investment.

Once this process is complete, we will be able to decide what to do next and communicate this to our customers.

Stations included in the pilot

All of the stations included in the pilot are listed below:

- Aldgate
- Angel
- Baker Street
- Bank
- Belsize Park
- Blackfriars
- Borough
- Camden Town
- Cannon Street
- Chalk Farm
- Chancery Lane
- Charing Cross
- Covent Garden
- Dollis Hill
- Elephant & Castle
- Embankment
- Euston
- Finchley Road
- Green Park
- Holborn
- Kennington
- Kentish Town

- Kilburn
- King's Cross St. Pancras
- Lambeth North
- Leicester Square
- Liverpool Street
- London Bridge
- Mansion House
- Monument
- Moorgate
- Mornington Crescent
- Neasden
- Old Street
- Oval
- Oxford Circus
- Piccadilly Circus
- Regent's Park
- Russell Square
- St. James 's Park
- St. Paul's
- St. John's Wood
- Stockwell
- Swiss Cottage
- Temple
- Tower Hill
- Tufnell Park
- Victoria
- Warren Street
- Waterloo
- Wembley Park
- West Hampstead
- Westminster
- Willesden Green



Industrial Relations Letter



Row 1 Row 2 Row 3 Postcode Phone

Date

Dear X,

As part of our continuing aim to improve services and information provided to our customers, we will launch a four week pilot on Monday 21 November whereby WiFi connection data is collected at 54 London Underground stations (Appendix 1). WiFi data has the potential to provide a greater understanding of crowding and collective travel patterns. This may enable TfL to improve our services, provide better travel information and help prioritise investment.

Four potential key benefits have been identified where the analysis of WiFi data could benefit our customers:

- **Customer information:** Providing better customer information for journey planning and avoiding congestion.
- Operations and safety information: Understanding how customers move around stations could help us to manage disruptions and events more effectively, deploy staff to best meet customer needs and ensure a safe environment for all.
- Transport planning: By better understanding how our customers use the Underground network, we can better plan timetables, station designs and major station upgrades.
- Prioritise Investment: By understanding how customers move through and around stations we may be able increase revenue from companies who advertise on our poster sites and who rent retail units on our property to reinvest in improving your services

When a mobile device such as a smartphone or tablet has WiFi enabled, the device will continually search for a WiFi network to connect to by sending out a probing request which contains an identifier specific to that device known as a Media Access Control (MAC) address.

If the device finds a WiFi network that is known to the device, it will automatically connect to that network. If the device finds unknown networks it will list these in your device settings so you can decide whether to connect to one of them. When you are near one of our station WiFi access points and you have WiFi enabled, your device will request to connect which will be received by our WiFi network, even if your device does not subsequently connect.



During the 29-day pilot we will collect device MAC addresses connections at stations within the pilot area listed below. All data collected will be de-personalised (pseudonymised) to ensure TfL is unable to identify any individual. We will not collect any web browsing data, or data from website cookies, generated by your device as part of this pilot.

All TfL mobile devices which have been issued to staff will be excluded from the pilot. We are identify TfL mobile devices as they are configured to connect to a private TfL network. Any devices connecting to this private network will be removed from data collected. This is because staff movements in stations are not representative of customer movements and journeys. As we will de-personalise all data we are unable to identify and exclude staff personal devices. Individuals who do not want TfL to collect their MAC address connections, can either turn off WiFi on their device or put the device into airplane mode whilst in one of the 54 London Underground stations included in the pilot (listed below).

When developing this pilot, we followed advice published by the Information Commissioner's Office (ICO) who regulates the processing of personal data within the UK and discussed our plans with them. TfL's Privacy and Data Protection team have been involved with the proposal to ensure it fully complies with the Data Protection Act 1998. We have met to fully brief the ICO and we agreed to keep the ICO informed of our developments.

Station staff will be informed of the pilot through Area and General Manager Briefings and announcements on our intranet sites. To ensure customers are aware that data is being collected posters will be displayed in stations, a dedicated webpage (www.tfl.gov.uk/privacy) created and a series of media articles published. Station staff and Contact Centre staff will be given a question and answer sheet to respond to customer enquiries.

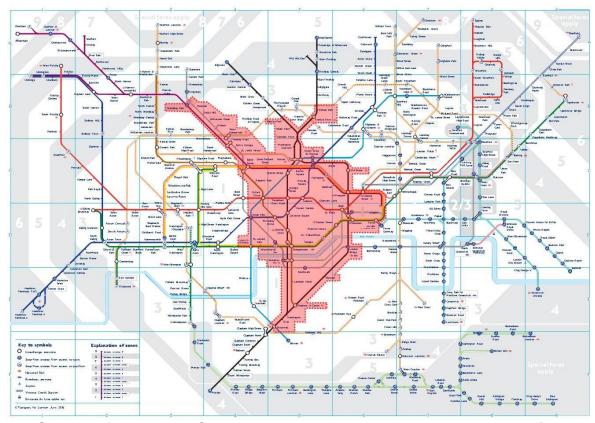
TfL will stop collecting this data at 23:59 on Monday 19 December. We will then analyse the data to test how useful it could be to improve our services, provide better travel information and help prioritise investment.

Once this process is complete, we will be able to decide what to do next and communicate this to our staff and customers.

Yours Sincerely



Appendix 1: Proposed Pilot Stations



Bond Street and Tottenham Court Road are shown in the map but have no TfL Wi-Fi provision.

Aldgate	Green Park	Piccadilly Circus
Angel	Holborn	Regent's Park
Baker Street	Kennington	Russell Square
Bank	Kentish Town	St. James's Park
Belsize Park	Kilburn	St. Paul's
Blackfriars	Kings Cross St. Pancras	St. John's Wood
Borough	Lambeth North	Stockwell
Camden Town	Leicester Square	Swiss Cottage
Cannon Street	Liverpool Street	Temple
Chalk Farm	London Bridge	Tower Hill
Chancery Lane	Mansion House	Tufnell Park
Charing Cross	Monument	Victoria
Covent Garden	Moorgate	Warren Street
Dollis Hill	Mornington Crescent	Waterloo
Elephant & Castle	Neasden	Wembley Park
Embankment	Old Street	West Hampstead
Euston	Oval	Westminster



Staff Briefing

Station Staff Briefing and Content for Intranet Sites

On Monday 21 November, TfL will launch a four week pilot whereby WiFi connection data is collected at 54 London Underground stations. WiFi data has the potential to provide a greater understanding of crowding and collective travel patterns. This may enable us to improve our services, provide better travel information and help prioritise investment. Four potential key benefits have been identified where the analysis of WiFi data could benefit our customers:

- **Customer information:** Providing better customer information for journey planning and avoiding congestion.
- Operations and safety information: Understanding how customers move around stations could help us to manage disruptions and events more effectively, deploy staff to best meet customer needs and ensure a safe environment for all.
- Transport planning: By better understanding how our customers use the Underground network, we can better plan timetables, station designs and major station upgrades.
- Prioritise investment: By understanding how customers move through and around stations we may be able increase revenue from companies who advertise on our poster sites and who rent retail units on our property to reinvest in improving services

We will use the data collected to test whether it can be used to deliver these benefits and improve on data currently collected. Although Oyster and Contactless Payment Card ticketing data helps us understand where customers enter and exit the London Underground network (as well as any intermediate validations), it doesn't tell us the platforms and lines customers are using, the stations they interchange at and how they navigated around our stations. Due to the nature of the Tube network, there are many options that customers could take for their journey. Traditional paper surveys have been used for this but they are expensive, only provide a snapshot of travel patterns on the day of survey and are unable to provide a continuous flow of information. Wi-Fi data may provide more accurate information to improve our services

When a mobile device such as a smartphone or tablet has WiFi enabled, the device will continually search for a WiFi network to connect to by sending out a probing request which contains an identifier specific to that device known as a Media Access Control (MAC) address.

If the device finds a WiFi network that is known to the device, it will automatically connect to that network. If the device finds unknown networks it will list these in your device settings so you can decide whether to connect to one of them. When you are near one of our station WiFi access points and you have WiFi enabled, your device will request to connect which will be received by our WiFi network, even if your device does not subsequently connect.

During the 29-day pilot we will collect device MAC addresses connections at stations within the pilot area listed below. All data collected will be de-personalised (pseudonymised) to ensure TfL is unable to identify any individual. We will not collect any web browsing data, or data from website cookies, generated by your device as part of this pilot. All TfL mobile devices which have been issued to staff will be excluded from the pilot. We are identify TfL mobile devices as they are configured to connect to a private TfL network. Any devices connecting to this private network will be removed from data collected. This is because staff movements are not representative of customer movements and journeys. As we will de-personalise all data we are unable to identify and exclude staff personal devices. Individuals who do not want TfL to collect their MAC address, can either turn off WiFi on your device or put the device into airplane mode whilst in one of the stations included in the pilot (listed below).

When developing this pilot, we followed advice published by the Information Commissioner's Office (ICO) who regulates the processing of personal data within the UK and discussed our plans with them. To ensure customers are aware that data is being collected posters will be displayed in stations, a dedicated webpage (www.tfl.gov.uk/privacy) created and a series of media articles published. Station staff and Contact Centre staff will be given a question and answer sheet to respond to customer enquiries.

TfL will stop collecting this data at 23:59 on Monday 19 December. We will then analyse the data to test how useful it could be to improve our services, provide better travel information and help prioritise investment.

Once this process is complete, we will be able to decide what to do next and communicate this to our staff and customers. If you have queries about how the data may be able to support your business area pleas contact CEAQueries@tfl.gov.uk.



Contact Centre and Operational Staff FAQ guide

TfL WiFi Data Collection Pilot

Frequently Asked Questions Guide.





Contents

What is Wifi?	3
When is the pilot taking place?	3
What stations are included in the pilot?	3
What is WiFi connection data?	3
Why is TfL conducting this pilot?	4
Customer information	4
Operations and safety information	4
Transport planning	5
Prioritise Investment	5
Do I have to connect to the network for my data to be collected?	5
Are you using this data to identify individuals?	
Will TfL see what websites I visited and other browsing data?	
Do Oyster and Contactless ticketing data not tell you this already?	
Could you not use surveys to find out this information?	6
Will I receive any marketing information if you collect my data?	6
Are you linking this to other data you hold?	6
Is this secure?	7
Can I request a copy of my data?	7
What happens when the pilot finishes?	7
As a member of staff, I have a question not answered here. Who do I contact?	7

Between Monday 21 November and Monday 19 December 2016 (inclusive), TfL will be collecting WiFi connection data from mobile devices using the station WiFI at 54 Tube stations in central London. We will not use this data to identify individuals or monitor browsing activity. This guide contains a response to a number of questions customers may ask. It is consistent with the website we have produced on www.tfl.gov.uk/privacy.

What is Wifi?

TfL has partnered with Virgin Media to bring WiFi internet access to 250 London Underground stations to provide customers with internet access. Where stations have WiFI, you can go online anywhere in these stations; in ticket halls, corridors and platforms. More information can be found athttps://tfl.gov.uk/campaign/station-wifi.

When is the pilot taking place?

The pilot will commence on Monday 21 November 2016 when we will start collecting WiFI data and TfL will stop collecting WiFi data on Monday 19 December 2016 at 23:59.

What stations are included in the pilot?

The pilot will be conducted in 54 stations in Zones 1-4. These stations are listed below and are shown on a Tube Map (for internal use only) on the last page of this guide.

Green Park Piccadilly Circus Aldgate Holborn Regent's Park Angel **Baker Street** Kennington Russell Square Bank Kentish Town St. James's Park Belsize Park Kilburn St. Paul's St. John's Wood Blackfriars Kings Cross St. Pancras Borough Lambeth North Stockwell Camden Town Leicester Square Swiss Cottage Cannon Street Temple Liverpool Street Chalk Farm London Bridge Tower Hill Chancery Lane Mansion House Tufnell Park Charing Cross Monument Victoria Covent Garden Moorgate Warren Street Dollis Hill Mornington Crescent Waterloo Elephant & Castle Neasden Wembley Park Embankment Old Street West Hampstead Euston Oval Westminster Finchley Road Oxford Circus Willesden Green

What is WiFi connection data?

When a mobile device such as a smartphone or tablet has WiFi enabled, the device will continually search for a WiFi network to connect to. When searching for a WiFi network, the

device sends out a probing request which contains an identifier specific to that device known as a Media Access Control (MAC) address.

If the device finds a WiFi network that is known to the device, it will automatically connect to that network. If the device finds unknown networks it will list these in your device settings so you can decide whether to connect to one of them.

When you are near one of our station WiFi access points and you have WiFi enabled, your device will request to connect which will be received by our WiFi network, even if your device does not subsequently connect.

Collecting these device MAC addresses connections may help us to better understand customer movements through and between stations, by seeing how long it took for a device to travel between stations, the routes the device takes and waiting times at busy periods. During the 29-day pilot we will collect device MAC addresses at stations within the pilot area listed below. All data collected will be de-personalised (pseudonymised) to ensure TfL is unable to identify any individual.

The data we will be collecting is the MAC address, which Access Point you have connected to, the time and date and details about the connectivity status.

Why is TfL conducting this pilot?

WiFi data has the potential to provide a greater understanding of crowding and collective travel patterns so we can improve services and information provision for customers. This may enable us to improve our services, provide better travel information and help prioritise investment. Four potential key benefits have been identified where the analysis of WiFi data could benefit our customers:

Customer information

Providing better customer information for journey planning and avoiding congestion.

Operations and safety information

Understanding how customers move around stations could help us to manage disruptions and events more effectively, deploy staff to best meet customer needs and ensure a safe environment for all.

Transport planning

By better understanding how our customers use the Underground network, we can better plan timetables, station designs and major station upgrades.

Prioritise Investment

By understanding how customers move through and around stations we may be able increase revenue from companies who advertise on our poster sites and who rent retail units on our preperty to reinvest in improving your services.

Do I have to connect to the network for my data to be collected?

You don't necessarily need to connect to the network for your data to be collected. When you are near one of our station WiFi access points and you have WiFi enabled, your device will request to connect which will be received by our WiFi network, even if your device does not subsequently connect.

Can I opt out of my data being collected?

Yes. If you do not want TfL to collect your MAC address, you can either turn off WiFi on your device or put the device into airplane mode whilst in one of the 54 London Underground stations included in the pilot (listed below). Once you have left the station simply switch WiFi setting back on or turn off airplane mode to re-enable WiFi connectivity.

Are you using this data to identify individuals?

No we will not be able to identify any individuals. We are trying to understand how customers as a whole use the network, not how specific individuals use it.

Each MAC address collected during the pilot will be depersonalised (pseudonymised) and encrypted to prevent the identification of the original MAC address and associated

device. The data will be stored in a restricted area of a secure server and it will not be linked to any other data.

Will TfL see what websites I visited and other browsing data?

TfL will not collect any web browsing data, or data from website cookies, generated by your device as part of this pilot.

Do Oyster and Contactless ticketing data not tell you this already?

Although Oyster and Contactless Payment Card ticketing data helps us understand where customers enter and exit the London Underground network (as well as any intermediate validations, it doesn't tell us the platforms and lines customers are using, the stations they interchange at and how they navigated around our stations. Due to the nature of the Tube network, there are many options that customers could take for their journey.

Could you not use surveys to find out this information?

We currently use surveys to understand how customers use the Tube. However, traditional paper surveys are expensive, only provide a snapshot of travel patterns on the day of survey and are unable to provide a continuous flow of information. WiFi data may provide more accurate information to improve our services and the purpose of the trial is to test whether WiFI data could provide information

Will I receive any marketing information if you collect my data?

As TfL will not be able to link this data to any other information about you or your device, you will not receive any information by email, text, push message or any other means, as a result this pilot.

Are you linking this to other data you hold?

TfL will not link this to any other data we hold. WiFi data will be de-personalised to prevent the identification of individuals.

Is this secure?

We are committed to protecting customers personal data when they use TfL services. Data collected will be stored in restricted area of a secure server and all data will be de-personalised.

Can I request a copy of my data?

As we will not be able to identify the original MAC address because we have de-personalised data, we will not be able to identify you and so cannot provide a copy of the WiFi data generated by your device.

What happens when the pilot finishes?

TfL will stop collecting this data at 23:59 on Monday 19 December We will then analyse the data to test how useful it could be to improve our services, provide better travel information and help prioritise investment.

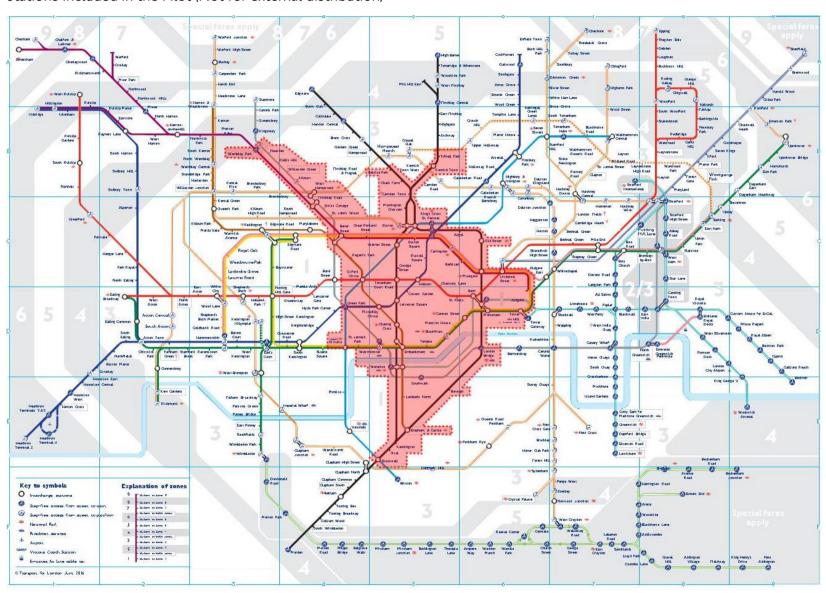
Once this process is complete, we will be able to decide what to do next and communicate this to our customers.

As a member of staff, I have a question not answered here. Who do I contact?

This guide and the TfL website are designed to provide you with the information you require. If you have any further queries and find you are being asked questions that we have not answered, please inform

This is an internal email address and should not be made publically available.

Stations Included in the Pilot (Not for external distribution)





End