

London underground



**ASSIGN
BUSTER**

London Underground

PROBLEMS IN STRATEGY

London Underground is a vital public asset and a cornerstone of London life. It is the single most important part of its public transport infrastructure. It carries three million trips per weekday, including the journey to work trips of 35% of those who work in central London. The Underground now carries approximately the same number of passengers as the entire National Rail Network in the UK and generates over £1. 1 billion in fares revenue and other income annually. London Underground is vital to London's world city function and is the backbone of the transport system serving the central area. It is fundamental to passenger transport for London business and tourism, with over 90% of tourists using the Underground during their stay in London. The Underground is essential for access to London jobs, shopping and leisure activities. As this system is so big, it got lot of problems in its strategy.

1. London Underground should be transferred to Transport for London without further delay

The Transport Strategy sets the framework for the city's integrated transport system, of which the London Underground is a vital part. The Mayor has had regard to national policy. However, in order to facilitate the implementation of the Strategy, in particular to achieve integrated transport across all modes in London, it is proposed that London Underground should be transferred to Transport for London (TfL) without further delay.

2. The Underground's chronic problems of unreliability and Over crowding

Passengers require a quick and reliable service without the current high levels of failure and delays. Service unreliability is a severe barrier to travel in London and addressing this, together with overcrowding and inadequate capacity for current and projected growth is an urgent priority. This Service should be secure and safe; its capacity must be increased by bringing the system to a state of good repair and long term through the extension of network.

Overcrowding is now experienced across the Underground network, particularly at peak times, and most noticeably on sections of the Central, Piccadilly, Victoria and Northern Lines. Large parts of the network carry more passengers than the ' planning standard' (broadly a maximum of one person standing for each sitting across the whole peak hour) allows – in some cases more than 25 per cent above (see figure 1 on current crowding, and figure 2 for 2011 projections without Transport Strategy actions). In the short term, making the trains run more regularly through more efficient operations and improvements to the existing network will, in itself, increase effective capacity but this will not be sufficient to cater for the expected growth in Underground usage and the problems of overcrowding will get worse. To meet this rising demand, additional, new capacity must be provided.

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Figure 1: Underground crowding in 2001, AM peak (07. 00-10. 00)

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Figure 2: Projected Underground crowding in 2011 without Transport Strategy, AM peak (07. 00-10. 00)

3. Service delivery

The Underground's performance falls significantly below what is required. It is grossly overcrowded and unreliable. Overcrowding is extending through a longer proportion of the day and delays are becoming more frequent and of greater duration. Due to inadequate investment and maintenance over many years, equipment failure – of signalling, power supply, escalators and trains – has become common. As a consequence, many of the London Underground's quality of service indicators are falling. The immediate task must be to improve the worst performing lines, and then raise the overall standard. Whilst most lines are operated to capacity in the peaks, in some cases peak capacity has fallen. Had the system been properly maintained greater peak capacity would be available. They will need to take account of its demand of night time maintenance.

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Figure 3:- Reliability: percentage of scheduled Underground kilometres operated

London Underground estimates that 60 per cent of delays experienced by passengers on the Underground (measured as total passenger minutes lost in delays of two minutes or over) are caused by infrastructure and rolling stock failures. One estimate (Chantray Vellacott DFK's ' London Underground Disintegration Index') is that breakdowns of service due to such causes

increased by one quarter between 1997 and 1999 and have now stabilised at that level. Such failures are largely attributable to insufficient investment. In addition, even new infrastructure such as the

Central Line and the extended Jubilee Line is not delivering planned service frequencies and reliability. Additional investment will be needed to put this right, which must be better managed than has been the case previously.

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Figure 4: Peak period train cancellations due to train, signal and track failures, December 1999 to November 2000

4. Escalator and lift failures

Escalator and lift failures are another major cause of delay and discomfort to passengers. In 1999/2000 one in twelve escalators was out of order at any one time. While major works are needed to improve the quality and expand capacity of stations, there is an urgent priority to tackle the unreliability of existing assets. Too many lifts and escalators are out of service and basic maintenance of assets has been neglected. Tackling these problems is an urgent priority

5. Financial Problems

Most of the Underground's underlying infrastructure is nearly a 100 years old. In refurbished system maintenance expenditure could be substantially higher than in recent years, in the near term, since declining levels of Government grant have meant that, despite steeply rising fares, a considerable backlog of works has built up. These works have not been detailed and costed. Major improvements to the existing system, as well as extensions to the network, will require additional funding. If this is not

available, progressing these works would have to be funded from the ‘standard’ budget at the expense of expenditure on the rest of the network.

If we compare World City Metro fares, we will see that, In London, to cope with the reduction of Government grant, prior to 2001, Underground fares have been increased above the rate of inflation every year since 1988 – rising overall by one-third. As figure 4C. 5 shows, London Underground fares are now twice as high as Paris and Tokyo, and a third higher than New York and Berlin. In short, the burden of funding has been shifted on to passengers. But while London Underground’s fares revenue has increased substantially, from £637 million in 1993/4 to £1, 058 million in 1999/2000, this rise has not been enough to provide for the Underground’s necessary investment given the decline in Government grant.

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Figure 5: WorldCity Metro fares

London Underground’s proposed Public Private Partnership

The Mayor is conscious of the legislative requirement that he must have regard to the need to ensure consistency between the Strategy and the Government’s national policies. He has had proper regard to this need in formulating his proposals for the funding of the Underground.

The Mayor recognises that the proposals on how to rehabilitate the London Underground are a departure from the way in which London Underground Ltd (LUL) has proposed to implement the particular kind of Public Private Partnership (PPP) for the Underground set out.

Plan to rehabilitate and modernise the Underground

Under the plan proposed by the Commissioner and adopted by the Mayor, TfL would be directly responsible for the planning and management of a broad programme of upgrade and improvement, whilst reaching out to private firms to carry out specific, discrete responsibilities.

Through managerial reforms and professional recruitment, TfL will strengthen the project and programme management capabilities of the Underground. TfL will then be able to properly evaluate and effectively monitor the performance of private sector contractors working on its capital programme pursuant to long term contracts for services.

6. Stations, interchange and parking at stations

It is vital that the programme of station modernisation and refurbishment is realistic and properly prioritised so that the stations most in need of renewal are modernised first. At a number of locations, such as Victoria and Tottenham Court Road, major station works are needed to deal with congestion, the general increase in usage and/or particular increases that will arise from the proposed cross-London links. Additional action is needed to encourage interchange away from congested central area stations to interchange hubs which are further out and less busy.

Overcrowding is not, of course, the only reason that additional train services or station improvements are needed. Providing the passenger with a better service all rounds is important. Interchange is a key part of many Underground journeys and physical interchange difficulties will be addressed at many stations by new build or refurbishment schemes. Interchange does, however, need to be looked at across the network and in terms of

interchange in its widest sense. TfL is currently working on an interchange agenda to be published in 2001. This will assess interchanges, identifying the minimum standard of facility required in each category, and identify priorities for improvement.

TfL and the London boroughs will look at the wider issue of access to stations and their integration with their catchment areas by improved access from feeder modes, including walking, the most common means of access to the Underground, and cycling, and the provision of safe and secure street environments. With the exception of some 'end of line' stations, most parking at London Underground stations is generated from the local catchment. There is relatively little spare capacity at London Underground stations and limited opportunity for increasing the amount of station car parking provided. London Underground has used pricing policy to bring about maximum utilisation of station car parking. In some instances, this has encouraged parkers to travel further to make use of available space. Parking provision at London Underground stations should take into account the wider park-and-ride policy.

7. Accessibility of stations and trains

The Underground has been planned and operated with little consideration of the accessibility of stations and trains to disabled people. Consequently, on most of the Underground network, staircases and escalators (and the lack of lifts) preclude independent access for wheelchair users and represent a barrier to many other people with reduced mobility. Added to this, the interface between the platform and the train often forms a further barrier. The Jubilee Line Extension between Westminster and Stratford is the only

part of the London Underground that has, in principle, been built to be fully accessible. London Underground plans to install raised sections of platforms or ‘humps’ to achieve level access to at least one door of the train at stations where step-free access already exists or is proposed. There are also a number of measures planned that are designed to make it easier to use the Underground system, such as real-time information, visual and audio information on the trains, improved handrails, better lighting, and more flexible train layouts. There are proposals for providing a core network of stations with step-free access, and a timetable for implementation will be developed by TfL.

8. Security and Safety

The Underground has a good safety record. The Underground must, however, retain its high standards and safety must stay at the top of the Underground’s priorities. The major injury rate increased by 85% between 1995 and 1998. A key feature is injury to people trespassing or causing damage to the railway. The Underground must continue to ensure the system is as secure as possible from trespass and vandalism.

London Underground is continuing to investigate methods of improving air quality on the system particularly by reducing dust emissions. Personal security at stations, on platforms, on trains and in car parks and areas around stations, is a significant concern to many customers, particularly women. The journey outside the station, to car parks, bus stops and home is often of particular concern. TfL will work with the boroughs and other agencies to bring forward programmes to improve the environment around stations. Many women are afraid to use the Underground alone at night.

Passenger surveys indicate that increased staff presence would be the most welcome response to these fears. This should include additional British Transport Police officers. Greater use of CCTV, improved lighting and alarms on stations and surrounding areas could also be effective. More taxis and private hire vehicles at stations for the final leg of the journey can encourage the use of public transport.

9. Extending the network

In the peaks, the possible upgrades of the existing Underground network will only achieve an 08% or less increase in capacity between 2001 and 2011.

Over the same period passenger demand is predicted to rise by 17%.

Upgrading the existing network alone will be insufficient to cater for the increased demand. As figure 2 shows, if the Strategy is not implemented, peak overcrowding on the Underground is predicted to get worse. In 1981/2 the Underground only had to cope with 541 million passenger journeys a year, whilst in 2000/01 the figure was 970 million. To address overcrowding, there is an urgent need to expand capacity. In the first instance, this will be achieved by the rehabilitation and modernisation of the existing system. In the longer term, this requires a substantial programme of investment in new lines and hence additional capacity.

Amongst the proposed newlines/services, which are being developed in partnership with the Strategic Rail Authority (SRA), are:

the East London Line Extensions – to be taken forward working with the SRA. This will extend the line north to Dalston where it will connect with the North London Line, and south to connect with the National Rail Network in south London; • CrossRail – a high-capacity east-west rail link which the Strategy

proposes should link the City to Heathrow serving Paddington, Bond Street, Tottenham Court Road, Farringdon and Liverpool Street and connected to the National Rail Network at both ends serving Thames Gateway in the east;

- the Hackney-SouthWest Line – taking a route between Victoria and Dalston, via Piccadilly Circus, Tottenham Court Road and King's Cross and extending through Hackney to the north east and to the south west linking with other Underground and/or National Rail services.

Modelling work undertaken in conjunction with the preparation of the Strategy indicates that these schemes will attract passengers from both the Underground and National Rail Networks. The system will provide sufficient overall capacity to accommodate the growth in demand for projected peak hour rail travel in central London only if the major schemes proposed by the Strategy are implemented.

The following principles will be taken into account in developing and maintaining a programme for funding and improving the

Underground

In order for it to ensure a safe, efficient and reliable service, Transport for London (TfL) must have unified management control over the system and all private sector contractors servicing the system.

- The Underground has suffered from a long period of under-investment in its infrastructure, the extent of which is not currently known with an adequate degree of certainty. TfL will ascertain it promptly.
- A sound public transport system is one of London's most essential infrastructure assets and the sole objective should be to deliver a safe,

efficient and reliable service at the lowest possible cost to fare paying passengers and to taxpayers.

- Real increases in fares should not be relied upon to support the additional capital investment required.
- The Greater London Authority should use its authority to raise new revenues to provide additional funding to the Underground.
- The Government should provide the Underground with a stable level of annual grants, resulting in reduced costs due to greater efficiencies.
- The securitisation of London Underground's revenues is an efficient and economical means of financing, which is widely accepted both in the UK and internationally.
- Direct financial penalties imposed on the contractor providing or refurbishing a capital asset and the potential additional sanction of immediate dismissal are the most effective devices to minimise TfL's exposure to risk.
- The prime responsibility of the Mayor and TfL in relation to the Underground is to promote and encourage safe, integrated, and efficient facilities and services that meet the requirements of the Transport Strategy.

The Mayor and Transport for London will seek to combine the best features of public sector oversight and management with the competitive drive of the private sector to rebuild and refurbish the Underground over 15 years.

Recommendation for Quality of service

London Underground passengers want the following:

- They want to experience the minimum delay in waiting for trains. This involves a higher proportion of the scheduled service being operated, and the service that is operated running more regularly and reliably.
- They want to experience the minimum delay on trains. Far too many hold-ups occur to passenger journeys caused by failure of stock, signalling and other equipment, and through the unavailability of staff or poor staff management.
- They want reliable escalators, lifts and other assets. In 1999/2000 one in twelve escalators were out of service at any one time.
- They want less crowded trains and to travel in reasonable comfort. Far too much of the network is 'very crowded' or 'crowded' and forecast to get worse without action.
- They want less crowded, more attractive and easy to use stations. This includes ease of movement within stations, especially interchange stations and the availability and quality of facilities at stations.
- They want to feel secure when using stations and trains. Surveys show passengers, and particularly women, value security highly and particularly welcome CCTV, staff and British Transport Police presence and help/alarm buttons. Attention must also be paid to access journeys, as it is often the journey to and from the station and the areas around stations that passengers fear most.
- They want easy to understand information to hand on services, fares and local amenities.
- They want better all round access to stations and trains. All passengers benefit from the removal of barriers that preclude independent access

for wheelchair users – the provision of step free access to stations and trains

- They want a clean Underground with graffiti and litter-free stations and trains and areas around stations. (The Underground will need to seek to reduce, reuse and recycle waste and recycle products in keeping with the objectives of the Mayor's Waste Strategy.)