Driverless Trains

Efficient, Reliable, the Future

RICHARD TRACEY
GREATER **LONDON** ASSEMBLY
MEMBER

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CONTENTS

World city needs world-class mass transit 1

A Critique of the Status Quo 2

The Technology 3

Metros across the world 3

The status quo must go 4

Feedback 5

THE ARGUMENT FOR DRIVERLESS TRAINS ON THE LONDON UNDERGROUND NETWORK

WORLD CITY NEEDS WORLD-CLASS MASS TRANSIT

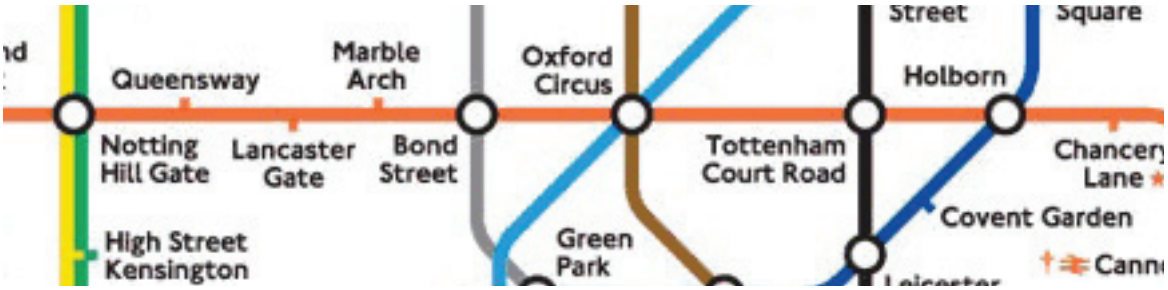
London is a world class city, it is at the centre of world finance, it is the largest conurbation in Europe and it has the continent's most extensive metro system. But that metro system, the London Underground, is sometimes third rate.

London played midwife to the birth of the underground railway in the nineteenth century. In the time that has followed other cities have built on the foundations it established. Now more than ever, London needs a world-class underground that befits its status. It needs higher capacity, greater speed, improved safety levels and increased efficiency. All those desirables are both obtainable and affordable. The key to unlocking this potential is driverless trains.

Driverless trains offer a safer, faster, more efficient level of service. Such a system would end the strangle-hold militant unions have on the city's tube network and seriously curtail their ability to bring London to a standstill. The Victoria and Central lines already use technology which has reduced train drivers to door openers. Current upgrade work will extend this to the Jubilee, Northern, Piccadilly, District, Circle, Hammersmith and City and Metropolitan Lines.

With the recent decision to bring TubeLines under the control of Transport for London, this is the time to switch to a completely driverless train network. The more modern trains already in operation and those due for upgrade are compatible with driverless train technology.

This memorandum aims to convince you that not to push for a driverless trains system in the near future, has the potential to retard the development of the Underground as a first class mass transit system. The recent economic crisis should be a wake up call to the capital, a failure to deliver an efficient mass transit system could jeopardise London's position as the leading global city.



A CRITIQUE OF THE STATUS QUO

The system of driverless trains is often referred to as RTO or Remote Train Operation. The trains are controlled by a remote computer.

Under the current upgrade work taking place on the Tube, technology known as Automated Train Operation is being introduced. This technology reduces Tube train drivers to door operators. It also acts as the technological foundation for the installation of driverless systems, known as Remote Train Operation (RTO) Richard Parry, former managing director of London Underground stated that "moving to RTO is technically possible" but said "we have no plans to adopt RTO systems" this seems absurd. The annual cost of employing trained drivers is high. At present the average train driver earns £40,000 per year. Figures provided by your office in November 2009 state that there were 3,525 operators across the network. That translates into an approximate wage bill of £141,000,000 per annum. If Transport for London decided to transfer to Remote Train Operation, the year on year savings would provide much needed funds to divert into transport infrastructure projects that have been put on hold due to the lack of resources.

Against this background of substantial savings, it is important to recognise the poor state of industrial relations between London Underground management and train operators. Between 31st December 2005 and 23rd December 2009, there were 20 days of strikes. All of these actions were called by the National Union of Rail, Maritime and Transport Workers (RMT). Between the 21st April 2005 and 23rd December 2009 there were 34 strike ballots involving the RMT and other unions. The estimated cost in loss of ticket revenues through industrial action is estimated by Transport for London to stand at £36,000,000. The damage inflicted on the wider London economy is hard to calculate, but common sense would suggest that there would have been significant cost to business as a result of workers being unable to get to work and to carry out their jobs. The stress to the travelling public caused by strikes, is immense.

THE TECHNOLOGY

There are various degrees of automated systems that could be employed on London Underground. First there is STO (Semi-Automated Train Operation) which is a system with train drivers. Secondly, there is DTO (Driverless Train Operation), a system with only an attendant aboard the train, acting in case of problematic conditions. Thirdly there is UTO (Unattended Train Operation) which is a system without any staff on the trains. It is this third option that should be implemented by Transport for London. The UTO system means that all functions, including braking, acceleration, coasting, and train doors are automated. The UTO system controls the train according to the time table and has the added benefit of delivering a higher frequency service, and corresponding reduction in energy use. The savings in wages and benefits for train drivers would translate into financial savings in the long term, even if there is a need to invest additional monies in the short term.

The switch to a driverless train system need not mean mass disruption for the travelling public. Many of the companies with the capability to install such technology are able to do this through a migration strategy, offering a smooth transition from old signalling systems to new driverless train operations.

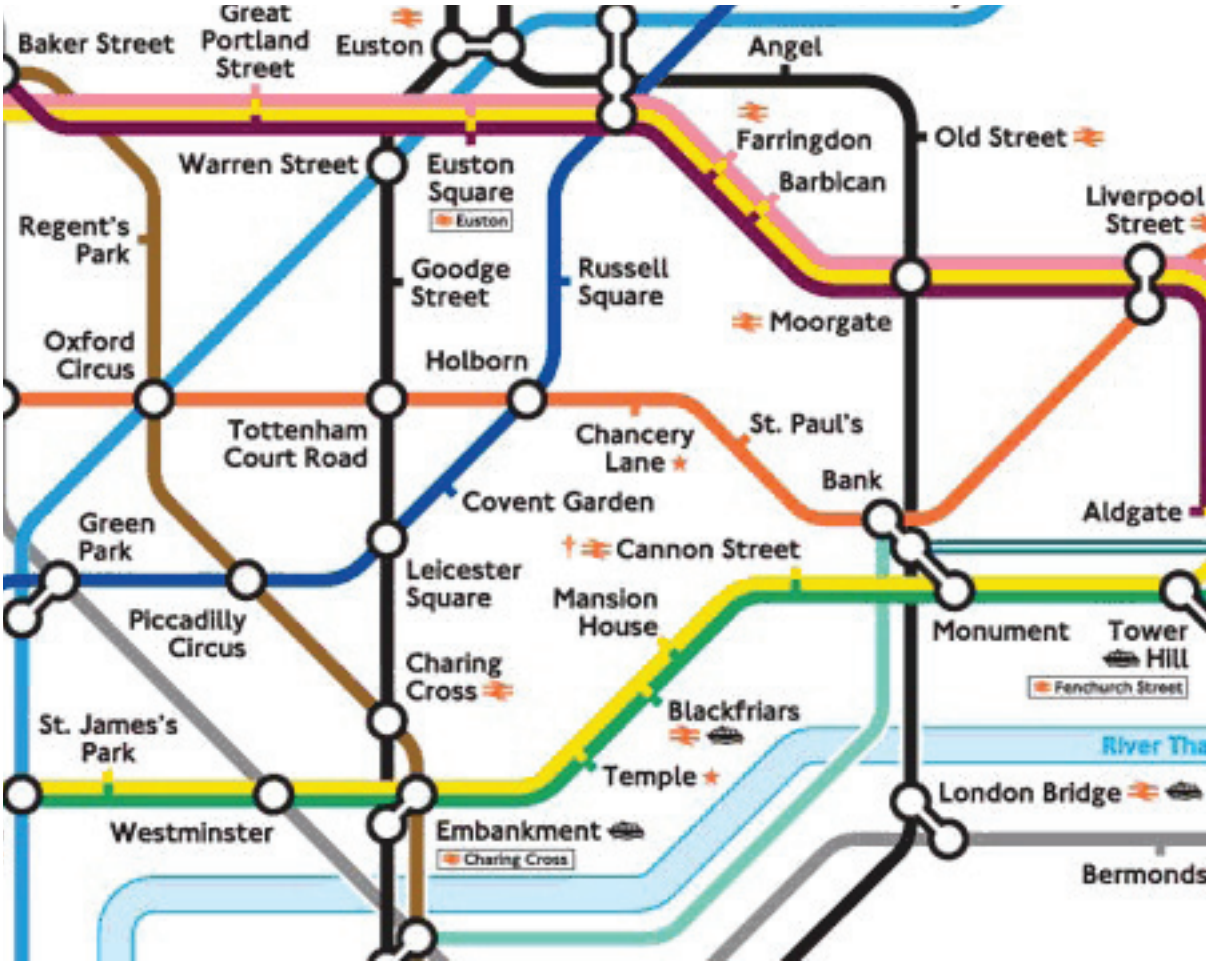
METROS ACROSS THE WORLD

Many metros across the globe are now switching to driverless train technology. Paris Line 1, the oldest line on the city's metro system, is now switching to such driverless train operation. Similar schemes are being implemented in Budapest, Sao Paolo and Barcelona. The Sao Paolo Via Quatro will be the first driverless train metro line in South America. In Singapore there already exists a driverless train metro, operating since 2003. London risks falling behind other major cities, by failing to invest in driverless train operation, which can move more people, more smoothly, and

more efficiently. If Sao Paolo, a much less developed city than London can introduce a driverless metro system, why cannot the centre of world finance do the same?

THE STATUS QUO MUST GO

London is a city that thrives on its diversity and flexibility. It is imperative that London stays ahead of international competition. A key to the success of any city is the ability of its populous to travel around it quickly and with ease. London led the world with the first underground system, now Sao Paolo is using technology more advanced than our own metro, this seems absurd. Londoners cannot be beholden to unions, stuck in the past, demanding pay and conditions that the capital can no longer afford. Now that TubeLines is under control of Transport for London, this is the ideal time to think radically about the future of the London Underground. In this age of austerity, as public servants, we must look to deliver value for money for the people we represent. Driverless trains, efficient, reliable, the future.



FEEDBACK

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Email: Assembly.Tories@gmail.com

RICHARD TRACEY
GREATER **LONDON** ASSEMBLY **MEMBER**
Greater London Authority
City Hall
The Queen's Walk
London SE1 2AA