

Delivering e-government



The e-government programme presents a major change in the way local and central government works together to exploit new technology to deliver enhanced customer services. It's also about increasing engagement and making local authorities more open, accessible and accountable.



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Foreword

Ken Livingstone,
Mayor of London



London must cement its position as a leading centre of technology adoption and innovation.

When it comes to getting around the city, people want every part of their journey to be easy, comfortable, safe and reliable. They want information at their fingertips, whether at home, at work or on the move. Above all, they want to feel in control.

I am working together with Transport for London (TfL), the Greater London Authority (GLA) partners and the London boroughs to lead change in the Capital's e-landscape. By embracing new technology, we are delivering improved services for residents, commuters and tourists.

A key element of the e-government programme is integration, so TfL is not only driving innovations to improve our transport systems, but also working to incorporate travel information into other public services.

This document will highlight the impressive work that is underway to meet people's needs and to establish London as an e-city competing with the world's best.

Our work includes fresh innovations with Journey Planner, improvements to real-time travel updates, the creation of the 'YourLondon' portal plus improvements to Oyster ticketing and

payment, which have led to a dramatic increase in customer take-up.

Oyster is a notable success story. More than six million cards are now in circulation, accounting for 65 per cent of journeys by Tube, bus, tram and the Docklands Light Railway (DLR). It is set to expand across the entire transport network creating a fully integrated ticketing network, meaning passengers need only ever use one ticket.

As we prepare for the next stage of the electronic revolution, a GLA Group e-government board is working to identify new opportunities, raise the profile of London's e-agenda and influence the development of my e-government policy. It is also spearheading our goal of delivering the world's best 'e-Olympics' in 2012.

Through this board and other initiatives, we will continue to improve the timeliness, accuracy and accessibility of electronic information. I am committed to ongoing e-programmes and will strive to deliver innovative, time-saving and useful services for the people who work, visit and live in London.

A handwritten signature of Ken Livingstone in black ink.

Introduction

Chris Townsend,
Group Marketing Director



Transport for London (TfL) continues to drive efforts to deliver the Mayor's vision of an e-enabled London, a city that can claim to be one of the world's leading centres of technology innovation.

In doing so, TfL has demonstrated a commitment to enhancing its interaction with customers, leading the industry on pioneering sophisticated new e-enabled services across channels including the web, mobile phone and even digital TV.

Customer needs and strategic direction

Londoners and visitors to the city want to choose a mode of travel that best meets their needs and they want to base that choice on accurate, timely and readily-available information.

TfL is committed to examining and enhancing all elements of customer interactions to ensure it empowers people to make the right

choices for them. Its customer vision, as set out in its Group Marketing Strategy for the next three years, aims to do this by:

- Promoting increased and efficient use of the transport network
- Driving the development of an integrated transport network
- Delivering Mayoral and TfL objectives through efficient and effective modal partnerships

Crucial to achieving this goal is the understanding that marketing at TfL has to reflect wider changes in service industries.

Businesses are no longer focusing on simply acquiring customers, but are concentrating on forming more holistic relationships with them, based on a clear understanding of what individuals want and why, and how they want it. TfL not only embraces this development, it is leading the market on many initiatives.

Personalisation and integration

A key part of TfL's strategy, and an example of keeping track of industry trends, is personalisation. This is about providing customers with a seamless set of interaction options that reflect individual needs.

Personalised Travel Alerts are already being delivered to customers via email and SMS messages, providing updates on London Underground (LU) and DLR service issues.

The first phases of Journey Planner personalisation will be implemented in 2006, allowing customers to register and save their travel preferences so their route options are more relevant. This could include mobility requirements or periodic journeys.

Market research indicates that people already interact with TfL across a range of modes and services. By joining these up more effectively, customers will see TfL as one organisation, issuing consistent and relevant information.

Further developments to Journey Planner will integrate route information with the Travel Alerts service (see page 24) so customers can get updates on their journey as they travel.

The Customer Services Integration Programme is another example of more joined-up working. The project, which will roll-out in 2008, aims to revolutionise

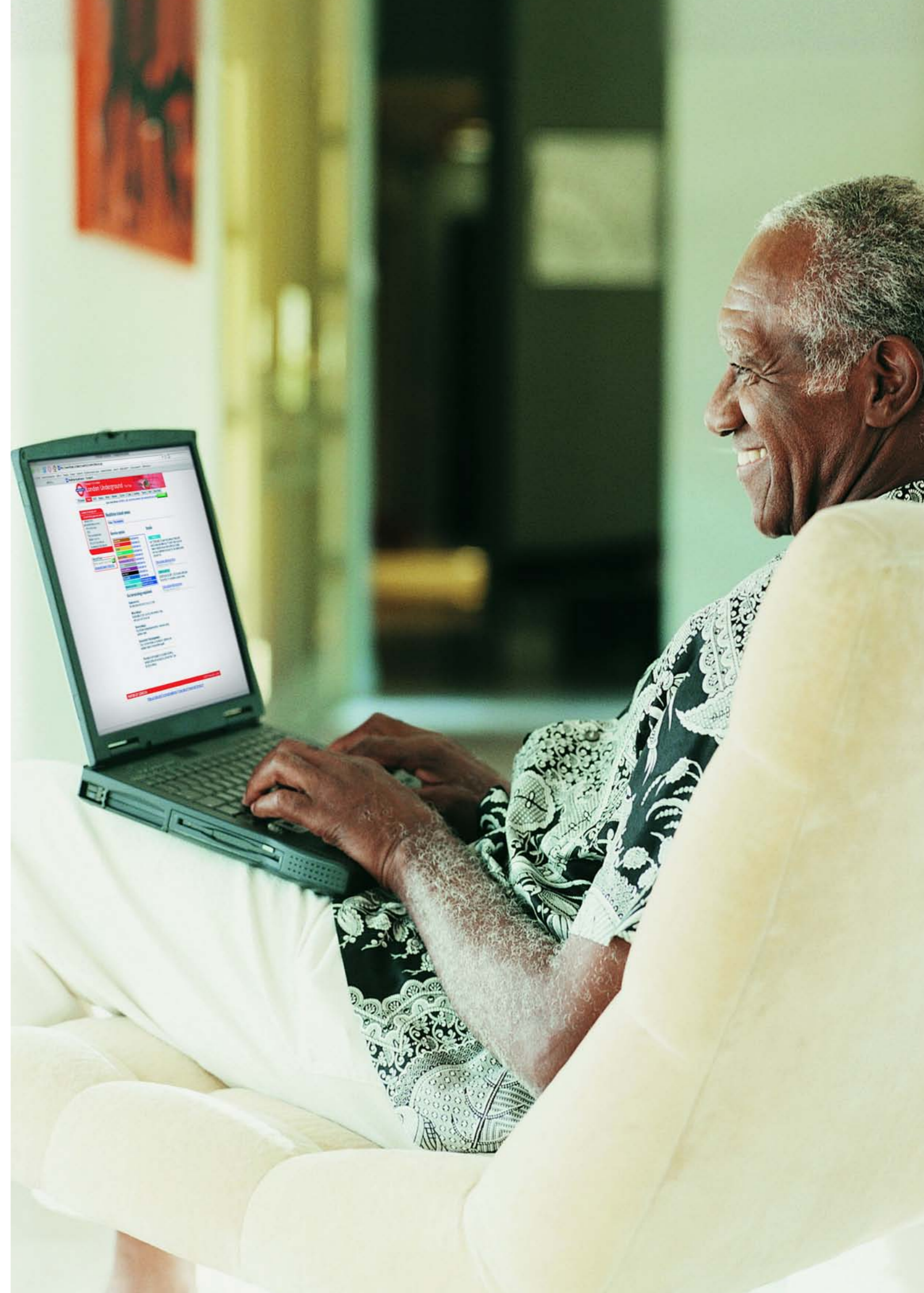
technology across contact centres, allowing our modes to share data to become more efficient and improve the customer experience (see page 25).

Driving implementation of e-government

Initiatives that were celebrated in TfL's first e-government brochure published in 2004 have evolved dramatically. There are six million Oyster cards currently in circulation and new services have broadened its functionality. Journey Planner now has 1.5 million unique users with 2.3 million visits per month.

TfL's internet site was named best travel website in Yahoo Search's Finds of the Year Awards 2006. It has also received a Visit London nomination for best site. In 2005, Journey Planner won the National Transport Award for technology.

This new document aims to demonstrate not only how TfL has embraced the e-government programme, but how it has pushed the boundaries as it remains at the forefront of e-enabled service provision.



What is e-government?

Exploiting new technology to deliver maximum benefit for London, its residents and tourists.



The e-government programme is a major cultural change in the way local and central government exploits new technology to deliver enhanced services for customers and staff.

It is also about seeking to improve joined-up working between public authorities and statutory bodies, promoting efficiency and increasing engagement with the public to make councils more open, accessible and accountable.

The National Strategy for Local E-government was published by the Office of the Deputy Prime Minister (ODPM) in 2002 to provide guidance and financial support to authorities aiming to meet these requirements.

A key element is the need for government departments and agencies to work together to ensure developments under the

programme are greater than the sum of their component parts, delivering maximum benefit for London.

Four years on, TfL has helped spearhead some of the UK's most significant electronic service innovations as part of both the e-government programme and its own business planning process. Prior to 2002, strategies were already in place to develop schemes such as the Oyster card and the Central London Congestion Charge Scheme.

The e-government programme, however, will not see electronic services replacing all of the traditional delivery methods, such as print. Instead a wider range of channels will ensure TfL can meet its customers' diverse needs while always looking to deliver services via the most effective means possible.



1.1 :: Meeting compliance targets

As part of the first four-year phase of the e-government programme, local authorities were required to submit annual Implementing Electronic Government (IEG) statements, setting out how they were improving service delivery.

Progress was recorded against the Best Value Performance Indicator 157 (BVPI 157), a national measure against which all authorities reported the extent to which they were meeting the target for 100 per cent of services to be e-enabled by the end of 2005.

Success was also measured against a set of government-issued 'priority outcomes'.

In April 2006, TfL's IEG6 stated 100 per cent compliance against this target. Ongoing initiatives also show that TfL remains a leader in e-government as it continues to develop new technologies to further enhance the services it offers customers.

To view the IEG6 document, visit the report library in the 'About TfL' section of www.tfl.gov.uk

- ■ In April 2006, TfL's IEG6 stated
- ■ 100 per cent compliance.

TfL's approach to e-government

How TfL has fully e-enabled more than 500 processes to achieve 100 per cent compliance.



The e-government programme provides a formal framework for advancing initiatives already in TfL's Business Plan. It also presents more scope for working with other public bodies on their delivery.

In addition to BVPI 157, the Government published a target for authorities to achieve a set of 73 'priority outcome' process improvements across seven themes:

- Transportation
- E-payments
- The web
- Customer Relationship Management (CRM)
- The use of Information and Communication Technology (ICT)
- E-consultation
- Procurement

By 31 December 2005, TfL was 100 per cent compliant with BVPI 157 and had fulfilled all relevant priority outcome targets. This amounted to more than 500 processes being fully e-enabled.

TfL is working within Department for Transport guidelines on efficiency savings as a result of the e-government programme and, at April 2006, was above target.

2.1 :: Transportation

Journey Planner and real-time reporting are now extensive throughout all modes on the TfL website, via WAP (mobile internet), SMS and through digital TV. Further enhancements are planned (see pages 24 and 42).

TfL has also created the LondonWorks programme, a tool to facilitate the planning, co-ordination and approval of road and street works by the Capital's highway authorities.

A GIS-based mapping database, it shows the location of works that are either planned or are being undertaken on all of London's roads and allows expected traffic impacts to be properly managed. The tool is available to utilities, highway authorities and emergency services.

E-forms are now available for appealing parking contraventions, for instance bus lane charges, or the issue of a penalty charge notice.

2.2 :: E-payments

Oyster payment facilities have been added to the online shop at www.tfl.gov.uk/oyster (see page 30). Payment for Congestion Charging is also available through the website and mobile phones via SMS text messaging (see page 28).

The introduction of electronic transactions for Oyster and Congestion Charging has led to increased customer satisfaction with the available payment channels.

2.3 :: The web

Latest figures show that www.tfl.gov.uk has more than two million unique users per month. Journey Planner and real-time information have become integral to the site.



TfL is continually pushing the boundaries to drive development of its website and exceed industry standards, including the Web Accessibility Initiative (WAI) and internet service standards (performance statistics are now available online).

As part of a London-wide initiative of local and statutory authorities, TfL has been a major contributor in the development of the 'YourLondon' portal, a website that provides a focus for all government-related services in the Capital (see page 35).

- ■ Self-serve access to all services outside of
- ■ standard working hours is available via the internet or contact centres.

2.4 :: Customer Relationship Management (CRM)

TfL has developed a rich CRM programme designed to improve the customer experience.

During the 2005/06 financial year, 157 campaigns were generated from the customer database, 137 of which were email campaigns. Subjects ranged from informing passengers across all modes of planned works that could affect their regular journeys, to advising on how to use SMS payment facilities.

Self-serve access to all services outside of standard working hours is available via the internet or contact centres.

Email and web form acknowledgements now include a unique reference number to enable enquiries to be tracked and followed-up and 100 per cent of email enquiries are answered within one working day.

The Customer Services Integration Programme is also being designed to significantly improve how customer information is shared across TfL modes, and to ensure more issues are resolved at the first point of contact (see pages 25 - 27).

2.5 :: Use of Information Communication Technology (ICT)

Email and internet access are provided for all members of staff who need it, as is support for home-working and remote technology, including the use of Blackberrys. E-skills training programmes are widely available on the TfL corporate intranet.

All new TfL systems are integrated and, as such, are compliant with the Government Interoperability Framework.

2.6 :: E-consultation

TfL is researching comprehensive solutions to e-consultation, which allows Londoners to comment on planned projects through electronic channels (see page 39).

2.7 :: Procurement

Online e-procurement solutions are now in place. These include paperless ordering, invoicing and payment options via TfL's SAP-based software (see page 33).

Key achievements

A look at some of the major projects that are revolutionising the way Londoners interact with TfL.



3.1 :: Real-time information

The provision of real-time information helps customers make informed choices about their journeys and keeps them updated while on the move.

Via sensors on train tracks, satellite Global Positioning Systems (GPS) or other systems, TfL offers passengers up-to-the-minute details of how LU, bus, DLR, Rail and river services are operating across the Capital. Real-time services are also based on a network of more than 1,000 traffic cameras providing real-time views of London's roads.

Work is currently underway to fully explore technologies that will enable TfL to deliver integrated real-time services over the next decade and more (see page 43).

Choosing how to travel

Disruption information for Tube, DLR, Rail, buses and river routes can be found on www.tfl.gov.uk/realtime. This can also be accessed via mobile phones (mobile internet and SMS) or by calling TfL's Travel Information Centre.

Customers who sign up for mobile services can receive personalised Travel Alerts via SMS or email, provided in association with BBC London. In addition, they can get notification of Tube updates as SMS messages and live travel news via WAP.

In 2005, real-time news feeds also became available through a revolutionary new two-year, interactive digital TV pilot launched with BSkyB (see page 40).

The Traffic News service on TfL's website is designed to help drivers plan journeys and avoid delays. It receives information from the London Traffic Control Centre, which monitors the city's roads 24-hours-a-day via a network of cameras and other systems. For those already on the move, the service is available via Windows-based smart phones.

Journey Planner will be extended to offer information for drivers later in 2006 and will incorporate live traffic reports (see page 24).



- ■ Stations will have information displays in each ticket hall and on every platform.

Across the TfL modes

In addition to informing internet and mobile services, real-time information also feeds into passenger display systems across the network.

London Underground (LU)

Beginning in 2004 and continuing over the period of the Public Private Partnership (PPP), LU and its partners are investing in upgrading all real-time information systems.

Stations will have information displays in each ticket hall and on every platform. Complimentary and synchronised audible broadcasts will also be delivered.

The displays and public address systems will broadcast current information on:

- Service disruptions on any line
- Station closures on the Tube network
- Service disruptions on other modes within the London area

'On board' systems will also be capable of broadcasting real-time incident and delay information both visually and audibly. The Victoria line will be equipped at the start of 2008 and will be followed by the District, Metropolitan, Circle and Hammersmith & City lines.

■ Train arrival

LU currently provides its customers with line-based service information via dot matrix information displays on most platforms and in some ticket halls. The information comes directly from the signalling system or line-side beacons giving minute-by-minute train arrival times.

This information is available on the website for the Bakerloo, Jubilee, Metropolitan, Northern and Victoria lines. Capability for other lines will be added in the near future.

■ Incident and delay information

In 2004, LU launched an initiative to provide customers with improved real-time service information at stations. Forty-five station displays have now been installed at key station ticket halls, with a further 48 planned by the end of 2006.

These are electronic information screens linked directly to LU's Network Operations Centre, providing up-to-the-minute information about the service status of each line. Over the next year, LU will be developing them in order to broadcast latest information about National Rail services and other TfL modes.

London Buses

■ Countdown

London Buses' real-time passenger display system, Countdown, uses Automatic Vehicle Location (AVL) data to predict the arrival of buses at stops throughout the Capital.

Currently installed on 2,000 bus stop shelters, it also incorporates a bottom-line message facility that provides up-to-date information on events affecting services, such as diversions or road closures.

From 2008, these will be replaced with new signs that include an audio facility. Countdown will be expanded to around 4,000 locations. New technologies will be evaluated including alternative display methods, energy sources such as solar power, and REACT tag activation. This is a key card given to visually impaired people by the Royal National Institute for the Blind. It works like a security pass and can be used to activate services for visually impaired customers.

■ iBus

The introduction of iBus – a £117m, state-of-the-art AVL system – will revolutionise how services are delivered and monitored.

The new system will be the first of its kind in the world, harnessing satellite technology and wireless data transmission to help bus operators provide a more regulated, efficient service.



Further benefits will include:

- Precise real-time information thanks to on-bus 'next stop' visual displays and audio announcements
- Improved Countdown information at bus stops
- The ability for operators to provide 'headway' data to drivers, which is the time lapse between

consecutive buses. This information, constantly available to drivers via a screen, will enable them to slow down or speed up to help maintain a regulated service

- The possibility that emergency services can respond faster as the location of all buses can be monitored constantly

In 2006, a trial with on-board next stop signs and announcements was carried out and 91 per cent of passengers involved felt the technology would improve journeys.

Plans are to equip buses with the new systems over a two-year period, with the first full garage installation expected to be completed in 2007.

Docklands Light Railway (DLR)

DLR's real-time facilities include dot matrix passenger information displays on all station platforms and trains.

Real-time information is also fed into display screens in companies, schools, colleges and residential foyer areas via the Docklands Arrival Information System (DAISY), allowing passengers to time their journey from a known environment before reaching the station. This is particularly beneficial for those travelling at night.

The DAISY system is integrated into the DLR web homepage and provides real-time information about next train departures from every station. Journeys can now be planned to the minute as it allows customers to view the platform information display at any station on the DLR network, and is updated every 10 seconds.

The same functionality is provided by 'Wireless Application Next Departure/Arrival' (WANDA), the DLR's real-time WAP service.

London River Services

In 2005, real-time information became available to passengers of the Thames Clipper commuter services via indicator boards at each pier. Capability was also added to the TfL website.

Further roll-out is currently being considered on other riverboat routes.

3.2 :: Journey Planner

Journey Planner, a comprehensive travel information service that will span all TfL's modes including walking and cycling, now receives 2.3 million monthly visits and has more than 1.5 million unique users.

Available via TfL's internet site, mobile phone (WAP and SMS) and interactive TV, the service offers Londoners real-time travel information anywhere, anytime.

Journey Planner is also available via some third party kiosks in London.

Over the past year, Journey Planner's popularity has soared with a 100 per cent increase recorded in monthly usage.

Nearly four out of 10 Londoners now access the service on either web, mobile or Sky TV at least once a quarter and, in 2005, Journey Planner on mobile phones was used, on average, more than 150,000 times per month (across SMS and mobile internet versions of the service).

Journey Planner is an integral part of www.tfl.gov.uk, which was named best travel website in Yahoo Search's Finds of the Year Awards 2006.

New developments

The internet service has already been expanded to offer Spanish, French, German and Italian translations and in 2006, will be developed to provide an additional 14

language versions to cater fully for the needs of both residents and visitors to London.

Over the course of 2006, TfL is looking to integrate its web and mobile Journey Planner services, offering seamless information provision. Examples include allowing customers to receive journey options on a PC, then enabling them to monitor the route for disruptions using their mobile once they set out.

An enhanced, personalised Journey Planner will allow customers to register and save their travel preferences so their route options are more relevant. This will include their mobility requirements, regular stops or stations, cycling options and much more.



In late 2006, functionality will also be added to allow drivers to plan their travel by car and compare route information with available public transport options, taking into account real-time congestion data.

It will mean that, for the first time, Londoners will be able to compare road routes with public transport options in real-time.

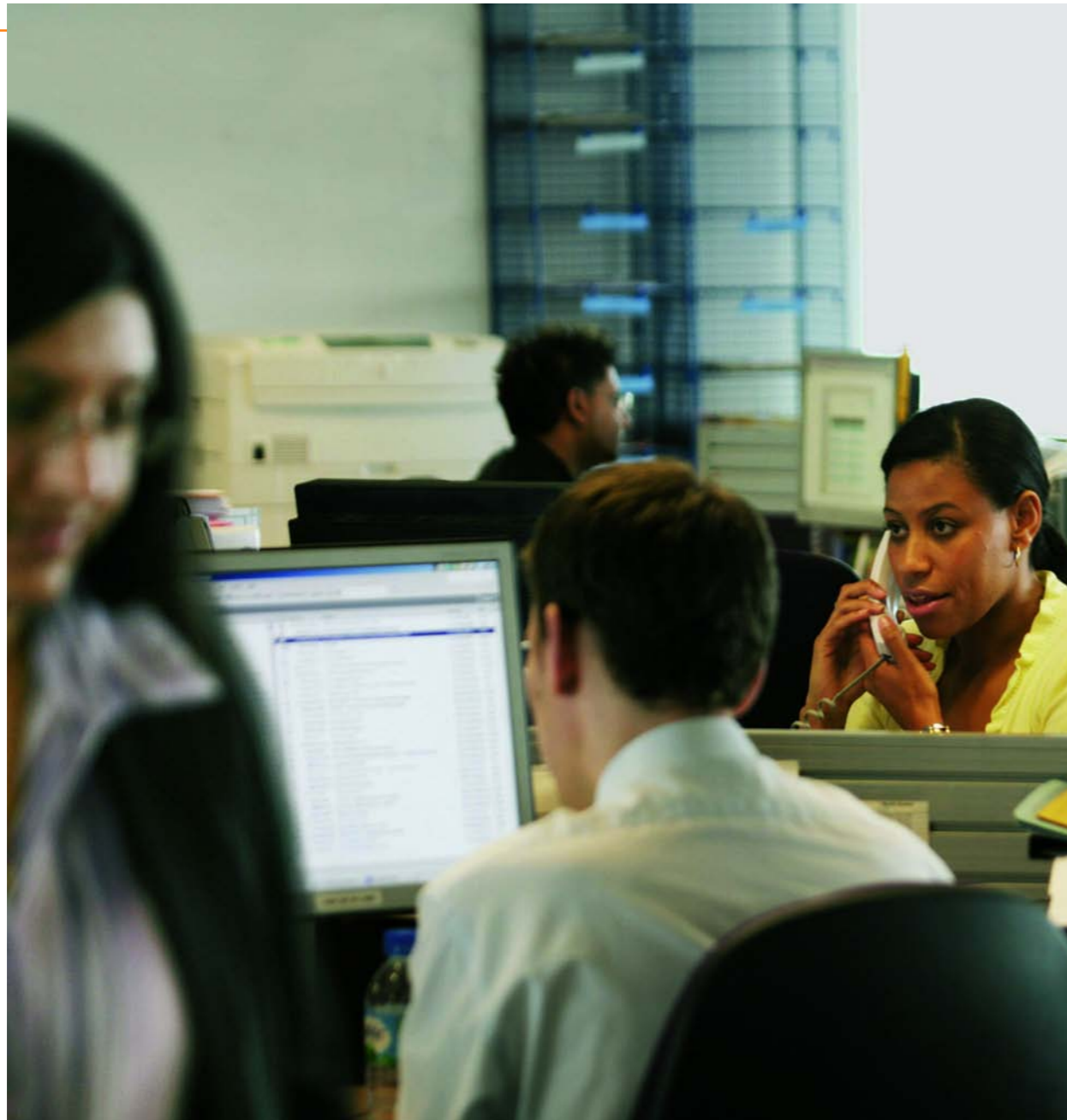
3.3 :: Customer services

TfL recognises that a successful customer relationship is based on two-way communication tailored to the needs of the individual.

There are a number of TfL contact centres – including Central Customer Services, Travel Information, Lost Property, Congestion Charging, LU, Surface Transport and Oyster – and a range of contact channels to accommodate the different requirements of customers.

In total, TfL's contact centres receive almost 500,000 calls, 3,000 letters plus approximately 12,000 emails per month.

Up to four million visits are made each month to TfL's website. Around 2.3 million of these are visits to www.tfl.gov.uk for the latest travel news and route information via Journey Planner. Customers can also access a range of services including online account management for Congestion Charging and Oyster.



In addition, Travel Information and Congestion Charging provide customer services via SMS. This includes Travel Alerts and the recently-launched licensed minicab service, which allows customers to receive details of their local companies by text.

Enhancing the customer experience

TfL continues to look at ways of enhancing the experience people have when making contact. The range of self-service options has been widened and automated payment options increased.

So, for instance, Congestion Charge payments can now be made online and via mobile phones with an SMS text message (see page 29). In addition, customers can access their payment history online and choose to receive a monthly statement.

Another example is the Oyster auto top-up functionality that ensures customers' balances are automatically boosted as they start to run low (see page 30).

Set to be designed in 2006, and rolled out by 2008, the Customer Services Integration Programme will merge technology used across contact centres.

It will allow TfL's businesses to share information, creating a 'single view' of the customer across all modes, and ensure that customers are provided with a seamless,

consistent experience when making contact with the organisation.

It will also increase the opportunities for offering self-serve options, enhance services available on the web outside contact centre opening hours and enable further development of e-consultation functionality, so Londoners can give their views on TfL projects electronically.

There is also scope for the roll-out of a single, non-emergency telephone number for the whole of Greater London, a project currently being considered in partnership with a number of stakeholders.

3.4 :: Human Resource Services (HRS)

Key elements of the HR sections of the 15 businesses, which united to form TfL, were brought together in January 2005 to create HRS, an integrated leading-edge HR services function.

HRS delivers services to TfL's 19,000 employees, as well as 60,000 pensioners, and has an average 'cost to hire' which is 20 per cent below the industry average. Economies of scale and shared best practice ensured that, in 2004/05, HRS delivered savings across the organisation of around £1.9m, which was £400,000 ahead of target. It is set to deliver future savings of £8.1m per year.

Tools for managing people

Calls to HRS are routed to a purpose-designed service centre in West London and the core technology platform is front-ended with the latest in customer management and e-resourcing software. Sophisticated technology enables TfL to track and monitor both individual cases and business trends and provides proactive support in coaching or challenging managers.

The step change for HR has been to make its role one of facilitating performance improvement. The new delivery model equips managers with the tools and support they need to manage their people. With a service that is quick and accessible, and ensures there is expert advice on hand, there is the real opportunity for managers to gain confidence and be more self-sufficient.

HRS covers the full employee lifecycle from recruitment, learning and development, and eventually through to exit. Face-to-face support is provided when needed through small, specialist teams.

The HRS team's success has been recognised externally and other organisations from both the public and private sector have been

keen to learn from TfL's experience when implementing their own HR shared services.

Just 17 weeks after going live, HRS was voted runner-up in the 'best new shared services organisation' category at the European Shared Services Excellence Awards. It was recently nominated for a BT Award for Innovation.

3.5 :: Congestion Charging

In 2006, the Mayor approved plans to extend the scheme westward to cover most of Kensington and Chelsea plus Westminster. This will come into effect in February 2007.

Drivers in the Capital can pay the charge online at www.cclondon.com, via their mobile phones, at BT internet kiosks, by post, over the telephone and at selected shops, petrol stations and car parks.

The website has established itself as the most used payment channel and now accounts for 30 per cent of all charge sales. Around 80,000 online sales transactions are made each week and the site receives 137,000 visits to the homepage during the same period.



Delivering for customers

The payment process has been streamlined making it faster and easier to use. At the end of 2005, TfL also launched an automatic Congestion Charge payment reminder that people can download to their computers.

Available from the website, it can be customised to pop-up on computer screens at a certain time, on specific days. It also provides a direct link to the site so the charge can be paid immediately.

SMS is also a much-used channel, accounting for around 21 per cent of payments. TfL is now planning a pilot of a reminder service that works in the same way as the computer pop-up, but can be accessed via mobile phones. It includes a

scroll-down map and an option so customers can pay from that application.

A major upgrade to the website's Frequently Asked Questions, employing the more advanced knowledge management tool used by Oyster, means that only three per cent of visits now lead to further email enquiries.

The site also recently underwent a complete review incorporating feedback from experts and users, who tested both existing functionality and proposed alternatives. As a result, significant additional enhancements are set to be made by the end of 2006.

From June 2006, TfL will be allowing drivers to pay the Congestion Charge the day after travelling. Development is already underway to ensure the website will offer this option too.

3.6 :: Oyster

The popularity of Oyster – London’s travel smart card – has soared as more people recognise it as a faster, smarter and cheaper way to travel.

At April 2006, Oyster was being used for 65 per cent of journeys on the Capital’s buses, the Tube, DLR and trams (130 million trips per month). This represents a dramatic increase compared with 11 per cent at the same point in 2004.

Around 26 million journeys per month are currently being made by Oyster users who pay as they go by putting cash rather than tickets on their Oyster cards.

Even more people will benefit from Oyster following the recent announcement that TfL will pay for Oyster validation equipment at all London National Rail stations in Zones 1-6. TfL will also work with the Department for Transport to ensure all Oyster equipment is capable of accepting other smart cards, laying the foundations for a national integrated ticketing scheme (see p 45).

Service improvements

A new auto top-up facility has been introduced to make Oyster even more hassle-free. Designed so customers who pay as they go can link their Oyster card to a credit or debit card, it ensures their balance is automatically topped-up by a pre-determined amount whenever it falls below £5.

More than 50,000 Londoners now manage their Oyster cash balances in this way and TfL expects this figure to grow significantly once the service is extended to Oyster card readers on buses and trams later in 2006.

The introduction of daily price capping has made Oyster cheaper. TfL now guarantees that an Oyster customer who pays as they go will never be charged more than the cheapest combination of single tickets, Travelcards and/or bus passes that cover all journeys made in a single day.

More advances are planned for Oyster in the future and the Oyster online shop is being overhauled to make it even easier to navigate. In addition, customers ordering tickets, or who top up their cash balance over the phone or on the internet, will benefit from much faster fulfilment later in 2006 with the introduction of ‘FastLoad’ capability.

Under the current system, products are delivered to a specified location overnight. With ‘FastLoad’, delivery will be almost real-time.

3.7 :: Boroughs extranet

The boroughs extranet is an excellent example of TfL’s partnership approach to e-government (see section 4 for more).

A comprehensive information portal, it was created by TfL for the 33 London boroughs and brings all relevant data together in one place.



Its look and feel mirrors the TfL website, making it easier to navigate and use. Content includes news items and press releases, guidance and policy documents, information on forthcoming events and consultations, plus a TfL contacts database.

Users can download reports from a publications library and view a range of factsheets, which summarise each of the borough's involvement with TfL. These include details of Borough Spending Plan projects and any other services TfL provides.

The extranet was redeveloped in 2005 and, in response to user feedback, many new features were added including a search facility and site map.

The new-look site has received a great deal of positive feedback from users and is now playing an increasingly important role in the way TfL and the boroughs work together.

3.8 :: Internal systems

A range of technological developments have empowered TfL staff, enabling them to work more effectively and efficiently while at their desks or on the move.

Email and internet access are provided for all staff members who need it, as is support for home-working. People who require remote technology are supplied with a company laptop or Blackberry. E-skills training programmes are also widely available.

The implementation of a content management system for TfL's intranet site is also increasing empowerment by encouraging devolved web content creation and site management across modes.

The SAP-based software solution is in place within TfL so staff can manage a range of HR, procurement and finance processes online (see 'e-procurement' section).

In early 2006, a series of changes were introduced. These included:

- The introduction of online expense submissions
- A revamped accounts payable process to ensure quicker supplier payment
- A portal containing 14 key HR, finance and procurement reports specifically designed to provide cost centre managers with up-to-date information on how their cost centre is performing

Transport funding allocated to London boroughs and partnership organisations through the Borough Spending Plan is now managed at individual scheme level within TfL via SAP.

Staff involved with planning, budgeting and forecasting will see improvements as part of the next SAP development phase. Advantages will include a single database for all plans and versions, automation and real-time reporting thanks to a powerful tool allowing easy manipulation of data to personalise report views.

3.9 :: E-procurement

SAP e-procurement enables nominated members of staff across TfL to request goods and services via their desktop computer, which speeds up the order-to-delivery time.

System workflow ensures requests are routed to the correct cost centre manager for approval, as well as the relevant procurement team to allocate the purchase order to the contracted supplier. This ensures effective cost-control and compliance.

Online catalogues are also available for high-volume, low-value goods such as stationery. The system is configured to enable such orders to be sent automatically by fax to the supplier – more than 75 per cent of purchase orders raised are sent in this way.



Work is also being undertaken to develop the ability to exchange purchase orders and invoices electronically with suppliers. These enhancements will eliminate errors in order processing and reduce the effort required by the supplier.

The e-procurement system was enhanced in 2005 to make it even easier for users to navigate. A number of pilot schemes are now underway to look at additional enhancements. These include:

- e-Tendering – significantly reduces the manual processing and administration which is a common part of the tender process
- e-Evaluation – enables the efficient review of tender responses using an online system, which distributes tender sections to relevant departments
- e-Auction – also known as a reverse auction, this creates a competition among pre-qualified suppliers of goods and services. At a pre-set time, candidates tendering for a contract can log on to a secure website where they can bid as often as they wish. They can see the relevant position of other bidders but the identity of all contenders remains confidential. Previously completed e-auctions have already delivered cost savings for TfL.

Working in partnership

How joint-working is creating opportunities for exciting Capital-wide initiatives.



Joint-working is an integral part of the e-government programme and TfL has numerous relationships with statutory bodies and private sector organisations across the Capital and the UK. These partnerships cover a wide range of industries.

4.1 :: LondonConnects

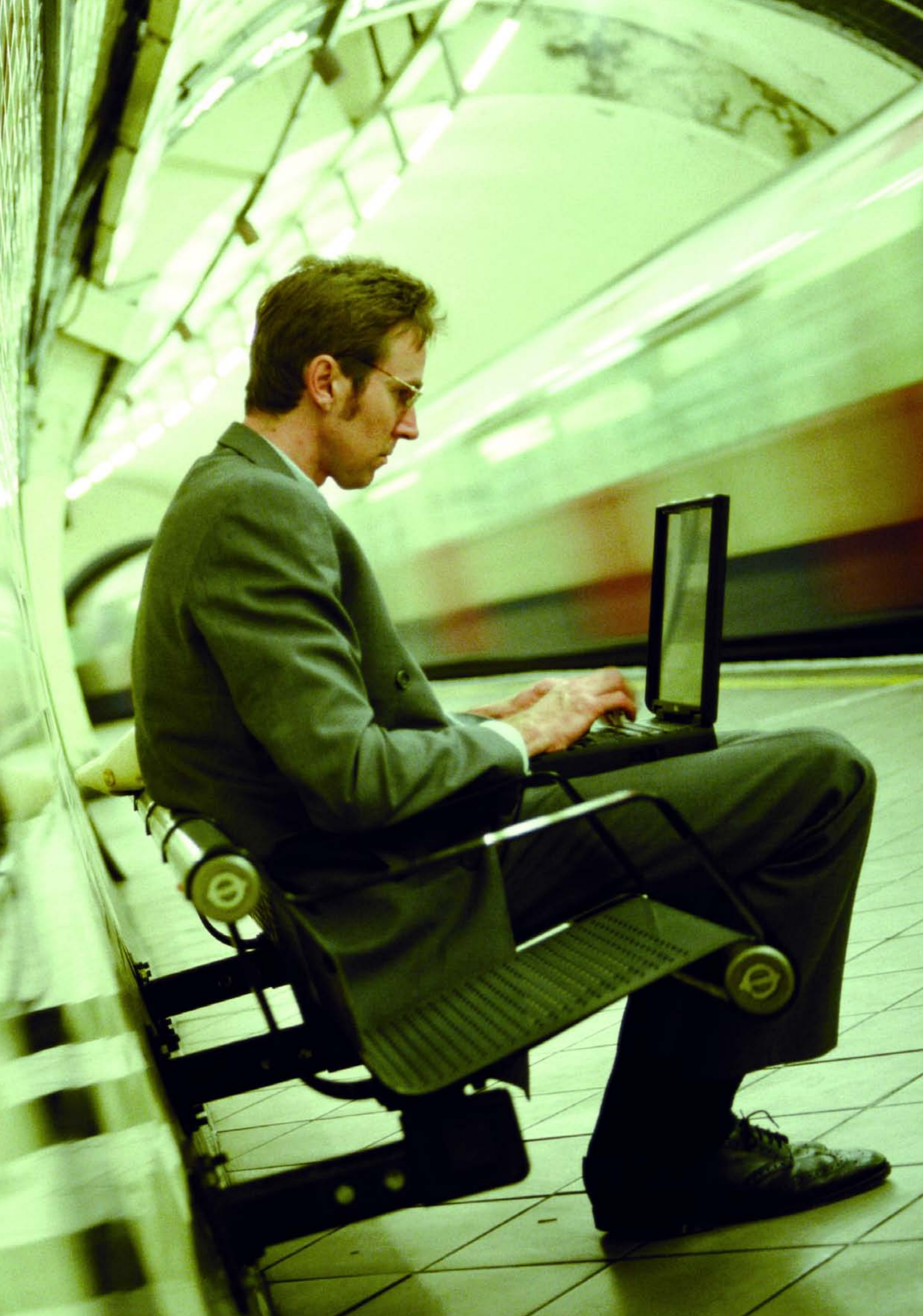
The GLA Group, which includes TfL, the Metropolitan Police, London Fire and Emergency Planning Association and London Development Agency, works with the Capital's e-government agency, LondonConnects, in the delivery of London-wide programmes.

This presents huge opportunities for joint-working on Capital-wide strategies and initiatives including the 'YourLondon' portal, which is due to be officially launched to the public soon.

Also developed in partnership with high-visibility websites including VisitLondon.com, plans are to establish the portal as the place where people can find information on all government-related services provided in the city.

It features maps, live traffic updates, transport news and everything else needed by visitors and Londoners alike. Unique functionality means people can even report low-level problems in their area, for instance broken streetlamps. A pan-London online schools admissions system will also be added.

LondonConnects is also liaising with the London Centre of Excellence on joint procurement opportunities and will look at further development of shared services for the web, out of hours call services, smart cards and the creation of a single, non-emergency number across the Greater London region.



- ■ Customers can access services while
- ■ at home or on the move.

4.2 :: Private sector partnerships

In the private sector, TfL works with a number of major telecommunications providers including Orange, Vodafone, T-mobile, O2 and Hutchinson 3 to promote the use of mobile phones (both SMS and mobile internet) for receiving information about TfL services.

TfL also works with a range of television and radio broadcasters including BSkyB and BBC London in order to provide more accurate travel information to viewers.

As a result, customers can access services including Journey Planner, Travel Alerts, departure boards and real-time information while at home or on the move through WAP, SMS, PDAs, interactive digital TV or standard analogue TV.

This has led to increased service usage. In 2005, Journey Planner on mobile phones was used, on average, more than 150,000 times per month (SMS and WAP).

4.3 :: More third party links

TfL also liaises closely with tourism organisations, content partners and other transport operators.

For instance, TfL works with BBC London and Trafficlink to provide quality road and public transport information to millions of TV viewers and radio listeners every day.

Around 700 websites incorporate Journey Planner links and TfL works with organisers of some of the largest events in the Capital to promote the service as the best way to travel.

Examples of these include the Open House architecture education programme, the Tate Museums, Chelsea and Hampton Court flower shows, Hyde Park concerts and the EuroPride festival.

TfL also develops strategic marketing plans and initiatives in collaboration with VisitBritain and VisitLondon, and works with both organisations to embed relevant TfL services in their websites.

These partnerships have helped TfL establish its travel information services as part of the everyday fabric of London, making life easier for the Capital's residents, commuters and tourists.

Looking to the future

Examples of pilot projects that continue to push the boundaries of e-government.



TfL is constantly innovating in order to improve services for customers and staff, deliver efficiency savings and establish the Capital as a world-leading technological centre. A number of pilot schemes are currently underway.

5.1 :: Three-dimensional modelling

Working with Bentley Systems, TfL is developing the use of computer aided design (CAD) for leading-edge, 3D modelling.

Bentley supplies the CAD technology that underpins the design and delivery of railway infrastructure. Using this, it has created detailed 3D images that show Victoria Underground station.

These models have huge potential. If installed at stations, they could provide a 3D

map to help customers and emergency services find their way around the terminus. They could also prove an invaluable planning tool for future TfL infrastructure projects.

5.2 :: E-consultation

TfL is piloting technology that allows Londoners to submit their views to TfL consultations in electronic formats. This includes a facility so people can sign up for email or SMS text alerts on forthcoming major projects.

Initial successes have included the 2005 consultation on proposed changes to LU's operating hours. More than 47,000 online responses were received following a targeted email from TfL to almost 86,000 season ticket holders on the day of the consultation launch.



5.3 :: Digital TV

In 2005, the launch of a two-year pilot with BSkyB made TfL the first UK public transport service to broadcast information on an interactive TV platform.

Subscribers to the Sky Active service can view real-time news feeds on LU, buses, DLR and the Capital's river routes. There is also information on fares and timetables, Oyster,

Dial-a-Ride, the Freedom Pass plus taxi and minicab services.

Interactive TV is an increasingly important part of everyday life. This pilot improves services available to customers while encouraging more efficient use of the transport network.

5.4 :: One-stop shop

At present, historical information is kept separately at London's Transport Museum and within TfL's Group Historical Archives department.

The Museum stores material from TfL and its predecessors focusing on the development of the Capital's modes of transport, including more than 12,000 books and pamphlets plus around 100 series of periodicals. Group

Historical Archives holds five kilometres of records dating from the 1830s to the present day.

As some of the information inevitably overlaps, TfL is looking at ways of integrating the two disparate systems so customers can electronically access records on a single subject that are housed at both locations.

5.5 :: Digital preservation

TfL needs to be able to read large volumes of safety-critical records held in electronic form for extremely long periods of time.

While paper documents can always be read and understood by future generations, technology is constantly evolving. A research exercise has been completed to evaluate the use of specific technical file formats to preserve TfL's many thousands of electronic records.

The report has identified several issues that need to be considered by TfL in the development of a policy, and any new systems that are procured, to aid document management.

5.6 :: Journey Planner

During 2006, TfL will integrate its web and mobile Journey Planner services to allow customers to plan their trip from a PC, then receive updates to their mobile while on the move.

Improved functionality will also provide route information for drivers in the Capital and enable people to receive personalised journey options (see page 24).

5.7 :: Legal records

Across the company, TfL owns more than 86,000 property deeds that are archived in boxes by its solicitors. Of these, 3,000 covering the last 15 years have been scanned into a database that can be accessed by lawyers and surveyors via a web front-end.

Providing access to deeds in this way is far more efficient as people requesting information can research the documents themselves, making the process much quicker. It also further improves security.

As part of the pilot, creators of new deeds will be asked to supply PDF files as well as paper documents so the database continues to grow.

5.8 :: Document workflow

TfL is also looking into solutions for managing the flow of documents through the company and beyond the firewall. This would include more efficient methods of delivery and version control and will ensure only authorised people can make amendments, and then only in the areas that they are permitted to.

One area of use is in training material that includes a test at the end of the instruction. People would only be allowed to input their answer and would be prevented from altering anything else.

■ ■ ■ A research exercise has been completed to evaluate the use of specific technical file formats to preserve TfL's many thousands of electronic records.

5.9 :: Customer Services Integration Programme (CSIP)

CSIP is being designed this year and will be introduced in 2008. It will integrate technology across all of TfL's contact centres to make sharing customer information easier.

This will benefit customers as they will receive a more consistent service, with more issues resolved at the first point of contact (see page 25).

5.10 :: Real-time Implementation Project (RTIP)

TfL is currently working on developing technologies for delivering integrated real-time information to customers via fixed and mobile channels including 3G and 4G phones, Wi-Fi and even gaming consoles.

The aim is to deliver personalised and seamless real-time information for all TfL modes to customers via technologies that will exist up to 15 years into the future. The work will also underpin developments to meet real-time requirements for the 2012 Olympics.

It is hoped the first stages of implementation will begin in 12 to 18 months time (see page 21-24 for more about real-time information).

Conclusion

Summarising the e-government journey so far and a look to the future.



After four years, the e-government programme has reached a conclusion. It does not mean, however, that work is completed. Instead, TfL is looking forward to the next phase of its electronic evolution in customer service.

While e-government was about implementation and investment in infrastructure, the next step – transformational government or ‘t-government’ – is about delivering a real transformation in services with added focus on joined-up working and efficiency.

In this future, ‘joined-up’ refers to the third party links outlined in this document, as well as deeper relationships with a range of partners which include local authorities, voluntary organisations, broadcasters, content providers, major London venues and more.

Continual evolution

This brochure has summarised TfL’s current success in delivering the e-government programme over the past four years. However, times change quickly and further enhancements and innovations are constantly being unveiled, and opportunities examined.

For example, over the last month it has been announced that TfL has agreed to work with National Rail operating companies to install Oyster validation equipment at all rail stations in Zones 1-6. There are currently only 60 rail stations where passengers can pay as they go. This latest development

will see that number increased to 310, and the full benefits made available to a wider set of customers. It will also allow the development of a fully integrated ticketing system.

The introduction of Oyster technology could start later in 2006 at gated stations and, once worked through with train operators, equipment to allow Oyster customers to pay as they go could be available at rail stations in London during 2008.

TfL is constantly looking to the future in order to improve its services. That means developing technology that makes every stage of the customer's journey, and their interaction with TfL, straightforward. This includes accurate and detailed location and route information plus updates sent to the best device for the customer, whether mobile or fixed.

Examples include the work currently underway to take real-time travel information into the next generation of development, the revolution in TfL's customer service systems to make people's experience even easier, and other innovative pilots outlined in this document.

In addition, longer term projects will transform the Capital for future generations. These include investigations with GIS mapping for pollution hotspots in London, which could result in a real-time pollution index for London by 2025.

It also means innovating for the business, delivering internal projects such as the integrated HR Services functions to help TfL work smarter and more efficiently.

TfL will continue to focus on the needs of London's residents, visitors, the Capital's businesses and its own people. It will strengthen its partnerships to deliver innovations that meet the requirements of all these groups and make further contributions to London's e-agenda.

TfL is proud of its achievements in delivering the e-government programme over the past four years. Through current initiatives and future developments, the organisation is demonstrating its commitment to delivering a world class, integrated transport system for the Capital.

