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Politics and transport met head on with the controversial partial privatisation of the London Underground. How successful has it been?

# Funding London Underground's **investment programme**

Mark Gannon CMILT, Westminster Business School, University of Westminster, takes a hard look at the partial privatisation of the tube. He discovers how successful and effective the funding initiatives have been.

Since 1990, London Underground Limited (LUL), a public transport organisation, has been through a series of significant organisational and funding initiatives. Organisational initiatives have been aimed at improving performance and making the organisation more efficient. Funding initiatives have changed the way in which it funds and delivers its intensive capital investment programme. The most notable initiatives have included: a value analysis project to restructure the company entirely, the Company Plan, during 1991-92;

the Make or Buy Review, during 1995-98, the signing of six private finance initiatives (PFI) projects; and the controversial public-private partnership (PPP), the partial privatisation of the tube.

## Background to PFI/PPP

Public-private partnerships (PPP) bring together the public and private sectors in a long-term partnership. The private finance initiative (PFI), a form of PPP, was an ingenious initiative, often argued as privatisation by

## Number of PFI/PPP deals signed by public sector department in the UK 1987-2004<sup>3</sup>

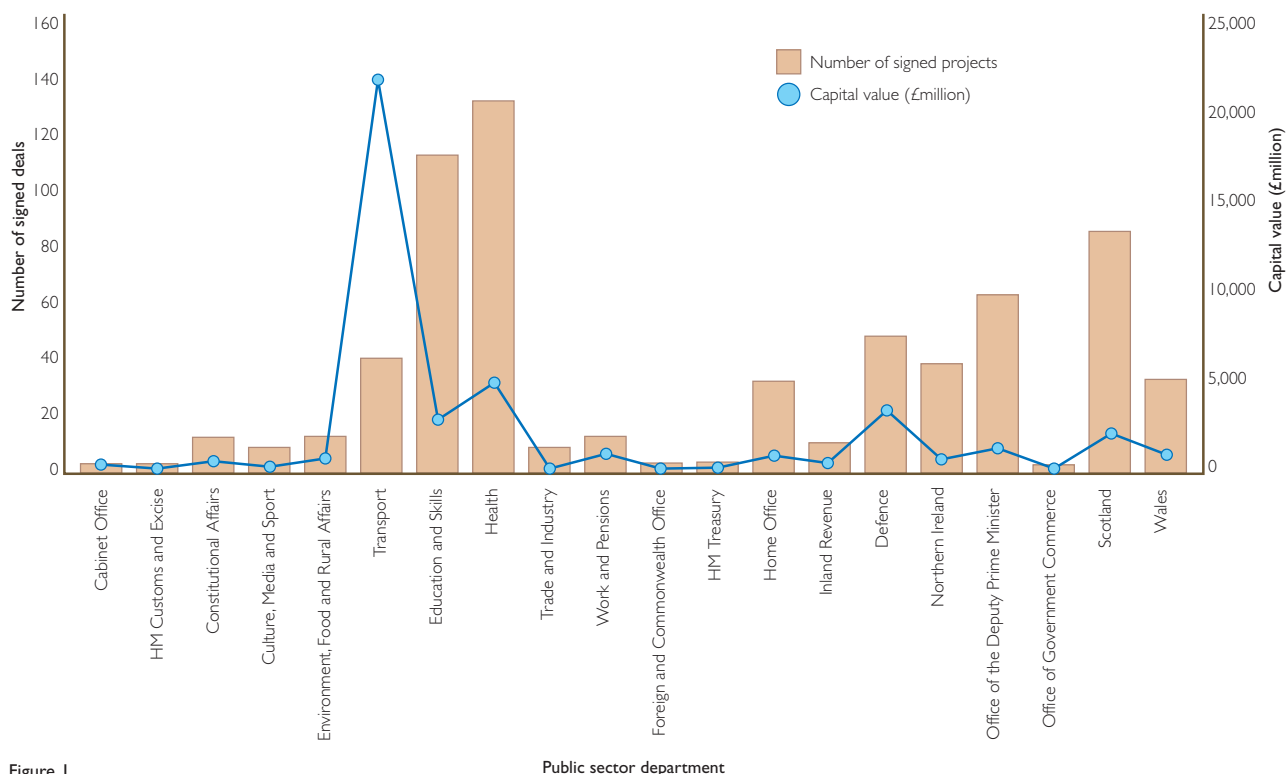


Figure 1

stealth, developed by the Conservatives to follow on from Margaret Thatcher's privatisation campaign.<sup>1</sup> It has been an innovative means by which the public sector has attracted the private sector to invest in public services. The principle of PFI is that the public sector contracts with the private sector on a long-term basis, often between 20 and 30 years, to deliver services to the public sector rather than an asset.<sup>2</sup>

Between 1987 and 2004, private capital of approximately £40 billion has been invested in 626 projects, some of this before the introduction of PFI/PPP, across 20 different public sectors departments – see Figure 1. The most significant of the expenditure and most complex projects have been within the transport sector, where nearly 50% of this expenditure has occurred. At present, PFI/PPP represents an extremely important method to Her Majesty's Treasury (HMT) of financing public sector projects.

### London Underground Limited

#### The business

LUL has a significant fixed asset base valued at nearly £9 billion that requires substantial investment.<sup>4</sup> It has been this investment that has been under funded by a series of governments. The system carried nearly three million passengers every weekday, generated £1.24 billion revenue and incurred £1.66 billion operating costs, including PFI costs, in 2003. Quite notably, operating costs have been increasing over time, representing an increase of two and a half times that in 1995/96, despite fares revenue only increasing by only one and a half times.

#### Sources of funds

LUL has two sources of income: primary and secondary revenue; and receives core and ring-fenced grants from Government. Core grant is for investment in the operating system and ring-fenced grant is for investment in major projects, such as was the case with Jubilee Line Extension (JLE). LUL's principal source, of course, was the operating profit that the business was able to generate. Naturally, its ability to increase this was dependent on its continuation to operate more efficiently and the gross margin increasing as improvements in revenue and cost efficiencies were delivered. What LUL did not have was the ability to supplement its income with external borrowing, despite the enormous income generated. Therefore it needed to turn to PFI as a third source of funds to support its investment programme.

#### PFI applied to LUL

LUL has successfully signed six PFI/PPP deals that are a mixture of network-wide and line-based contracts: Northern Line Trains Service Contract (NLTS); Power; LT Prestige, now renamed Oyster; Connect; British Transport Police; and the Piccadilly Line Extension to Heathrow Terminal 5 (PicEx T5). The total worth of the PFIs signed represents nearly £6 billion over the term of each contract and has a capital value of nearly £1.7 billion.<sup>5</sup> Table 1 provides an overview of each of the PFI contracts signed and the management of the contract since PPP has been signed.

#### Public-private partnership

Shortly after the Deputy Prime Minister's announcement on 20th March 1998, LUL was dismantled into four

## PFI/PPP contracts signed between 1995 and 2004<sup>6</sup>

| PFI/PPP contract   | Contract overview   | Contract term and value  |
|--|---|--|
| Northern Line Train Service Contract (NLTS) Signed: April 1995 | GEC Alsthom to design, build, deliver and maintain 106 trains for the Northern Line                         | 20-year contract worth £1.1 billion. Contract managed by LUL before the PPP, but now managed by Tubelines consortium |
| LT Prestige Signed: August 1998                                | Transys to provide and maintain a new ticketing system for London's Underground and buses                   | 17-year contract worth £1.1 billion. Originally signed between LUL and Transys, now managed by TfL                   |
| Power Signed: August 1998                                      | SeeBoard to provide and maintain a new power system with pick up from the National Grid                     | 30-year contract worth £1.2 billion. Originally signed by LUL, now managed by TfL                                    |
| British Transport Police Accommodation Signed: March 1999      | Construction and maintenance of police station facilities for British Transport Police                      | 23-year contract worth £50 million. Contract managed by TfL  |
| Connect Signed: November 1999                                  | Connect to provide and maintain a new integrated radio and communication network for LUL and its interfaces | 20-year contract worth £1.2 billion. Contract managed by TfL   |
| Piccadilly Line Extension to Terminal 5 Signed: August 2004    | BAA with Tubelines Consortium to extend the Piccadilly to Heathrow Terminal 5 due open in 2008 <sup>7</sup> | 20-30-year contract worth £300 million. Contract to be managed by TfL  |

Table 1

distinct organisations: an operating company – Opsco; and three infrastructure companies – BCV Infracos, JNP Infracos and SSL Infracos. Opsco had responsibility for running the trains, stations and safety, and the three Infracos had responsibility for funding, renewing and maintaining LUL's assets – see Figure 2.

The four public sector organisations were shadow run for three years to ensure the contracts and performance regime was fully tested and modified, where needed, prior to transferring the three Infracos to winning private sector bidders. After an extended transaction period, principally due to political debate and an underestimation of the bidders' costs by the public sector and its advisors, the contracts were eventually signed between December 2002 and April

2003. The three Infracos were acquired by: Metronet, which won two of the Infracos – BCV and SSL; and Tubelines, which won JNP Infracos. The contract is expected to attract £15.7 billion of investment over 30 years to the tube, with £9.7 billion, 2002-03 prices, in the first seven and a half years.<sup>8</sup>

The PPP contract between LUL and Infracos is based on a performance and payment regime that incentivise the contractor to perform. The infrastructure service charge (ISC) is comprised of three components: capability, availability and ambience, each necessary to incentivise contractors to deliver improvements to the system. The private sector's ISC is derived from surplus revenue; and a capital grant provided from the Department of Transport (DfT) to Transport for

The Jubilee Line Extension resulted in an improved service, but it was affected by delays and performance issues. These problems helped pave the way for the PPP initiative.



## PPP contractual structure

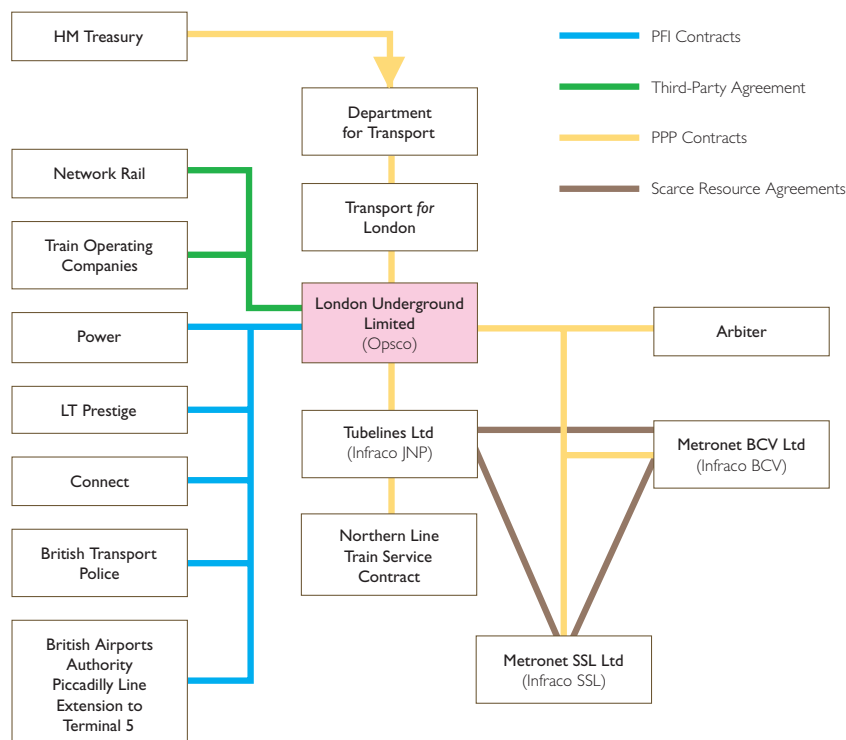


Figure 2

London (TfL) to LUL, which totals nearly £9 billion over seven and a half years, is required to cover the infrastructure service charge payable to the private sector consortiums.<sup>9</sup>

Although the contract term is 30 years, there are three review periods every seven and half years. During the transaction, bidders were required to submit fixed prices up to the first review period thereafter prices were not fixed. An arbitrator will oversee along with LUL the tender process for the second review period.

Figure 3 shows the grant provided to LUL for core investment and ring fenced grant provided for JLE. The years 1990/01 to 2003/04 are outturn, 2005/06 is estimated and 2006/07 to 2009/10 are planned. Since the signature of the PPP, core grant to LUL has increased substantially. However, it is for the private sector, rather than the public sector:

### Project reviews

Due to the public attention the PPP attracted, it was clear the UK Government would need to instruct reviews to ensure the PPP offered value for money (VfM). Six public sectors ordered that reviews be undertaken: Ernst and Young carried out an independent review of the Public Sector Comparator; used to assess the PPP's value for money; the National Audit Office (2004) reviewed the financial analysis conducted on the PPP option vs alternative options and later investigated whether the PPP were good deals and whether the PPP were likely to be successful. Then three reviews were ordered by the House of Commons and were undertaken by the Transport Select Committee in winter 1998, spring 2000 and autumn 2001. The last three reviews clearly reflected the concerns the Transport Select Committee had about the UK Government's proposals for LUL and its impact on the London and UK Economy.

## Discussion

### PFI

The main advantage of PFI to LUL was that by agreeing service contracts it allowed the public sector to bring forward the benefits of major projects and to improve the system far more rapidly than would otherwise be the case if left to be funded by government grant. The projects undertaken, many of them very large in scope, brought rapid improvements, especially given LUL's continuing need for infrastructure maintenance and renewals. It gave LUL access to private sector innovation and efficiency that had a benefit in terms of LUL picking up best private sector practice in many areas; and, of course, it claimed to provide LUL better value for money.

Whilst the cost of each PFI transaction was significant for LUL and bidders, implementing more PFIs in a network and line piecemeal would have led to overly complex contractual interfaces and enormous contract management disputes and costs. However, despite the setbacks with PFI, it did provide LUL and the Government with a learning experience and a valuable market-tested pilot. This has provided a platform on which to base the PPP, the controversial route that was eventually used to solve the major problem of providing the urgently needed investment for the tube. The main problem with PFI was that it did not provide a solution to the funding problem soon enough to solve the huge investment backlog, estimated to be £1.5 billion.<sup>12</sup>

### PPP

The JLE suffered significant cost overruns and time delays and the Central Line upgrade similarly suffered significant delays and poor performance. LUL's record in managing large-scale projects had been poor and was used as a means of justifying the PPP by the UK



Government. It was these assumptions that were built into the financial analysis comparing options for the PPP and the VfM assessment.

PPP has provided access to private sector efficiencies and practices, as with PFI. However, it has come at a price, some of which was not envisaged until the bids were submitted. The PPP now requires a total grant of £8.882 billion, broadly £1-1.1 billion a year – again, see Figure 3 – spanning a seven-year period, that is payable to Infracos, plus a contribution from LUL's net operating revenue to meet the ISC payments.<sup>13</sup> The ISC paid in 2003/04 by LUL to the private sector totalled £1,074 million<sup>14</sup>: net of £7.5 million of bonus payments and £15.9 million of abatements. In 2004/05, this rose to £2,220.2 million<sup>15</sup>: net of zero bonus payments and £18.9 million of abatements.

The VfM analysis for the PPP was subjected to much review and debate. The Transport Select Committee<sup>16</sup> concluded that there were differences in the opinions of engineering and finance experts with the assessment of VfM. It was also noted that there was considerable risk to the public sector that bidders would inflate prices after the first review period. Clearly, the VfM analysis was driven by assumptions about the public sector in comparison to an efficient private sector. The Transport Select Committee review queried how realistic a VfM could be over 30 years, especially when bidders were asked to submit fixed bid prices for just the first seven and half years.

## Conclusion

LUL has patiently but successfully applied PFI to fund six large-scale capital projects amounting to a capital value

of £1.7 billion. The Piccadilly Line Extension to Heathrow Terminal 5 used the PPP structure. However, continuing using PFI would have led to overly complex contractual interfaces between projects, and high contractual set-up and contract management costs. PFI had its limitations, but it did provide a useful learning curve for LUL, the DfT and HMT that provided a natural progression to the PPP.

It is clear that all LUL's stakeholders agree over the requirement for investment in the system. The dispute over the PPP centred on the way in which the system would be procured and funded. Although PPP provided a means of funding LUL's considerable investment backlog, built up over several decades of under funding, it has come at a cost not forecast in the original scheme.

The PPP was a major project that was politically motivated and signed at a high cost, as is demonstrated by the significant public sector capital grant, in order to remove the LUL liability from the Treasury. The VfM analysis was underpinned by assumptions and it can be argued that these will provide all answers to all questions depending upon the assumptions used.

However, the key question that will remain to be asked by all stakeholders is: should LUL have remained in the public sector provided with stable funding by the HMT conditional on achieving efficiency savings and performance improvements claimed by the private sector? The decision is undoubtedly clear for all to see, but your perspective will be biased by your stakeholding in LUL.

The LT Prestige card (now Oyster) was an early PFI/PPP contract, worth £1.1 billion over 17 years



## Outturn, estimated and planned capital grant provided to LUL by the Department for Transport since 1990/91<sup>10 11</sup>

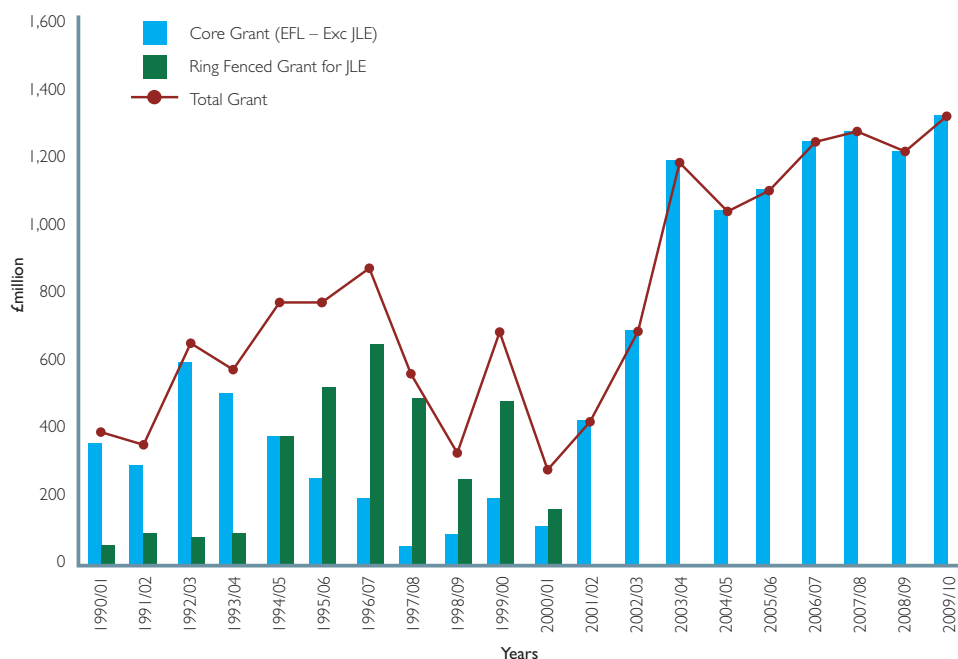


Figure 3

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## About the author

**Mark J Gannon CMILT** has developed a wide range of project management, commercial and analytical expertise through working on some of the largest and most innovative transport-based PFI/PPP projects in the UK. He has published 28 papers, mostly in the PFI/PPP field. He is a freelance management consultant and a senior lecturer at the University of Westminster Business Schools.

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