



SMART TRANSPORT  
**BYOD AND  
BEYOND**

**PARLIAMENT STREET**

*partnership in policy*

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**JUNE 2018**

# INTRODUCTION

The global race to build hyper connected, dynamic cities that can thrive in the highly competitive digital economy has begun.

As our capital city, London gives us much to be proud of. A thriving financial services sector, captivating history, technology innovation, architecture, diversity and energy, the list is endless.

Sitting at the core of this metropolis is our transport network, the performance of which is critical to our city's productivity. It's the tubes, trains, buses and bikes that enable commuters, tourists and residents to go about their daily business. Since its inception on 10th January 1863, the London Underground now has a daily ridership of 5million people, across 270 stations.

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We need to see implementation of the Internet of Things (IoT) to drive connectivity between transport services and improved broadband infrastructure for businesses. Our iconic buildings need to be optimised and truly connected and our roads need to be less congested and better managed.

Above all the men and women who manage our transport system need the correct tools to enable them to do their jobs. They need access to the latest data and devices to make smarter decisions, they also need to use phones, tablets and wearable technologies to operate effectively.

This research paper will explore the current use of Bring Your Own Device (BYOD) policies within Transport for London and examine how they can help build a smarter, more effective transport network.



**\$40BILLION:  
THE ESTIMATED  
GLOBAL SMART  
CITIES MARKET**

# EMBRACING BYOD

Transport for London (TFL) has been an advocate of technology investment in recent years. Last year's annual report stated that it has, "Created a community of more than 11,000 developers, powering more than 600 apps used by 42 per cent of Londoners."

Our research team liaised with TFL, requesting information around the organisation's use of BYOD schemes. Official correspondence was conducted via the Freedom of Information Act, with one of TFL's caseworkers providing the data and some supporting comment on the findings.

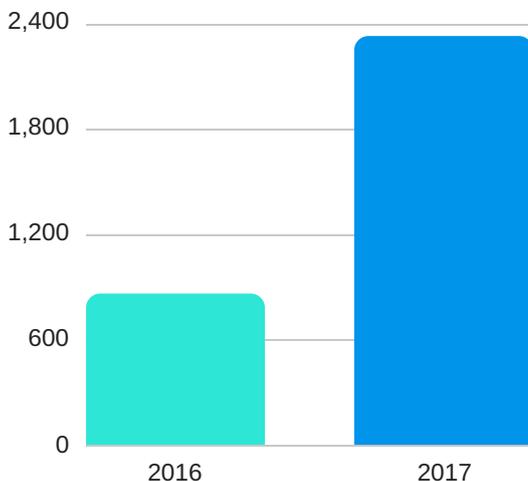
We asked for a breakdown of BYOD usage by its employees over the last three financial years 2016/17, 2017/18 and an for usage figures in the new financial year of 2018/19 so far.

TFL reported 816 devices registered under BYOD under the financial year of 2016/17, rising sharply by 170% to 2,328 for the financial year of 2017/2018. When this data is mapped against publicly available records of 28,000 employees, this suggests a rise within one year from 3% of the workforce using the scheme, to 8%.

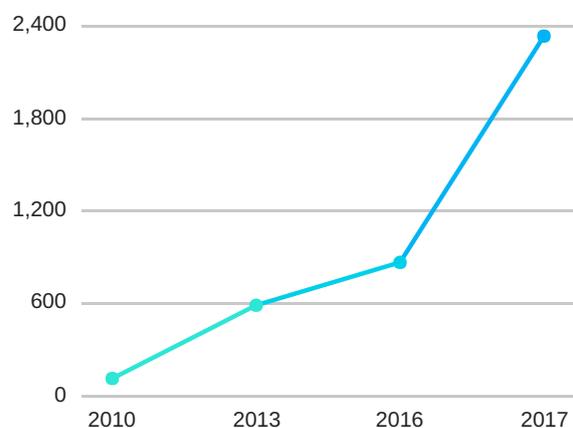
TFL also provided us with numbers of devices registered under BYOD for the new financial year of 2018/19. We were told that already 1326 devices had been registered, surpassing the total throughout 2016/17.

A TFL spokesperson said, "We take personal security management extremely seriously and each device has a unique password. We regularly analyse our authorised user database and our information security policies are refreshed to address the changing cyber threat landscape."

### TFL BYOD IN USE BY FINANCIAL YEAR 2016-2017



### TFL BYOD IN USE SINCE 2010



# DIVERSITY OF DEVICES

As a market BYOD, is on target to reach nearly \$367 billion by 2022, up from just \$30 billion in 2014. Analysts suggest that 59% of organisations now allow employees to use their own devices for work purposes.

However, security issues remain a concern. Of more than 500 SMEs polled in the UK, 61% said they had experienced a cyber security incident since introducing a BYOD policy, according to a study by SME card payment services firm Paymentsense.

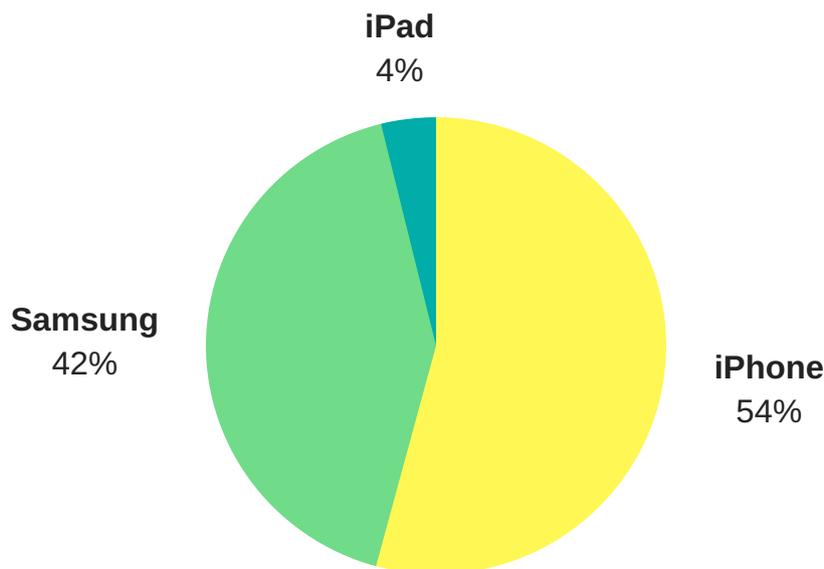
As part of our research, we also asked TFL to provide us with a breakdown of the 1,326 devices which were currently reported to be in use under the scheme.

The iPhone topped with list with 606 staff members registered that device under BYOD, followed by 469 Samsung devices and 43 i-pads.

On the lower end of the scale there were 19 Google Pixel devices registered, 19 Huawei devices, 15 for Sony Xperia and only 6 HTC devices.

Previous research from Infoblox conducted in 2013 revealed that there were 320 iPhones registered, and 178 iPad users. It is clear that in the last financial year at TFL, BYOD has increased dramatically.

## TOP THREE MOST POPULAR DEVICES UNDER TFL BYOD FOR THE CURRENT FINANCIAL YEAR





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**"WE TAKE PERSONAL SECURITY MANAGEMENT EXTREMELY SERIOUSLY AND EACH DEVICE HAS A UNIQUE PASSWORD"**  
**- TFL SPOKESPERSON**

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This research project has shed insight into one of the country's most complex organisations and revealed it to have a growing BYOD scheme. This is a bold move when you consider that many government departments have outlawed BYOD altogether.

Overall, TFL appears to be enabling its employees to work on devices relevant to their needs, thus saving time and money. Our research team provided the following recommendations moving forward to maximise the value of BYOD.

**1.) Aim to increase BYOD to 15% of the workforce in the next financial year**

This will need to be supported by an employee awareness campaign and necessary IT support to reduce overheads on TFL-purchased devices

**2.) Encourage data sharing via personalised devices**

TFL staff have a complex job, managing the performance of multiple transport services across a complicated network. It is vital that the organisation visualises important data and enables access to it via specialised secure apps.