

TRANSPORT FOR LONDON

'Bus Services in London'

Response to the London Assembly Transport Committee's Report

London's bus network

Transport for London's purpose is to keep London working and growing, and to make life in the capital better. The bus service is central to delivering this, supporting economic growth and social cohesion to enable people to make the most of employment, education, healthcare and other opportunities in London.

The bus network is the most-used type of public transport in London, with 2.4 billion passengers per year. It now carries half of all the bus journeys in England. As the only public transport service operating throughout the city, bus users reflect London's diversity and the network's position as a system for everyone. Buses spread accessibility to every corner of the city, helping support London's role as the engine-room of the UK economy.

Over the last fifteen years, the quality and scale of the network has been transformed. Passenger-led and forward-looking development of the service pays attention to the everyday details of reliability and capacity as well as the need to scan the horizon for forthcoming challenges. Despite offering the country's widest range of fare concessions, we have been able to reduce the subsidy for bus services by 40 per cent over the last five years whilst maintaining service levels and quality.

We carry out regular benchmarking against a number of international peers through the International Bus Benchmarking Group (IBBG), administered by Imperial College London. Across a range of indicators London performs very well and we work to ensure that will continue. This work is also reported to the Independent Investment Programme Advisory Group (IIPAG) that provides independent assurance on our activities.

Year of the Bus

In this 'Year of the Bus' we are celebrating the network's key role in London's economic and social development. As well as looking back at our history, it is an opportunity to talk about London's 21st Century bus service: a network for everyone, with extensive, high-frequency, reliable, convenient and accessible services. We are highlighting innovation, evident in the 'greening' of the fleet, the radical improvements which have been made to real-time customer information and our quality-led bus contracting system. Later this year cash-free operation of the bus service will continue the theme, delivering savings that can be reinvested in the transport network. It is in the range and ambition of such initiatives that London has set the standard for large-city bus networks. Figure 1 provides some examples of 'Year of the Bus' advertisements.

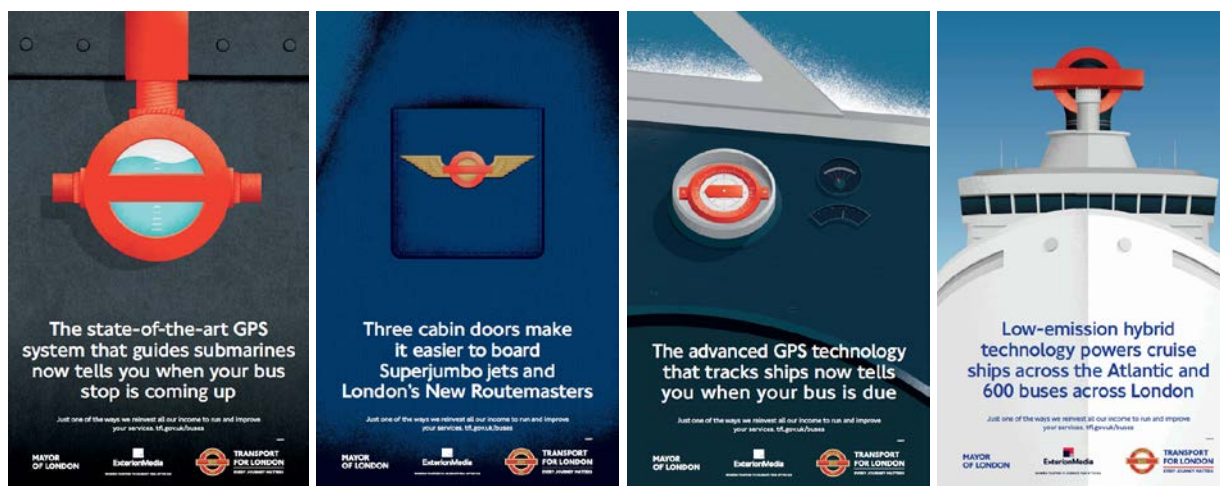


Figure 1: Examples of 'Year of the Bus' advertisements

Responding to the report

Our transport services and operations face challenges as London continues to grow and thrive while funding is constrained. London's successful bus network sustains its high standards through continued improvement. We are therefore grateful to the Committee for their examination of the best ways to keep London's bus network 'world class'. The recommendations have been carefully considered and our response is set out in detail in the next section.

Our commitments

We will:

- Continue to develop affordable, cost-effective plans to increase capacity where needed.
- Strengthen links with stakeholders, with a new approach to engagement by autumn 2014.
- Build on the report's welcome and strong support for increased bus priority. Engagement will commence with boroughs from autumn 2014.
- Add to the wide range of information we already publish on performance, extending it to journey volumes and occupancy. Update to be provided by December 2014.

We have highlighted our key commitments in bold throughout the document and provided an appendix indicating their timeframe for delivery.

Above all, the bus network must continue to support London's growth and we will all need to make the case for continuing investment. We recognise the challenges set out by the Committee and our response gives detailed information on how we plan to deal with them. We look forward to discussing progress in the months and years ahead.

Structure of our response

Our response to the nine recommendations is grouped into the three themes the Committee set out in its report.

- The challenge of rising demand for bus travel
- Meeting the challenge through bus service planning
- Maintaining an effective bus network

A separate set of background papers provides further contextual and supporting information. The four papers cover:

- Network development (recommendations 1, 2, 3 and 6)
- Consultation and engagement (recommendations 4 and 5)
- Bus priority and reliability (recommendation 8)
- Bus fares and ticketing, and environmentally friendly buses (recommendations 7 and 9)

Part 1 - The challenge of rising demand for bus travel

Recommendation 1

By March 2014 the Mayor and TfL should demonstrate to Londoners how they are meeting the challenge of rising demand for bus travel by publishing a long-term strategy for the development of the bus network. This strategy should include a mechanism whereby TfL will monitor and respond to bus passengers' reports of overcrowding e.g. via Twitter and publish its findings and actions from this monitoring.

Forecasts of demand

Bus demand rose by 64 per cent between 1999/00 and 2012/13, while bus-kilometres increased by 40 per cent. We expect usage to grow by around seven per cent between now and 2020/21, broadly in line with population growth, while bus-kilometres will increase by around three per cent. Beyond 2021 (the TfL Business Plan period) London's population is likely to grow by around five per cent from 9.1 million in 2021 to 9.7 million in 2031. Bus demand levels beyond 2021 will be driven by population increase, fares changes, service levels and quality, and the cross-effects of improvements to rail and other modes.

Strategic context

Our strategy for meeting the challenge of rising demand takes the Mayor's Transport Strategy (MTS, May 2010) as its starting point. This sets out the Mayor's overall vision that 'London's transport system should excel among those of world cities.' The bus network has a key role in providing access to jobs and services and is the most-used form of public transport in London, providing access to town centres, rail interchanges and other hubs.

Recognising that the quality and scale of the network has been transformed, now supporting ridership last seen over fifty years ago, the MTS seeks to maintain and expand on those achievements. It includes enhancements to the passenger experience through improved customer service and passenger information, upgrading the fleet to further reduce emissions and the introduction of the New Routemaster. The strategy makes it clear that continued development of the network will be necessary, so that it can carry on responding to change, with regular reviews of strategic priorities.

The TfL Business Plan takes this high level strategy and sets specific targets for service levels and quality across all of TfL's activities, taking account of the funding likely to be available from fares and subsidy. The current plan, published in December 2013, covers the period to 2020/21. Its overall financial context was set by the Government's 2013 Spending Review which reduced TfL's operational funding by 25 per cent. In this plan, overall subsidy for buses falls by 22 per cent whilst service levels and quality are maintained. However, gross spending on the network is anticipated to rise by around four per cent in real terms to 2020/21,

allowing bus-kilometres to be increased by three per cent and substantial enhancements to be made to the quality and environmental performance of the fleet. Additionally, provision has been made for up to £200 million to be invested in bus priority. The Business Plan is updated every year.

Strategy to meet increasing demand

The bus network is dynamic and can quickly respond to changes in demand. The best options for meeting new demand will depend on the time of day and the location where it arises. The current network is at capacity in certain locations in the peak direction at peak times. Where the new trips are outside these times or locations or involve trips against the peak flow then they can be accommodated.

Where this is not the case then the most cost-effective option may be to use bigger vehicles, whether larger vehicles or replacement of single-decks with double-decks. Reallocation from parts of the network where reductions can be made could also be considered. For example, some of the new rail capacity coming on-stream leads to changes in bus trip patterns, with an increase in shorter trips to rail stations replacing longer bus-only ones (the shorter bus trips being cheaper to cater for).

In some cases, capacity issues arise where intervals between buses at peak times become irregular. We will continue to review and resource bus schedules sufficiently to deal with variable journey times. We will also seek to maximise the contribution to journey time reliability made by bus priority measures.

Given the continuing growth in bus demand and the factors outlined above, we agree there is a requirement to review the need for further growth in bus-kilometres to meet current and expected growth in demand. We are looking into it as part of this year's business planning process and subsequent years' iterations.

Network development

The network development process is a continuous activity reflecting the constant change in travel demand. The programme of work includes planning for longer-term change as well as 'healthchecks' of capacity and reliability, working systematically across the network. In 2013 there were around 50 changes to routes to increase capacity including peak time frequency increases, night time frequency increases, conversion to double-deck operation and route extensions. Figure 2 provides an example of a service change introduced in summer 2013. Background Paper 1 provides more information on our approach.

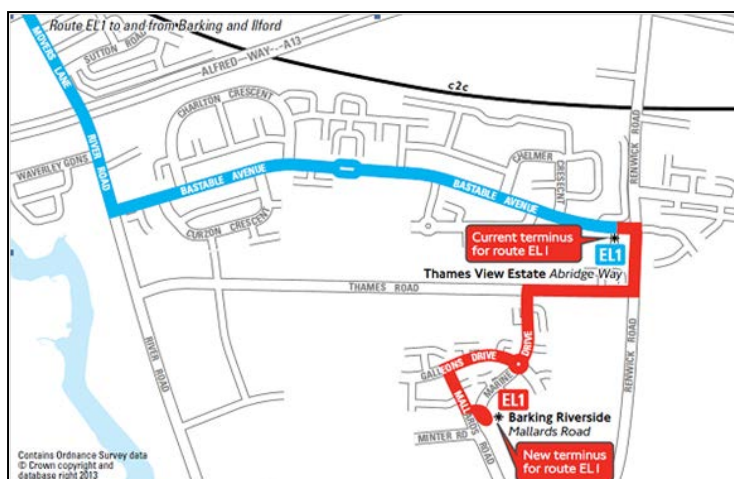


Figure 2: EL1 extension into new residential areas at Barking Riverside

Effective monitoring is clearly an essential element of capacity planning. We carry out over 2,500 route-level surveys each year, we review reports from passengers and stakeholders and we make use of Oyster card data. The most effective way for passengers to report crowding is via TfL Customer Services as this allows us to collect the data in the systematic way needed to take effective action. Nonetheless we recognise that social media is potentially a useful additional source. We have created new roles within our central control room (CentreComm) to ensure effective distribution of disruption information through Twitter via the @TfLBusAlerts feed and other channels. We will continue to publicise this as widely as possible. While we cannot commit to responding to individual tweets, we will continue to monitor general trends.

We have reviewed the responses to the Committee's survey and the ten routes selected as having the most mentions of busyness or overcrowding. As the report itself points out, this was a self-selecting survey. We have discussed the detail of responses with Committee staff. They refer to a range of issues, including reliability, inability to find a seat and the experience of travel at school closing times in the afternoon, as well as inability to board. Further information on the ten routes is provided in Appendix 4 of Background Paper 1. All the information supplied is being taken into account in our wider review work.

We will review the strategic balance of capacity and demand in preparing for the next issue of the Business Plan in December 2014. We will also continue to make the case for overall investment in London's bus network.

Recommendation 2

By March 2014 the Mayor and TfL should demonstrate to Londoners that they are monitoring and addressing the busyness of buses by devising a performance measure for all bus routes that captures how many people cannot board a bus because it is too full and cannot get a seat once on board in peak times. They should set annual targets for performance against this measure and report on progress against these targets twice a year.

Current practice

We already monitor and address how busy buses are. As described in our initial submission, we regularly monitor demand in a variety of ways, including surveys (around 2,500 per year), Oyster card data, reviews of customer stakeholder correspondence, and liaison with councils and other stakeholders. Although complaints about overcrowding currently comprise only around two per cent of the total comments we receive about buses, we take all such complaints seriously and address them in a variety of ways including changes to frequencies and bus sizes as well as measures to improve reliability.

Measures of bus demand and occupancy at network level are published alongside other key performance indicators in our annual 'Travel in London' report and elsewhere. This gives useful trend information for the network. However, we recognise the value of providing more detailed figures.

Following the Committee's report we will now publish annually the number of passenger journeys and the level of bus-kilometres operated on each route, starting with the 2013/14 data.

More detailed measures of occupancy

Our surveys are invaluable in supporting the service planning process at route and corridor level. However, they are not suitable for consolidation into an aggregate measure reporting how busy the network is. An effective method for this would have to be based on automatically-generated data as the cost of a survey-based process would be prohibitive.

Such data is in principle possible using on-board automatic counters. However, these would also be expensive if fitted to a sufficiently large sample of vehicles. Following the example of the rail industry and London Tramlink, bus-weighing is being investigated together with automatic passenger counting through CCTV, but we consider that these are unproven in a bus context as yet and in some cases would also require new equipment. Our initial investigations of good practice in other cities worldwide confirm these findings.

With Oyster card data, we do not currently have information on passenger alighting points, which is necessary to estimate loads. Work to develop techniques for this is already underway.

We are reviewing whether the new process for estimating passenger alighting points using Oyster card data yields a sufficient sample in terms of network coverage to permit the construction of a robust indicator of ‘busyness’. We will publish a report of findings by December 2014. If a robust indicator is possible from this source, the report will describe the new indicator and how it would be used and reported.

Inability to board / find a seat

Inability to board would be very difficult to measure accurately due to the high number of stops served by more than one route. Measuring inability to find a seat would need to assume that every passenger would take an available seat in preference to standing, which is not the case. For example, standing may be preferred to a seat at the back of the bus or upstairs by people making short journeys. We will of course continue to respond to customer reports of crowding and inability to board but do not intend to develop direct measures for passengers’ inability to board or find a seat.

Part 2 - Meeting the challenge through bus service planning

Recommendation 3

By March 2014 the Mayor and TfL should devise and publish a programme of cross-boundary bus service reviews and set out for consultation, proposals for more orbital and express bus routes.

Network development

Bus services in London are reviewed on a network basis. Reviews of varying types and complexity are carried out, including:

- Reviews based on continued close monitoring of supply, demand and reliability to ensure that issues are addressed as soon as possible after they arise.
- Impacts on the bus network of major changes of demand across a wide area – for example, the impact of Crossrail or ‘Night Tube’.
- How the bus network might respond to larger-scale land-use changes being implemented over many years. For example, this approach has been or is being applied in areas such as Barking Riverside, in the Royal Docks and in Greenwich.
- The effects of single-site development expected to lead to significant change in local travel, such as a new retail centre like Westfield White City, the new Heathrow Terminal 5, major new hospitals such as Queen’s at Romford, or new schools. All major planning applications are reviewed.
- ‘Healthcheck’ reviews of the capacity, reliability and alignment of routes prior to the re-tendering of their contracts.

Further information on network development is provided in Background Paper 1.

We recognise the benefit of increasing the visibility of the review process, including how areas of study are prioritised, how inputs are gathered, and engagement generally. We have therefore reviewed how the current process can be enhanced and results are described in our response to recommendation 4.

Orbital and express services

We always consider the best way of meeting passenger demand. Where appropriate this includes opportunities to develop express or limited stop services. For example, following a review, we introduced the south London express service X26 to replace a previous limited-stop route which had chronic reliability problems. We have also expanded the days and hours of operation of the west London limited-stop route 607 as demand has grown.

As we develop our review programme we will continue to look at suggestions from stakeholders for new types of service. In general, however, the level of benefit per pound of investment that such services deliver indicates that other calls on the

funding available for bus services would take a higher priority over significant further investment in orbital and express services.

We currently have an extensive network of orbital links as would be expected given that buses are the principal form of public transport for suburban travel in London (see figure 3). The average length of trip passengers want to make by bus is, and is likely to remain, relatively short. This indicates that the major form of orbital provision should continue to be links into the nearest major town centres, with good interchange for longer trips. Additional links in the orbital network will continue to be considered, taking account of the usual factors of cost and benefit. We will also ensure that good information is available on how to make orbital journeys, as part of the wider marketing of the bus network.

Figure 3:
Existing orbital bus routes

The map displays a dense network of red lines representing existing orbital bus routes across Greater London. The routes are concentrated in the outer boroughs and surrounding towns, forming a complex web that connects various parts of the region. Key features include the River Thames flowing through the center, major roads like the M25 and A1, and numerous town centers marked with blue dots. Insets provide detailed views of specific areas, including Harlow, Welwyn, Stevenage, and others, showing the local bus network in more detail.

Recommendation 4

By March 2014 the Mayor and TfL should devise and publish details of a new approach to bus service consultation to provide for boroughs and Londoners to have a more informed say on bus services. This should include provision for targeted consultation with bus passengers who use Oyster cards via email and for the boroughs and bus users to comments on TfL's guidelines for planning bus services.

Consultation

We recognise the need for continuous development of our engagement and consultation processes to make them more transparent to stakeholders and the public.

The consultation process has been developed in recent years. A major change is that detailed descriptions of all proposals for significant changes to services are now posted for comment on our consultation website. This allows an opportunity for review before any final decisions are made.

Emerging initiatives include early engagement meetings with key stakeholders, to assist with informed comment, joint consideration with boroughs of additional formats for engagement, such as 'drop-in' sessions, and emails to registered Oyster card users about consultations which may be of interest.

Strategic engagement

Our planning work is network-based and we work closely with partners all over London on this basis. However, our current formal communications that are visible to stakeholders London-wide are based on the list of routes in the contract tendering programme. While this form of communication had merits when first devised, it now serves to obscure the network-based nature of our analysis.

We will, therefore, replace our current borough engagement process with a process designed to develop a shared list of development issues from both the borough and the TfL perspective, such as forthcoming planning approvals or potential bus priority schemes. We will write to boroughs and other stakeholders in autumn 2014 with details of how we will introduce this process.

The exact format of the process will be agreed with each local authority, but is likely to include the offer of an annual overview with senior officers / cabinet members. We have deliberately not defined a 'one size fits all' approach to allow flexibility and a match to available resources, and to ensure maximum efficiency, for example by using sub-regional structures.

We will also introduce a forum with London TravelWatch where aspirations for the bus network can be discussed alongside feedback from the borough meetings. This forum will take place at least every six months, commencing in autumn 2014.

This will not only lead to a more informed stakeholder say on services, it will also enhance borough planning by, for example, enabling earlier discussion of the smaller-scale planning applications in each borough which are below the threshold for referral to the Mayor. We are confident that this new approach will enhance strategic engagement both on specific network aspirations and on service planning principles.

By summer 2015 we will have sufficient information from this new approach to publish a statement on the work areas which need to be prioritised overall, and this will be kept under review.

Recommendation 5

By March 2014 the Mayor and TfL should report on their work with NHS providers including through the London Health Board to plan for good public transport access at each London Hospital and major health centre now and after NHS reconfigurations.

We are involved in both the London Health Board and the newly established London Health Commission set up by the Mayor. We are continuously building on the support we provide to the NHS on its major healthcare reconfigurations, and have developed a number of tools and protocols to assist.

At a project level we are active participants. Examples include the Barnet, Enfield and Haringey Clinical Strategy Group. As a result of our participation route 307 was diverted to Barnet Hospital, we provided guidance on travel analysis and the joint travel plan, and digital bus arrival information boards have been set up in hospital reception areas. For the North West London project, 'Shaping a Healthier Future', we are members of the travel advisory group. We have provided travel-time analysis data, bus service planning guidance, and advice on the promotion of active travel for staff and patients. We are currently working with NHS staff to obtain information on daily travel flows, so that we can understand the detail of how public transport usage may be affected.

In general where healthcare reconfiguration projects result in large increases in travel time, this is unwelcome for the individuals concerned. However, if this involves only a relatively small number of people each day then significant extra spending on bus services would not be justified. The most effective action would be to make information available on travel options and ticketing. If larger numbers are affected then additional spending on bus services may be viable, particularly if the enhancement also caters for other kinds of trips, although in some instances we would require more data on travel impacts than has yet been provided.

We will continue to participate fully in all of the active working groups planning health service reconfigurations. Working with the London Health Commission, we will ensure that each reconfiguration project is aware of the scope of data required for consideration of changes to public transport services.

Part 3 - Maintaining an effective bus network

Recommendation 6

In its next published business plan, TfL should demonstrate to Londoners the cost effectiveness of the bus service by showing the gross cost effectiveness and financial impact of concessionary fares for all modes of service.

London's buses are extremely cost-effective and continue to offer passengers value for money even as the operating subsidy for services is reduced. Cost-effectiveness is assured through our quality-led contracting system. Subsidy has been reduced by 40 per cent over the last five years whilst maintaining service levels and quality. We welcome the Committee's suggestion for innovative ways to demonstrate efficiency through our standard reporting as we continue to develop the network.

A substantial amount of TfL's expenditure on bus service contracts contributes to capital expenditure by the operators (all expenditure on bus service contracts is treated as revenue spending for TfL purposes). Our investment supports jobs in manufacturing across the country. Each year around 700 new buses enter the fleet, leading to an average age of six years. £274 million was invested in new vehicles and equipment in 2013/14. Deducting this from total contract payments gives an estimated 'operating' cost of £1,693 million.

Average revenue per journey on London's buses, including TfL-funded concessions such as free travel for children under 16, is under 65p, compared to an average bus fare per journey of over £1 in other UK cities. The revenue foregone for these TfL concessions is estimated at £195 million in 2013/14. Adding this to bus fares income and borough payments for Freedom Passes gives a total of £1,720 million, which is greater than the estimated 'operating' cost for that year.

We can project these estimates for buses out to other years of the Business Plan. However, ensuring compatibility of definitions with rail and other TfL modes for joint presentation on a consistent basis is a more complex task. Further work would be needed to determine if this is possible. Reporting of the current gross cost per kilometre is clearly possible. However, formal forecasts of passenger-kilometres over the years ahead are not currently available on a consistent basis.

We will continue to ensure the bus network offers value for money to passengers, and will improve how we communicate this to stakeholders and passengers.

In advance of the 2015/16 business planning round, we will consider the value of presenting adjustments for bus network capital investment and revenue foregone in relevant publications. As part of this we will determine whether it is possible to present the information in a way that is comparable with rail and other modes.

We will publish the current gross cost per passenger kilometre for the bus network in a suitable document, for example the Annual Report or the Budget document.

Recommendation 7

By March 2014 the Mayor and TfL should report on how they will use the next generation of Oyster cards to develop a passenger focused ticketing system that provides for new ticketing and fares options including 'early bird' fares, part-time travel cards and 'one hour' bus tickets, and funding options for these new products.

Our Future Ticketing Project (FTP) builds on the technology and customer benefits of Oyster and will eventually update the Oyster technology platform which was launched in June 2003. FTP Phase 1 saw the acceptance of contactless payment cards (CPCs) on London's buses for pay as you go (PAYG) single fare travel. Since the launch in December 2012 over 12 million bus journeys have been made and over 600,000 unique cards have been used.

FTP Phase 2 will see acceptance of CPCs on all our public transport services for PAYG travel and will include both daily capping and a new Monday to Sunday cap. A staff and customer pilot is currently underway to test the new system and roll-out to the public will take place this later this year.

Some of the new ticketing options recommended by the Committee, such as a 'one hour' bus ticket, have been reviewed relatively recently. Given the extra complexity and the significant additional costs of the 'one hour' option we do not believe that this is currently worth pursuing further. Similarly, 'early bird' fares were operated in 2004/05 and did not produce significant net benefits to bus passengers. We will, however, look again at developments to the ticketing system once the Future Ticketing Project has been fully implemented.

We recognise the need to find new ways to meet the needs of part-time workers and following the Mayor's commitment to the Assembly we are reviewing this option with a view to introducing a part-time Travelcard in 2015.

Recommendation 8

By March 2014, the Mayor and TfL should publish details on how they are improving bus journey reliability. This may mean more bus priority measures and tackling the 30 traffic pinch points on the road network that affect 250 bus routes.

The Mayor's Roads Task Force examined the significant and growing pressures on road space and commended bus services as an important element of the response. With congestion forecast to increase by 14 per cent by 2031, we welcome the Committee's support for bus priority. Good bus priority enables effective deployment of bus service capacity – irregularity due to random traffic delays is a significant element in crowding at the height of the peak.

With around 80 per cent of bus services running on borough-controlled roads, a large proportion of the development and delivery of further bus priority schemes will in fact be the responsibility of boroughs.

Our Business Plan has allocated £200 million over the period to 2020/21 for the development and implementation of schemes to give buses new priority at pinch points and along new high-quality bus priority corridors serving key growth areas. Identifying the most effective locations for new bus priority is vital. New techniques, drawing on data available from the iBus system, are now becoming available that will enable the boroughs and ourselves to better target our investment in bus priority (see figure 4 on average bus speeds). Further information is available in Background Paper 3.

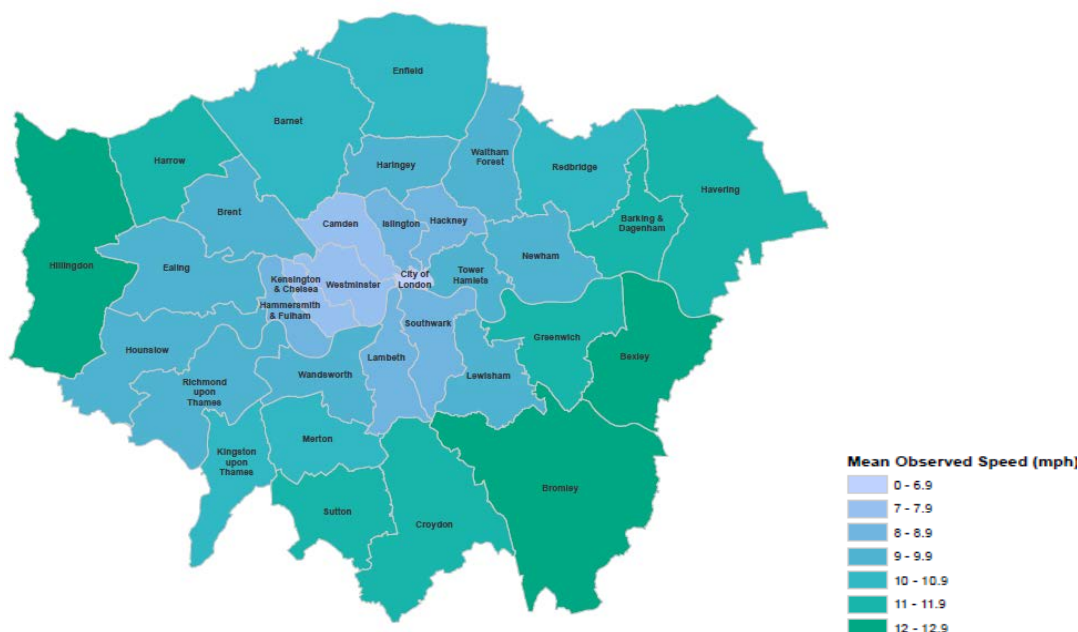


Figure 4: Average bus speed (PM peak, period 11 2012/13)

We will commence engagement with boroughs in autumn 2014 to present our analysis and seek views on how the bus priority funding should be allocated. This will then be followed by wider engagement with all other stakeholders.

While this enables new bus priority it will of course also be essential to ensure that existing priority is being used to maximise benefits for road users. The road network is being transformed over the next few years. We will thus seek to ensure that all significant road network changes maximise bus passenger benefits within the overall constraints of each project.

The request from London TravelWatch for an expansion of TfL staff resource dedicated to bus priority will be considered during 2014 as part of our wider work to ensure the efficient and timely delivery of the Mayor's roads programme.

Recommendation 9

By March 2014, the Mayor and TfL should publish the schedule for the roll-out of more environmentally friendly bus vehicles including electric bus vehicles to help reduce air pollution.

There is a comprehensive strategy to reduce emissions from the bus fleet. By 2016 emissions of oxides of nitrogen (NOx) will have decreased by around 20 per cent compared to 2012 levels. This builds on the successful completion of the world's largest retrofit programme, where all pre-Euro 4 buses were retrofitted with diesel particulate filters reducing particulate matter (PM) emissions from the bus fleet from 200 tonnes in 1997 to around 17 tonnes in 2013.

The Mayor's bus emission strategy consists of three components:

- 1. 100% of the fleet will meet Euro 4 standards for PM and NOx by 2015:**
The fleet already meets a minimum of Euro 4 standard for particulate matter, as all earlier vehicles have been retrofitted with diesel particulate filters (DPFs) which remove up to 90% of PM. In terms of NOx reduction, we are on track to either retrofit all Euro 3 generation engines with selective catalytic reduction equipment which reduces their NOx emissions by around 88% by December 2015, or replace them with Euro 6 buses (around 400 are expected to be in operation by 2016).
- 2. Building Europe's largest hybrid bus fleet:** with 600 hybrid buses currently on London's street and a total of 1,700 to be delivered by 2016, making up broadly 20% of the fleet, London has Europe's largest hybrid bus fleet. The New Routemaster is the lowest emission bus of its type, emitting around 50% less NOx and 25% less PM than the average hybrid bus. By May 2014 we will publish details of the fuel consumption of the New Routemaster compared to the conventional diesel buses they replace.
- 3. Trialling new zero emission technologies:** eight hydrogen buses are being trialled on the RV1 route and two electric buses on the 507/521 route, increasing to eight electric buses by the beginning of 2015. We will also be trialling inductive charging technology. These trials are part of a European wide project testing various types of electric bus technology.

Discussions are ongoing with the Office for Low Emission Vehicles (OLEV) for additional funding to accelerate the programme of low emission vehicles.

In the coming months the Mayor will be announcing further initiatives to reduce emissions from the bus fleet, including preparation for the Ultra Low Emission Zone (ULEZ). Under ULEZ, it is proposed that around an additional 2,000 hybrid buses would be needed by 2020, along with plans for a significant number of zero emission buses.

Transport for London
April 2014

Appendix 1: Summary of commitments

Rec.	Commitment	Timeframe
1	Review the strategic balance of capacity and demand in preparing for the next issue of the Business Plan.	Ongoing.
1	Continue to make the case for overall investment in London's bus network.	Ongoing.
2	Publish the number of passenger journeys and the level of bus-kilometres operated on each route.	Annual commitment. Publish 2013/14 data by December 2014.
2	Review whether the new process for estimating passenger alighting points using Oyster card data yields a sufficient sample in terms of network coverage to permit the construction of a robust indicator of 'busyness'.	Publish a report of findings by December 2014.
3	See recommendation 4.	
4	Replace the current borough engagement programme with a process designed to develop a shared list of development issues from both the borough and the TfL perspective, such as forthcoming planning approvals or potential bus priority schemes.	From Autumn 2014.
4	Introduce a forum with London TravelWatch where aspirations for the bus network can be discussed alongside feedback from the borough meetings.	Commencing Autumn 2014.
4	Publish a statement on the work areas which need to be prioritised overall.	By summer 2015.
5	Continue to participate fully in all of the active working groups planning health service reconfigurations. Ensure that each reconfiguration project is aware of the scope of data required for consideration of changes to public transport services.	Ongoing.
6	Consider the value of presenting adjustments for bus network capital investment and revenue foregone in relevant publications. Determine whether it is possible to present the information in a way that is comparable with rail and other modes.	December 2014.

6	Publish the current gross cost per passenger kilometre for the bus network in a suitable document, for example the Annual Report or the Budget document.	December 2014.
7	Find new ways to meet the needs of part-time workers with a view to introducing a part-time Travelcard.	Introduce in 2015.
8	Commence engagement with boroughs to present analysis and seek views on how the bus priority funding should be allocated. This will then be followed by wider engagement with all other stakeholders.	From Autumn 2014.
8	Consider expansion of TfL staff resource dedicated to bus priority as part of our wider work to ensure the efficient and timely delivery of the Mayor's roads programme.	Ongoing.
9	Bring the entire London bus fleet up to at least Euro 4 engine emission standard for oxides of nitrogen (NOx) and particulate matter (PM).	2015.
9	Publish details of the fuel consumption of the New Routemaster compared to the conventional diesel buses that they replace.	May 2014.
9	Introduce 1,700 hybrid buses in service, making up broadly 20 per cent of the bus fleet.	2016.
9	Trial wireless charging infrastructure and four range-extended diesel-electric hybrid double-deck buses.	Commence later in 2014.