

Volterra



Foreword

The Tube and London have always been inextricably linked. The Tube supports the city – but is also a great catalyst for growth. Now, for the first time in our history, we are in a position to run a continuous Tube service from Friday morning to Sunday night throughout large parts of the Capital.

London is already a 24-hour city, and it was always going to be a question of ‘when’ we would run a 24-hour service, not ‘if’. The demand is there. Over recent years our weekend passenger numbers on Friday and Saturday nights have soared by around 70 per cent.

Now, thanks in large part to unprecedented levels of investment and modernisation, we can deliver a Night Tube, and in doing so we can offer Londoners something very precious – more time.

More time for the care workers, nurses, waiters and bar staff, theatre staff, maintenance staff, cleaners and other shift workers who need to get to, from and across London to work.

And more time, and opportunity, for London's thriving night time economy to grow. Indeed, this report estimates that the introduction of the Night Tube alone will lead to an additional 1,965 permanent jobs alongside an output of £80m a year.

So my message to London is simple. Get ready. Consider what you would do with more time, and get ready for Night Tube.

Mike Brown, Managing Director, London Underground

If we were to build the Underground afresh today, there is little doubt a round-the-clock service would be part and parcel of it.

New York – ‘the city that never sleeps’ – has had a 24-hour subway since it opened 110 years ago. In Europe, Stockholm, Copenhagen and Berlin already have a night service, while Paris is examining the prospect right now.

Running the Tube through the night will help bring investment and jobs to the hospitality and entertainment sectors.

The city will become more attractive to tourists, while the extended service will make journeys safer and easier for staff who help keep this great city running.

It will also be hugely helpful in making the most of one of London's key competitive advantages – geography.

London sits in a plum time zone between East and West and this is a major reason so many international businesses are based here. Giving people easier access to the city, whenever they need it, will help companies communicate more effectively with the far flung markets they serve.

I predict that a year after the new service has been running, we'll wonder how we ever did without it.

Baroness Jo Valentine, Chief Executive, London First

Executive summary

Volterra has been commissioned by Transport for London (TfL) and London First to assess the impact on the night-time economy of the forthcoming Night Tube. This document provides a summary of the findings.

From 2015, the new Night Tube will see services continue throughout the night on five London Underground lines on Fridays and Saturdays. The service will open up London's night-time economy to a whole host of new opportunities, altering the way that people behave and the way that businesses choose to operate. It will support and help maintain London's status as a vibrant and exciting place to live, work and visit.

It is estimated that the Night Tube will lead to a gross impact of 1,965 permanent jobs. The net additional output produced as a result equates to an additional £360m¹ over 30 years (a standard length of time for a transport appraisal), which would increase the benefit cost ratio (BCR) to approximately 3.9:1 – greater than TfL's own estimate for the scheme.



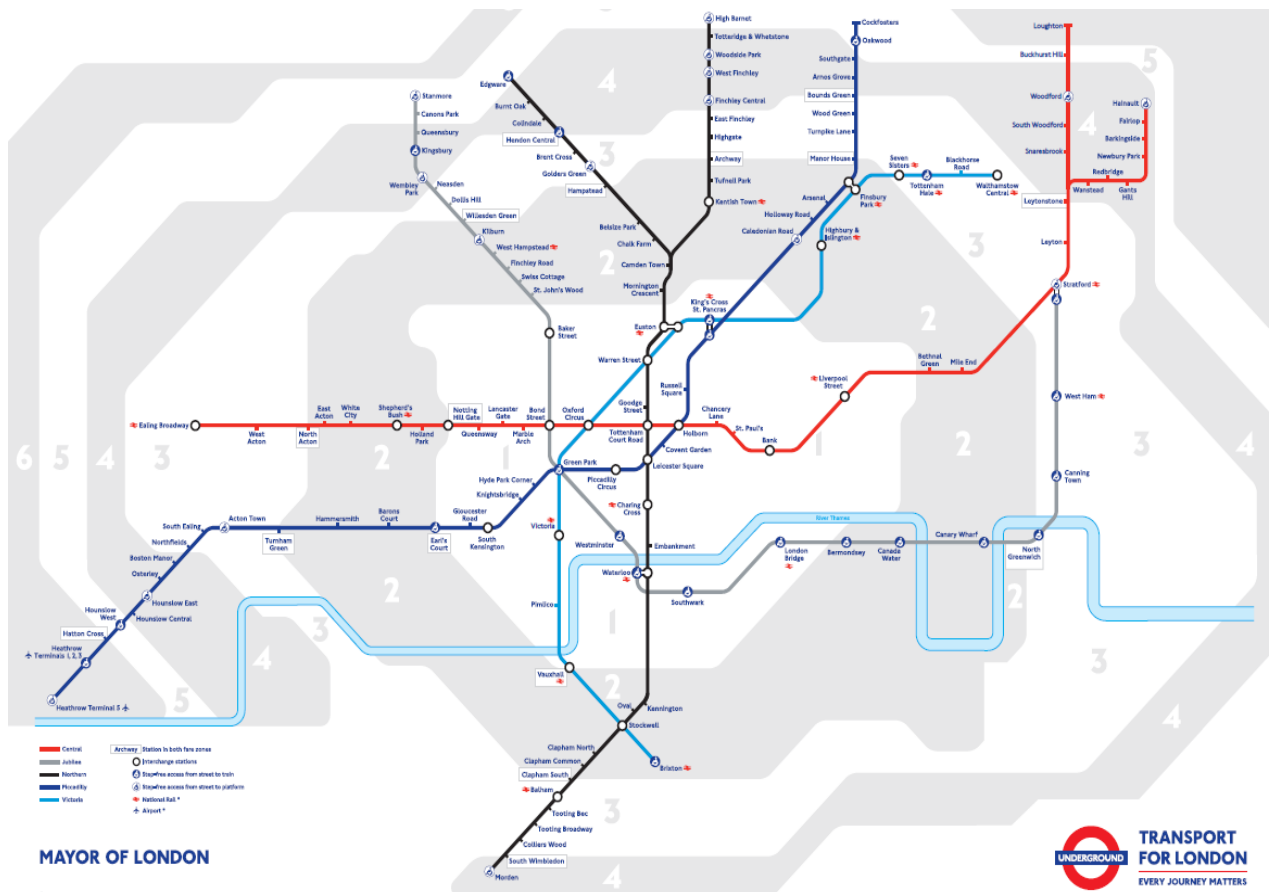
The way that the Night Tube can really add to the scale of economic activity and money circulating in the economy is by making London a more attractive place to live, work and visit – so that more people and businesses locate and invest here, and more tourists visit and spend money. Tourism was worth £16bn to London in 2013. For every £1 spent in London by a tourist, 78p is spent by an overseas visitor. Even if the Night Tube only has a marginal effect in retaining London's position as a top destination then this is beneficial.

London has never had an overnight underground service. In providing one, London will join New York, Chicago, Stockholm, Copenhagen, Berlin and Sydney, which all offer night time metro services to differing extents. London is the most visited city in the world and the most attractive city for Foreign Direct Investment. It is a place where people love to come to do business, to see the sights, experience the culture and heritage, to socialise and have fun. In order to remain globally competitive and attractive to investors and visitors it needs to continue to innovate and stay at the forefront. Introducing a Night Tube service will play a vital part in this.

¹ As a Present Value

<i>Quantifiable impacts</i>	<i>Unquantifiable impacts</i>
<ul style="list-style-type: none"> • We estimate that 1,965 permanent jobs will be supported by the Night Tube – 265 through direct operation of the service and 1,700 indirectly in the night-time economy, taking into account impacts on London’s night-time economy and the additional London Underground staff that would be required • Time savings will be on average 20 minutes but up to an hour will be saved on some routes • Standard business case shows that for each £1 spent on delivering the Night Tube, benefits will be £2.70 • Adding in wider economic impacts increases this benefit by £1.20 for every pound spent 	<ul style="list-style-type: none"> • Reduced demand for illegal minicabs, thus improved safety in taxis at night • Improved commuter journeys for many people who work during the night-time in central London but live further out • Potential for longer operating hours for bars, clubs, restaurants, bowling alleys, cinemas, museums, art galleries and attractions • Reduced congestion at stations after events at entertainment venues like the O2 as people are not in such a rush to leave to catch the last tube as events finish • Improved accessibility to Heathrow for passengers flying before 07:00 at the weekends • This would all contribute towards a more vibrant night-time economy in London, with a greater range of uses and a wider demographic • Help to retain London’s attractiveness to visitors, residents and businesses.

This summary is drawn from the full report, available at tfl.gov.uk/futuretube.



Source: TfL

Night Tube: The Proposal

TfL plans to start operating a Night Tube on the London Underground network starting from autumn 2015. This will provide a Friday and Saturday night-time service on five of the main lines: the Central, Jubilee, Northern (Charing Cross branch), Piccadilly and Victoria. The service on these lines will therefore operate continuously at weekends from Friday morning to Sunday night. A summary of the night-time service pattern is as follows:

- Central line: 3 trains per hour (tph) between Ealing Broadway and Hainault, and three tph between White City and Loughton (combined six tph between White City and Leytonstone). The West Ruislip branch is excluded due to lack of established demand
- Jubilee line: six tph between Stratford and Stanmore
- Northern line: four tph between Edgware and Morden, and four tph between High Barnet and Morden, both via Charing Cross (combined eight tph between Camden Town and Morden, with no service on Bank or Mill Hill East branches)
- Piccadilly line: six tph between Cockfosters and Heathrow Terminal 5 (excludes the Rayners Lane / Uxbridge branch due to lack of established demand)
- Victoria line: six tph between Walthamstow and Brixton.

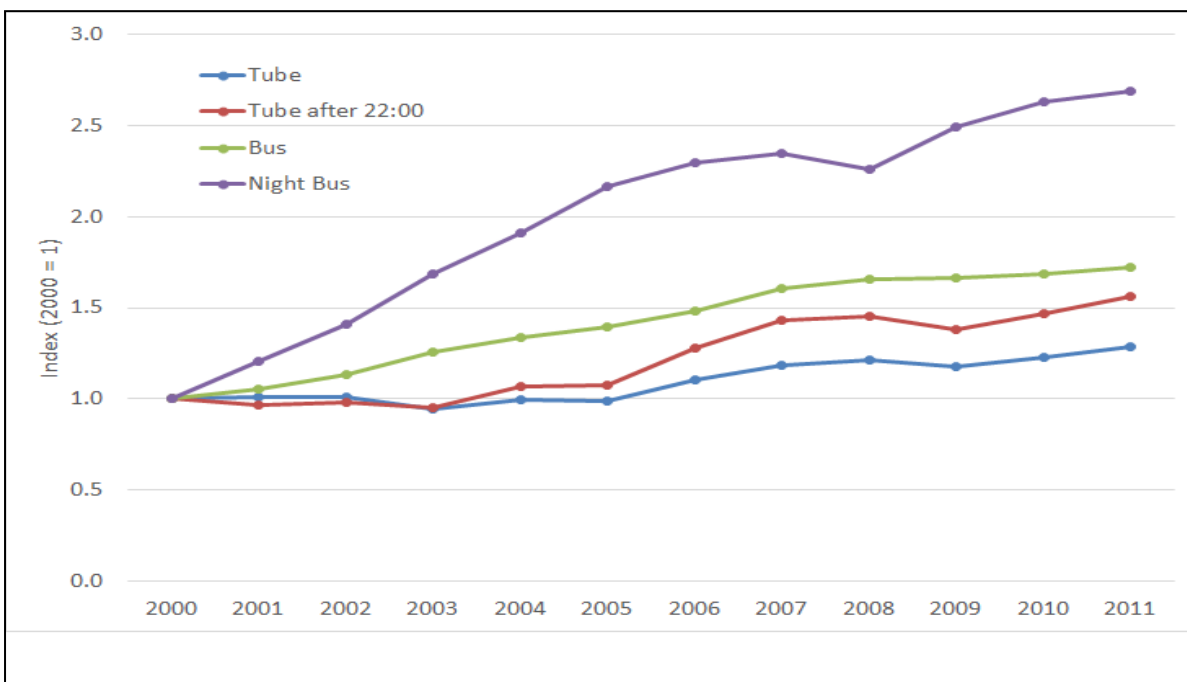
The exact routes served are shown in the figure above – all stations shown will be served, with no skipping stops.

Why we need it

Night bus usage has risen 170 per cent since 2000, with many users suffering delays due to having to wait for multiple buses before they can get on. Demand for night buses has outstripped all other forms of transport across London – daytime buses, Tubes and overland. Similarly, late night Tube ridership (after 22:00) has risen at around double the rate of daytime Underground trips.

Around 560,000 people use the Tube after 22:00 on Fridays and Saturdays already, equivalent to eight per cent of all trips, and this is only forecast to rise.

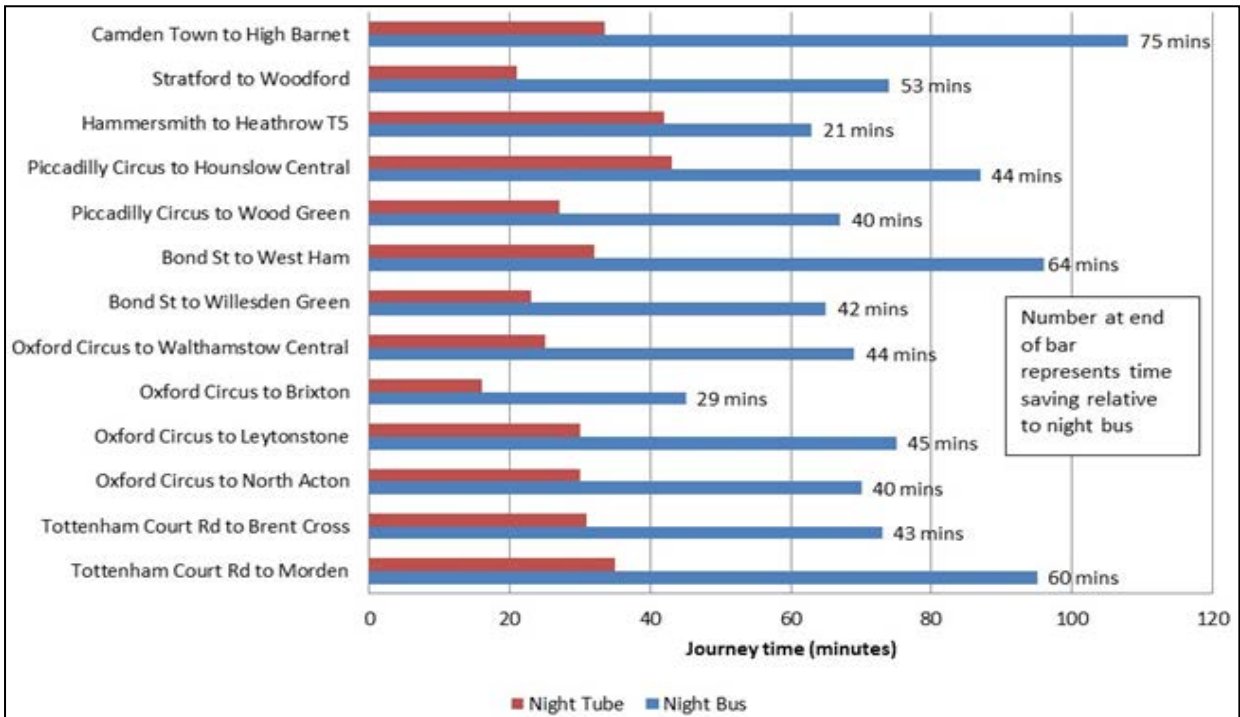
Demand for Travel 2000-2011 (Index: 2000 = 1)



Source: TfL

TfL's modelling suggests that nearly 180,000 trips will be made on the Night Tube between 00:30 and 06:00. Just under half of this is expected to be newly generated trips, with the remainder resulting from mode switch from Night Bus and taxis / private hire vehicles. Those who switch from Night Bus to Night Tube are estimated to get an average time saving of 20 minutes. The figure below highlights some of the larger journey time savings.

Night Tube journey time savings



Source: Volterra estimates

Case study: Taxi Driver

Demand for taxis at night is considered to exceed the capacity that legal taxis can currently provide. **Rather than being detrimental to London's taxi business, it is expected the Night Tube will instead remove demand for illegal minicabs.** When the Night Tube was originally announced, Mark Williams, a black cab driver for 12 years, was quoted in the press as saying *"I think it's great for Londoners. I don't think it will harm my trade... And it will deter people from using illegal minicabs"* (Financial Times, 21 November 2013).

Illegal minicabs still make up a notable amount of taxi travel during night hours in London. Over 170 arrests were made in just two crackdowns on illegal minicabs last year, as part of the Operation Safe Travel at Night, a joint initiative by the TfL-funded Metropolitan Police Service's Safer Transport Command and City of London Police.

Illegal minicabs are able to undercut fares offered by legitimate taxi drivers, as they avoid the costs associated with the legal permit process. **Further reductions in the activity of illegal minicabs will be of benefit to London's taxis, reducing the downward pressure on fares and increasing the reputation of safety.**



The business case

TfL has undertaken a cost-benefit analysis of the scheme based on the 'conventional' transport impacts. This suggests that the scheme has a BCR of 2.7:1. This means that for every £1 spent on it, it will generate £2.70 in benefits (time savings to users and fare revenue). Furthermore, it is financially positive as the additional fare revenue (estimated at £291m as a Present Value over 30 years) will outweigh the additional capital and operating costs (estimated at £287m).

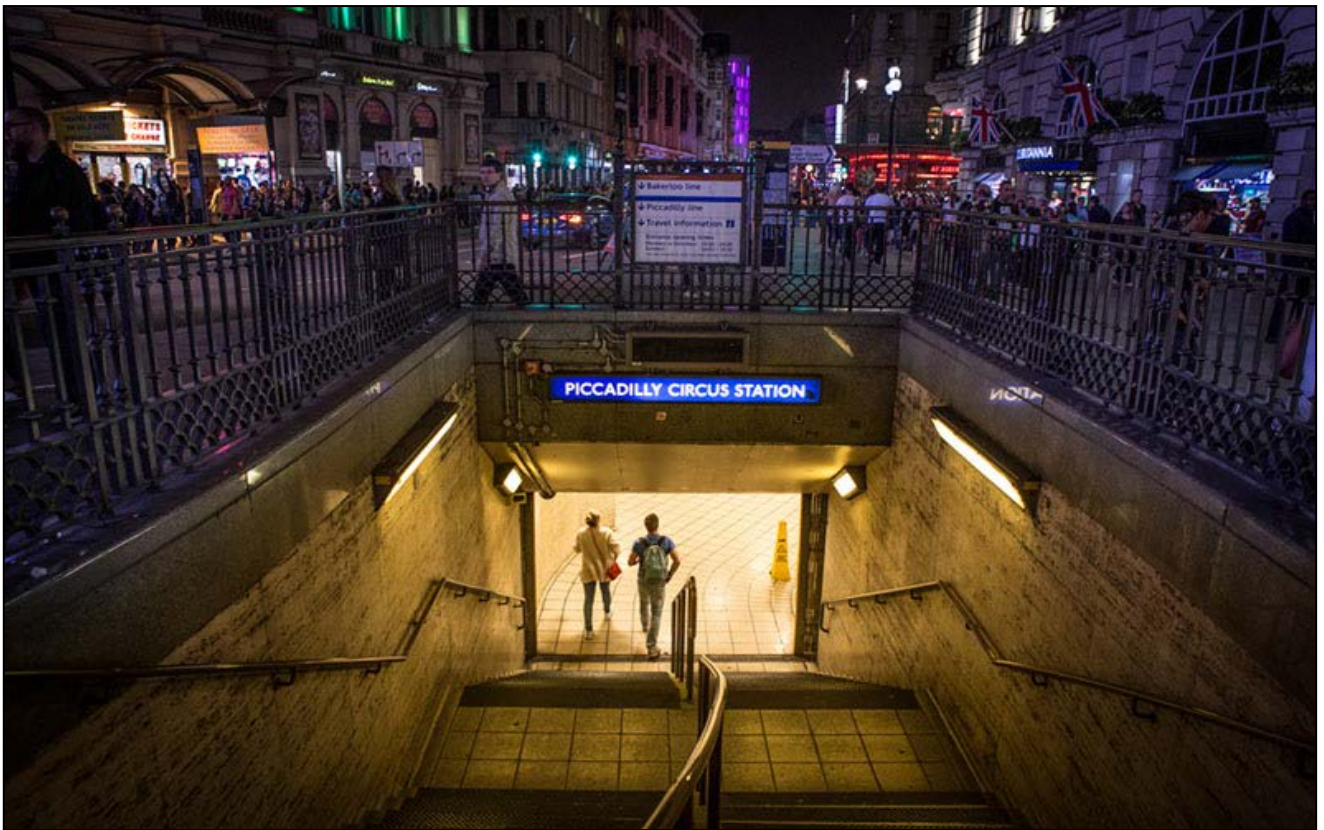


The wider case

Whilst it is important to assess the standard business case, this report seeks to set out the wider economic case for the Night Tube over and above this. This involves both a quantitative and a qualitative exercise. A Night Tube service will benefit a wide range of individuals: from people undertaking leisure activities and those in the hospitality sector through to tourists, shift workers, taxi drivers, office support staff and many more.

We have built a model that estimates a relationship between the size of the night-time economy and the Tube service and usage. It applies the most conservative assumptions about what could be additional in terms of jobs and economic benefits. **This results in an estimated gross impact of 1,965 permanent jobs – 265 through direct operation of the service and a further 1,700 jobs indirectly supported in the night-time economy.**

As previously stated, the net additional output produced as a result equates to an additional £360m as a Present Value over 30 years. This would increase the BCR of the scheme to approximately 3.9:1, which results in an extra £1.20 of benefits from every £1 spent over and above the standard TfL business case.



The Night Tube will open up London to a whole host of new opportunities, altering the way that people behave and the way that businesses choose to operate, for example:

- Theatres could start their shows later so that audiences can have a more leisurely pre-theatre dinner
- Retailers might start to open at night
- Museums and attractions may have more evening openings and events
- Restaurants may add an extra sitting
- Bands and entertainment events at venues such as the O2 might stay open longer, which could reduce the congestion caused by large numbers of people leaving at the same time
- Sporting events such as running clubs and organised races frequently start early in the morning, meaning that people have to drive to them: the Night Tube would offer an alternative to this.

These examples all serve to support London's place as a vibrant and exciting place to live, work and visit. Thus by improving the night-time offer, this makes London more attractive.

Case study: Night-time workers

Many different people work during the night. This includes those in the traditional leisure and recreation sectors but also many others including office cleaners, and other support functions such as IT maintenance and office removal. The emergency services, including health workers and the police, also work during the night.

London has a very wide labour catchment. People travel all across Greater London (and further afield) to get to work. Many of the positions that involve night-time working are low-medium earnings sectors. Generally, evidence tells us that the less people earn the shorter the distance they are willing to travel to work. However, recent Census 2011 information shows that this is less true in London than elsewhere across the country. Living in central London is often not an option for low earners because rents are so high.

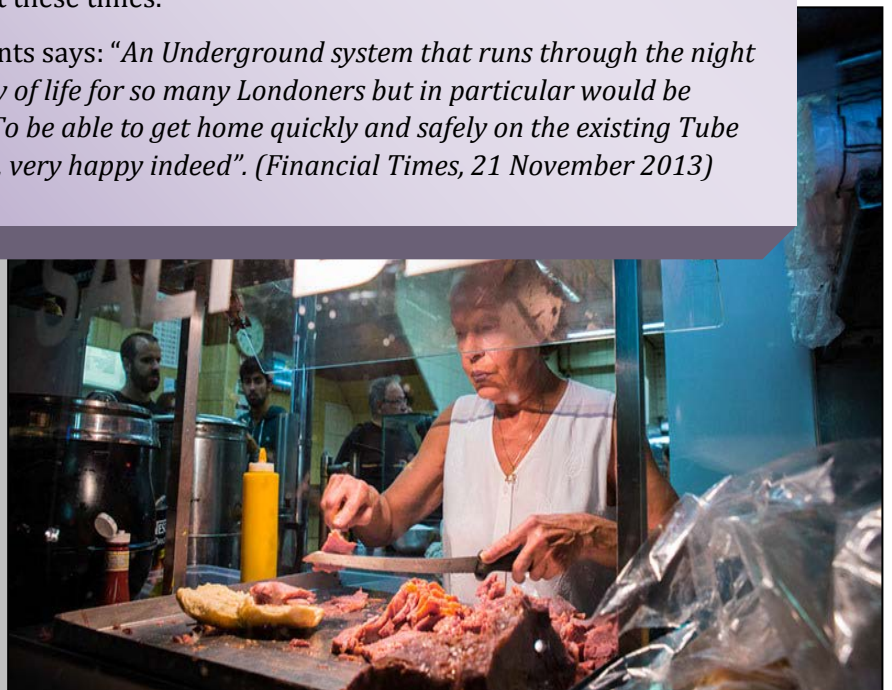
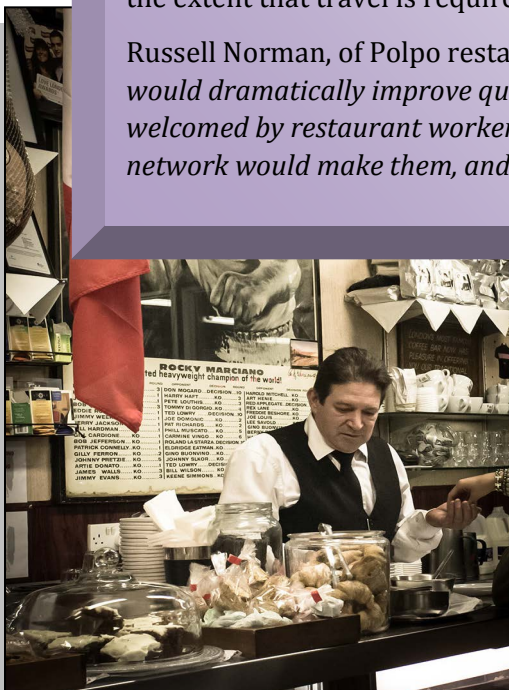
This means that many people working in night time roles in central London are likely to live out in Zones 4+. For example someone starting out their career in the food industry might currently work all evening at a restaurant and then spend several hours cleaning up, after which their current only option to get home is a time-consuming night bus.

Angela Hartnett, Chef Patron at London restaurant Murano, has recently commented on this issue: *“When I started out I lived with my aunt in south London and never had to worry about washing clothes or buying food. Now, with the average rent at £200 a week, you have to live in zone six. If I’m giving someone a hard time because they’re late, I have to remember that maybe they’re finishing [work] at one in the morning, then have a two-hour journey to Deptford”* (Evening Standard, 21 November 2013).

Getting a taxi home at the end of work is unlikely to be an option for lower earners. The opening of the Night Tube could bring major benefits to night shift workers in London.

The first and most obvious would be a reduction in commuting journey time for workers starting or ending their shift between the hours of 01:00 and 05:00 on a Saturday or Sunday, to the extent that travel is required at these times.

Russell Norman, of Polpo restaurants says: *“An Underground system that runs through the night would dramatically improve quality of life for so many Londoners but in particular would be welcomed by restaurant workers...To be able to get home quickly and safely on the existing Tube network would make them, and me, very happy indeed”.* (Financial Times, 21 November 2013)





Retaining London's attractiveness

The way that the Night Tube can really add to the scale of economic activity and money circulating in the economy is by making London a more attractive place to live, work and visit – so that more people and businesses locate and invest here, and more tourists visit and spend money.

London has never had an overnight underground service. In providing one, London will join New York, Chicago, Stockholm, Copenhagen, Berlin and Sydney, which all offer night time metro services to differing extents – some 7 days a week and other on Fridays and Saturdays, as proposed in London. Both Tokyo and Paris are looking to introduce an equivalent service to that being proposed in London.

London regularly ranks first on global city rankings – most recently ranking top in PwC's 2014 Cities of Opportunity index^[1], which scores 30 major cities on categories such as transport and infrastructure, economic clout, liveability and innovation. It is a place where people love to come to do business, to see the sights, experience the culture and heritage, to socialise and have fun.

[1] PwC (2014), *Cities of Opportunity 6*



In 2013, UK FDI stock, which is thought of as a suitable measure of long term investment, increased by 8.3 per cent from \$867 billion in 2012 to \$975 billion. Currently the UK has the highest share of total European FDI stock, at 19 per cent.

In order to remain globally competitive and attractive to investors and visitors, it needs to continue to innovate and stay at the forefront. Introducing the Night Tube service can play a vital part in this.

Tourism

The tourism industry is valued as being the third highest export in the UK, behind financial services and motor cars^[2]. Last year, a record breaking number of tourists visited the UK, 1.3 million more visitors than in 2012 and the highest recorded number of visitors since 2006^[3]. The amount of money spent by tourists in the UK has doubled since 2003. The value of London's tourism industry is estimated to be about £15.9 billion supporting 304,000 jobs^[4].

According to London & Partners, the large majority of tourist visits to both England and the UK overall are domestic trips. However, whilst London only accounts for 10 per cent of domestic visitors, 50 per cent of UK visits from overseas tourists featured a visit to London. London has consistently been one of the most visited cities in the world and has the highest number of international visitors in 2014.

^[2] Visit Britain, www.visitbritain.org

^[3] GLA Economics Tourism in London

^[4] ONS travel trends, 2013

Number of international overnight visitors by city, 2014

Rank	City	International overnight visitors, 2014 (millions)
1	London	18.69
2	Bangkok	16.42
3	Paris	15.57
4	Singapore	12.47
5	Dubai	11.95
6	New York	11.81
7	Istanbul	11.60
8	Kuala Lumpur	10.81
9	Hong Kong	8.84
10	Seoul	8.63

Source: Mastercard 2014 Global Destination Cities Index

Similarly, in terms of volume of spending, overseas visitors spent around £10 billion in London in 2012, whilst domestic visitors spent £2.8 billion.^[5] In 2013, for every £1 spent in London by a tourist, 78p is spent by an overseas visitor. Introducing a Night Tube service can help to retain London's strong appeal to overseas visitors and support further economic growth.

Even if the Night Tube only has a marginal effect in retaining London's position as a top destination then this is beneficial.

^[5] London Tourism Report 2012/13, London & Partners.

Case study: Tourist

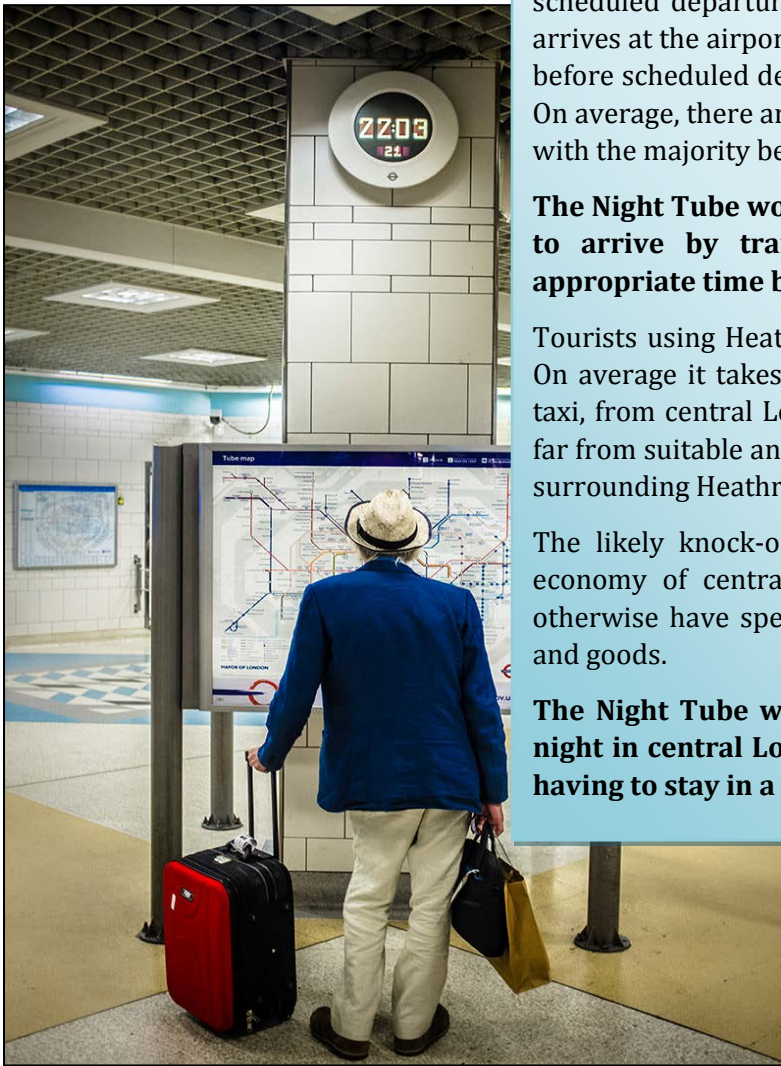
Advice on the Heathrow website advises long-haul passengers to arrive three hours, and European passengers to arrive two hours, before scheduled departure. The first Heathrow Express train in the morning arrives at the airport at approximately 5:25am. Even arriving 90 minutes before scheduled departure gives a safe buffer for flights only after 7am. On average, there are around 60 flights departing Heathrow before 7am¹, with the majority being to European destinations.

The Night Tube would therefore allow passengers flying before 7am to arrive by train, with ease from central London, with an appropriate time buffer before their scheduled flight.

Tourists using Heathrow arrive there by taxi or bus fairly infrequently. On average it takes up to 90 minutes by bus, and 30 to 60 minutes by taxi, from central London to Heathrow. For early morning flights this is far from suitable and so many tourists choose to stay in one of the hotels surrounding Heathrow.

The likely knock-on effect of this is lost revenue for the night-time economy of central London, where a tourist visiting London would otherwise have spent their time, with an associated spend on services and goods.

The Night Tube would give tourists the option to spend a further night in central London if departing over the weekend, rather than having to stay in a Heathrow airport hotel.





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