Updated Accessible Bus Stop Design Guidance

Consultation Report October 2015



MAYOR OF LONDON

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1 Background

The updated Accessible Bus Stop Design Guidance (the guidance) provides advice to those designing and maintaining bus stops in London. It supports Transport for London's (TfL) programme to make 95 per cent of bus stops in London accessible for all users by the end of 2016. This guidance updates the original accessibility guidance document, published in 2006, to ensure guidance is both relevant and reflects changes in transport policy and practice.

The updates to the 'Accessible Bus Stop Guidance note BP1/06' published in January 2006 and its predecessor documents have been developed in the context of the Equality Act 2010, the Mayor's Transport Strategy, the London Cycle Design Standards and the Accessibility Implementation Plan.

Key additions include:

- Criteria for an accessible bus stop
- New chapter on 'Interaction of bus stops with other street facilities'
- New chapter on 'Cycle facilities'

Key omissions include:

 The removal of references to articulated buses and particular kerb types that are not specified for use by TfL

2 Introduction

This report outlines the consultation undertaken on the guidance and summarises the responses.

This includes:

- An overview of the consultation
- Consultees comments
- Our responses to consultees comments

3 Overview of the Consultation

The consultation 'Have your say on the updated Accessible Bus Stop Design Guidance' was open for members of the public and organisations to comment between 22 September and 31 October 2014.

The objectives of the consultation were:

- To provide stakeholders and the public clear information about the guidance
- To encourage comments and feedback from stakeholders.
- To understand the level of support or opposition for the proposed revisions
- To identify any new concerns and issues which could affect the proposed revisions
- To fully capture the concerns and objections of all stakeholders and consultees
- To encourage positive suggestions on the revisions to the guidance

As outcomes of the consultation we have:

- Modified the guidance in response to issues raised in consultation
- Proceeded with updating the guidance for publication

3.1 Who we consulted

The consultation was open to the public and views of relevant stakeholders were sought. A list of the stakeholders consulted is shown in Appendix C. Responses from the public and from stakeholders are shown in Section 5 and 6 respectively.

3.2 Consultation material, distribution and publicity

The consultation was published online¹. It included context and background on the guidance and asked questions on each chapter. We raised awareness of the consultation by:

- Emailing TfL contacts who previously expressed interest in accessibility issues and including key stakeholders
- Staffing a stall at the 'Access All Areas' event on 2 October 2014 to discuss the proposed updates
- Producing social media updates highlighting the consultation, including12,000 twitter followers of TfL Access

17 questions were asked in total, three of which were closed questions and the remaining 14 allowed respondents to provide comments. A full list of the questions is available in Appendix B.

4 Overview of Consultation Responses

30 responses were received to the consultation, including seven from local authorities and six from access groups. The main themes included:

- Design of bus shelters
- Cycling interaction with bus facilities (bus stop bypasses)
- Hail & Ride services
- Kerb heights/Kassel kerbs (concave-section kerb for bus stops served by low-floor buses, developed in Germany)
- Provision of audio information at bus stops
- Need for additional bus driver training

The latter three are not included in the guidance.

Transport for All requested a meeting with TfL in their consultation response, to ensure their members' comments were fully explored. This meeting was held on 26 January 2015, and detailed in Appendix D.

¹ <u>https://consultations.tfl.gov.uk/buses/accessible-bus-stop-design-guidance</u>

5 Comments from Members of the Public and Our Responses

There were 20 comments from members of the public which we have responded to below. These comments and our responses have been categorised below by the chapter of the guidance they relate to.

There were a further 21 comments from members of the public (see Appendix E) which have been incorporated, where appropriate, into our updated guidance.

5.1 Chapter 1 - Introduction

Comment 1

"A service cannot be accessible unless the people who use it have understanding of it. Bus drivers are the greatest cause of inaccessible services. They drive away from stops before ensuring that people are seated thus risking causing pain at the very least if not the possibility of further injury. I have personally witnessed bus drivers mocking or making fun of disabled people on bus journeys on a regular basis."

Our response

All TfL bus drivers receive comprehensive training and guidance via the 'Big Red Book' which provides up to date information about our buses and services, along with tips on how to deal with difficult situations in a professional way. The actions described are not those we condone in terms of expected bus driver behaviour. We will be reviewing this and contacting the bus operators to address these concerns.

5.2 Chapter 2 - Accessible bus services

Comment 2

"Yes, it was good that the paragraphs mentioned low level buses, and also the ramps. However I would like to see a bit more emphasis on the lowering of the bus. This is not always done, so it can make boarding and alighting difficult for those who are not in wheelchairs. There needs to be more training on this."

Our response

When to lower a bus is primarily a bus driver training issue. All TfL bus drivers receive thorough and comprehensive training including the 'Driver Certificate of Professional Competence' (DCPC) and a BTEC Level 2 qualification with a number of key competencies, including: London Bus Operations and delivering a professional, inclusive and safer Bus Service. We will be reviewing this and contacting the bus operators to address these concerns.

5.3 Chapter 3 - Bus stop locations

Comment 3

"Have more bus stops along the high street."

Our response

Section 3 of the guidance refers to the ideal spacing for accessible bus stops of approximately 300-400m, although as noted a closer spacing in town centres may be required to meet passenger requirements.

5.4 Chapter 4 - Passenger waiting area

Comment 4

"Paragraph 'Bus Passenger Shelter' mentions seating within the bus shelter to assist ambulant disabled and older passengers. What it does not mention is the type of seating. Most London bus shelters have a red plastic bench with a sharp forward slope. This slope makes it almost impossible for many older or ambulant disabled passengers to sit in a safe, comfortable and stable way. The effort required to stay seated and not slide forward and off the seat is too great for many people. The surface of the seat should be redesigned to be flat, parallel with the ground."

Our response

TfL is committed to the ongoing upgrade of bus shelters and shelter seating to increase accessibility. The design for upgraded shelters (known as the Landmark London shelter) includes priority end seats with arm rests. Approximately one third of shelters had been upgraded (including seats) as part of a rolling shelter upgrade programme.

Comment 5

"Virtually every bus stop in the whole of City of Westminster is cluttered with bins and rubbish bags. It's very difficult for anyone to get on and off of buses let alone disabled people. How will you get local authorities to engage with your proposals?

Bus shelters should not face the road due to puddles and splashing of people waiting for the bus."

Our response

Removing street furniture which obstructs passengers boarding and alighting is one of the design recommendations of the guidance. Chapter 4 of the guidance shows boarding/alighting zones which should be kept clear of all street furniture. We acknowledge that there are issues with the positioning of street furniture at some bus stops and we are engaging with Boroughs to address these issues.

Bus shelters which face the road are preferable from an accessibility point of view and to enable full usage of the bus cage. However, other arrangements may be used where footways are narrow or other site constraints dictate.

The guidance notes the importance of highway maintenance to reduce puddles and splashing.

Comment 6

"I have concerns regarding bus user and cyclist conflict."

Our response

The guidance has been amended to provide practical recommendations on how to implement measures that should address the issue regarding cyclist and bus user conflict at bus stops. This is in line with the updated London Cycling Design Standards.

Comment 7

"Bus shelters are good, as not everyone can stand, and they also help keep passengers waiting in the dry. The bus shelters need to be made of plastic that is tough - so at least people can see what is coming."

Our response

Shelters with a half width or no end panel on the bus approach side are recommended to improve visibility of approaching buses.

Comment 8

"There needs to be guidance on the alignment of Countdown displays. Ideally these should be parallel to the kerb so that passengers already on-board a bus can read them and decide whether to alight (possibly at a subsequent stop) to achieve a quick connection. Ideally the section of a shelter roof above the display should be glazed, so that upper-deck passengers can also see the display."

Our response

Countdown displays are provided for passengers waiting at bus stops. For passengers aboard a bus we recommend the use of smartphone apps or the TfL website.

Comment 9 summary

"I am pleased that street furniture within a certain distance of bus stops will be removed or re-positioned. As a registered blind, guide dog owner, I would find audio bus stops, which are not mentioned in this guidance to be a big improvement."

Our response

We acknowledge this issue and we are looking at bus stop independent audio options to help blind and partially sighted people find their way around the network independently. Trials of audio information at bus stop carried out in 2010 were unsuccessful due to objections from local residents. We will continue to keep this issue under review, but have not included such proposals in this update of the guidance.

5.5 Chapter 5 - Bus stop area

Comment 10

"Make them bigger so that two buses can fit comfortably."

Our response

Guidance on the length of the bus stop cage varies depending on the highway layout, the size of buses serving the stop and the number of buses per hour serving the stop.

Comment 11

"A double sided bus shelter could provide two rows of seating in busier areas."

Our response

The shelter design will depend on the location characteristics, including passenger demand and available footway. For example, some locations are not large enough to accommodate double shelters.

Comment 12

"Would like to have a button you can push to make bus arrivals audible."

Our response

We acknowledge this issue and we are looking at bus stop independent audio options to help blind and partially sighted people find their way around the network independently. Trials of audio information at bus stops were carried out in 2010 were unsuccessful due to objections from local residents. We will continue to keep this issue under review, but have not included recommendations in this update of the guidance.

5.6 Chapter 6 - Bus stop layouts and Chapter 8 - Bus bays or lay-bys

Comment 13

"Lay-bys may be better than bus stops that are in main line of traffic. Gutters need to be checked regularly as to prevent flooding or people waiting in puddles."

Comment 14

"Make more lay-bys for Buses cut into the paving. This will reduce congestion behind buses. I can understand why you don't like lay-bys, but cars must be prevented from parking in the bus stop area - otherwise it is hopeless to get on a bus if you have a physical disability."

Our response

Lay-bys can create problems for buses seeking to re-join traffic on the main carriageway. They should be provided where a stopped bus on the carriageway would present a safety hazard, or for other identified safety purposes.

5.7 Chapter 9 - Kerb profiles and heights

Comment 15

"Have kerbs which have tactile paving."

Our response

Tactile paving is designed specifically to help identify the location of formal and informal crossing points. If tactile paving is used at other locations it can cause confusion for people with visual impairments.

5.8 Chapter 11 - Cycle facilities

Comment 16

"Make cycle routes run behind Bus Stops."

Comment 17

"Cyclists need to remember to use the road responsibly. Pavements should be for pedestrians. I am appalled that cyclists are being pandered to above all other road users. Cyclists are allowed to jump lights directly into the path of pedestrians crossing the road in Croydon. The new 'drive-by' bus stop proposal fails to address the issue of people rushing for a bus who do not see the cycle lane. You are assuming that all cyclists will stop when in truth very few cyclists even stop at a red light."

Our response

The guidance incorporates potential measures to reduce risks to pedestrians and cyclists in bus stop bypasses. This guidance is in line with the recently updated London Cycling Design Standards².

² https://www.tfl.gov.uk/corporate/publications-and-reports/cycling

Comment 18

"It would be helpful to develop a national standard bus-shape stencil for application to one-way cycle lanes some 7-10m before that lane is interrupted by a bus stop/cage or shelter."

Our response

The Traffic Signs Regulations and General Directions (TSRGD) 2002, provide detail oncarriageway markings. Any proposed changes to this are the responsibility of the Department for Transport; we consider these standards sufficient for bus stops.

5.9 General comments

Comment 19

"Bus drivers need more training, and consideration needs to be given to reducing the problem of buses stopping before the stop because of queuing - this often makes them stop outside of accessible spaces."

Our response

We will engage with bus operators about this reported behaviour and ensure bus drivers are provided with clear expectations. This guidance details the design of a bus stop that would assist bus drivers in stopping inside the accessible space.

Comment 20

"I wonder whether (the guidance) will be provided to appropriate cable and telecom businesses that determine street cabinet positions and widths."

Our response

The guidance will be published on the TfL website and will be launched through a press release, with the aim of reaching a wide audience, including these parties.

6 Comments from Statutory Bodies and Other Stakeholders and Our Responses

There were 30 comments from statutory bodies and other stakeholders which we have responded to below. They have been categorised below by the chapter of the guidance they relate to.

There were a further 62 statutory bodies and other stakeholder comments (see Appendix E) which we have incorporated where appropriate into the guidance. 24 of these comments related to formatting or content issues which we have amended.

6.1 Chapter 1 - Introduction

Croydon canal restoration group comment summary

"Bus design has gotten worse"

Our response

Your comment has been noted, however, bus design is outside the scope of this guidance and consultation.

Transport for all

"Not only is it important to remind enforcement authorities about the need for keeping bus stops free of park vehicles, but TfL should regularly prompt and train bus drivers to report problem spots. In our engagement with bus garages, its clear that drivers know that there are particular stops that are frequently blocked and made inaccessible but they don't seem to tell councils about this. There should be an expectation that if they can't pull right into a stop because of parked cars or another council enforcement issue, they radio the garage and the control centre can take it up with the council."

Our response

Bus garage managers engage with London Boroughs on a regular basis and discuss various issues looking for appropriate solutions. Drivers feed back to their garage with concerns and issues on their route, this information is also reviewed and passed on to enforcement officers.

LB Hillingdon - Access & Mobility Forum

"100mm kerb height is inadequate; 125mm should be the minimum. It is steep ascending and will cause some wheelchairs to tip backwards, particularly if there is an additional LIP at the top between the ramp and the bus floor. 100mm kerb height requires most wheelchair users to alight and descend a steep ramp backwards facing. Such a scenario is disconcerting and dangerous particularly at busy bus stops. To descend a steep ramp because of only 100mm kerb height forward facing could cause a wheelchair user to lose balance or result in there wheelchair tipping over."

Our response

As described in chapter 1of the guidance, 125-140 mm is the ideal range for kerb height. However, this is not always achievable due to footway camber, drainage and other issues. 100mm is outside the ideal range, but considered acceptable in certain situations.

6.2 Chapter 2 - Accessible bus services

Ealing Transport for All

"Not only are low floor buses a benefit to people with mobility issues & passengers with pushchairs but they also benefit people with shopper trolleys. However there is no point in having a kneeling bus if the bus driver does not pull into the kerb and the kerb is not the right height. The Red Book has been around for years but drivers quite often do not pull into the kerb. However sometimes they cannot because of parked lorries and cars and overhanging branches. Loading bays should not be adjacent to bus stops."

Our response

The guidance provides practical guidance for bus drivers to prevent this problem. We will engage with bus operators about this reported behaviour and ensure London bus drivers are reminded of best practice.

6.3 Chapter 3 - Bus stop locations

Ealing Transport for All comment summary

"In suburban areas dropped kerbs from residential properties prevent drivers stopping near the kerb."

Our response

We will engage with bus operators to identify appropriate locations for bus stops, in such locations.

London TravelWatch

"TfL's policy is to move towards fixed stops which we support. If hail and ride sections are to be retained then fixed stops should be installed as well. Hail and Ride bus services are not accessible."

Our response

This guidance recommends having fixed stops or alternatively hail and ride along a route,

but does not recommend a mixture of these measures. Accessible boarding points may be installed on a route as per option 2b (Chapter 3) but will not be classed as a bus stop.

6.4 Chapter 4 - Passenger waiting area

Ealing Transport for All

"Many of my local bus shelters are completely inadequate for the number of people waiting. Many of them serve multiple bus routes & sometimes there can be anything up to 20-25 people waiting. TfL should install far more double shelters and ones that actually protect people from inclement weather. All major bus stops should have Countdown & all stops that are only served by one bus route. Not everyone has a smart phone. The New Bus for London is not suitable for people with mobility problems & people in wheelchairs."

Our response

The shelter design will depend on the location, but double shelters are often not possible due to site constraints. 72 per cent of bus stops in London currently have bus shelters and we are committed to providing bus shelters, where possible and appropriate. Countdown bus passenger information is also currently installed at over 2,500 bus stops across London.

The New Routemaster buses have accessibility facilities, such as a step-free gangway on the lower deck from the front to the back; this allows easier access for those passengers with a mobility impairment and passengers with buggies. There is also a large wheelchair bay directly opposite the ramped centre door. Routemaster passengers are alerted to the next stop by audio and visual announcements. There is also a T-Loop system which transmits announcements for passengers with hearing aids.

Transport for all

"We are surprised there is no aim here about increasing the number of bus stops with seating and shelter. We regularly hear complaints from older people about bus stops with neither seating or shelter - a huge barrier to people using buses, especially in areas where there may be a long wait. We would like TfL to publish how many bus stops lack these facilities and set an 100% target for shelter and seating. In some places e.g. Wood Green existing shelters have been removed - unacceptable.

Also much bus stop seating is highly inadequate - sloping 'bum rests' which are impossible for many older people to use. Most London bus shelters have a red plastic bench with a sharp forward slope. This slope makes it almost impossible for many older or ambulant disabled passengers to sit in a safe, comfortable and stable way. The surface of the seat should be redesigned to be flat, parallel with the ground."

Age UK London

"In the section on "Bus passenger shelter" we urge that consideration be given to the type of seating which is provided. Some seating at bus stops appears difficult for older or disabled people to use, for example because it is low, has no arms or back and/or has a narrow surface. We think that this is an area which warrants further investigation."

Our response

TfL is committed to the ongoing upgrade of bus shelters and shelter seating. The design for upgraded shelters (known as the Landmark London shelter) includes priority end seats with arm rests. Approximately one third of shelters had been upgraded (including seats) as part of a rolling shelter upgrade programme.

The removal of bus shelters in Wood Green is a temporary measure to facilitate urban realm improvements. Landmark London bus shelters were reinstated in spring 2015. We apologise for any inconvenience caused to bus passengers.

LB Lewisham

"Some reference should be made to the height of the shelter. This can be affected if the footway is raised from a shallow kerb height."

Our response

Bus shelters should remain at an appropriate height regardless of changes to the footway levels. Guidance for kerb height is detailed in Chapter 1 of the guidance.

LB Ealing

"The guidance needs to recognise in the diagrams that rubbish bins are normally positioned at bus stops as a facility for passengers."

Our response

Chapter 4 of the guidance shows boarding and alighting zones which must be kept clear of all street furniture. The guidance provides clarity to help highway authorities to balance the need for street furniture and to keep bus boarding and alighting area clear to ensure that bus ramps can be deployed. We acknowledge that there are issues with the positioning of street furniture at some bus stops and are willing to engage with Boroughs on this issue.

LB Camden

"Page 14 – Figure 8 (referring to boarding/alighting zones) shows a bus shelter downstream from the flag, facing away from the carriageway on the kerb side of the footway (back to street layout). Shelter would need to fit between rear doors if being used by 3 door buses. Potential conflict with boarding/alighting zones if driver was to over/undershoot the stopping point at the flag (obviously this is not the case if shelter is actually in the centre of the footway). Also no mention of distance between doors (2m between front and centre doors in previous guidance) for design of 'boarding/alighting zones'."

Our response

The distance between doors has been included in the final guidance. The suggested layout (shelter between rear doors) is not recommended by the guidance.

6.5 Chapter 5 - Bus stop area

City of London

"In locations where there are strong competing demands for kerbside space, cage lengths below 25m may be necessary. Although there is no reference to the colour of bus stop lining and marking, it is important to consider the different requirements of each borough if a consistent approach is taken across London."

Our response

The length of the bus stop cage varies depending on the highway layout, the size of buses serving the stop and the number of buses per hour serving the stop. We will engage London Boroughs on specific bus stop designs where appropriate.

6.6 Chapter 8 - Bus bays or lay-bys

LB Sutton

"I think the guidance should mention that half depth bus bays are easier for buses to pull out of and also make it easier for cyclists to pass a stationary bus. The same is also true for full bus bays in respect of cyclists passing stationary buses."

Our response

Lay-bys should be provided where a stopped bus on the carriageway would present a safety hazard, or for any other safety reason, but they are not generally welcomed by bus operators as they can create problems for buses seeking to re-join traffic on the main carriageway. Example layouts for half filled bays is provided in the guidance.

6.7 Chapter 9 - Kerb profiles and heights

Ealing transport for all comment summary

"The most important matter at a bus stop is the kerb height.100mm-140mm is too low given that the ideal kerb is a Kassel kerb and these start at 160mm."

LB Hillingdon - Access & Mobility Forum comment summary

"Kerb heights must be no less than 125mm and a maximum of 140mm. These specifications must be maintained by all contractors responsible for highway maintenance. This guidance should be prescriptive about the type of kerbstone to be installed if bus driver training does not require drivers to demonstrate that they are able to 'feel' the nearside front wheel."

Our response

The introduction of low floor buses throughout London, fitted with ramps for wheelchair access, has led to a requirement for appropriate kerbside access at bus stops. In order for a bus to deploy its ramp the ideal range for kerb height is 125-140mm, with 100mm the minimum for compliance. Therefore the ramps on London buses are no longer designed to be used with 160mm Kassel kerbs. The range of kerb heights specified will ensure that there is a consistent standard which is both accessible and achievable.

LB Lewisham

"I would like to see 125mm min kerb height to reduce the angle of the slope form the bus plate. Although drainage is mentioned, I would like further paragraph on details that neighbouring driveways and entrances to properties can have an affect on the design of the bus stop. In some cases a land survey should undertaken."

Our response

As described in the guidance, 125-140 mm is the ideal range of kerb height to serve bus wheelchair ramps. A section of kerb that is at this height should be achievable at the majority of bus stop locations. 100mm is considered acceptable in certain situations where more additional height is not achievable (eg due to footway camber, drainage, driveways). In some cases a land survey may be required.

LB Camden

"It might not be possible to achieve kerb heights as suggested as well as adequate crossfalls without full re-design of the footway and carriageway and without affecting adjacent premises."

Our response

We accept that there will be a very small number of locations where this will present a challenge. However, at the majority of locations we believe this to be achievable.

City of London

"Agreement with kerb heights and carriageway crossfalls to avoid drainage issues if kerb heights are raised. It should be noted that raised bus stops will cost more to deliver in the City of London than other local authorities."

Our response

Your point is noted. There are a number of processes by which bus stop accessibility can be improved and funded, including the Local Implementation Plan programme, developer contributions at new developments and accessibility enhancements coinciding with road network improvement schemes. Our objective is to work with the boroughs (including City of London) to increase the number of accessible bus stops. We will continue to seek improvements to bus stop accessibility after costs and benefits have been evaluated.

6.8 Chapter 10 - Interaction with other street facilities

LB Camden

"Worth including consideration being given to the bus types that operate on the route and if all buses have different low floor access capabilities. Advice from TfL may not always be necessary as local authority officers may have experience in this area therefore advice may depend on the level of previous involvement."

Our response

This guidance is to provide support to London Borough officers. All London buses are fitted with deployable ramps to enable wheelchair boarding and alighting. This document provides guidance to ensure that bus stops in London can be served by the London Bus fleet with ramps deployed.

6.9 Chapter 11 - Cycle facilities

London TravelWatch

"Before TfL includes bus stop bypasses in this guidance it should do some proper research and also demonstrate how disabled, older and visually impaired passengers are supposed to cope with cycles being diverted around the rear of a bus stop. TfL should commission an equality impact assessment."

Transport for all

"We are strongly opposed to floating bus stops in their current configuration. VI members and wheelchair using members who have tried them have found them frightening, and we have not heard any convincing explanation of how, if there is cyclist priority, VI people could safely cross the bike lane. We therefore would like an immediate halt to all island bus stop building until these problems have been resolved. See more details here <u>www.transportforall.org.uk/news/proposals-to-make-pedestrians-cross-bike-lane-to-reachbus-stop</u> "

LB Lewisham

"This design causes conflicts with pedestrians with guide dogs and wheelchairs."

Age UK London comment summary

"We are very concerned at the possibility of bus stop cycle bypasses being rolled out on main roads across London. We seriously doubt that this type of design can work safely for bus passengers with mobility impairments or visual impairment or other disabled passengers. The possible problems include:

- collisions because disabled passengers were unable to avoid cyclists;
- disabled passengers being deterred from using the bus stop because of safety worries (we have heard of an unofficial trial at Stratford where a visually impaired person felt unable to cross to the bus stop because he did not know whether there was a cyclist coming);
- overcrowding on the bus stop island, especially if the stop is served by several bus lines. This would be particularly difficult for disabled or older people to negotiate;
- the observed behaviour of some cyclists (eg. at pedestrian crossings and traffic lights) would be of concern at bus stop bypasses!

Accidents will be more likely."

Our response

In 2013 TfL commissioned and funded research from the Transport Research Laboratory (TRL) to consider the design of bus stop bypasses. The trials formed part of a wider programme of off-street trials of innovative cycling infrastructure to inform TfL's implementation of the Mayor's Vision for Cycling, which has been published in March 2013. The TRL trials constituted off-street testing of bus stop bypasses and included testing by users with a range of disabilities including visual impairment. The four designs tested included different combinations of ramps and zebra crossings. This research concluded that most cyclists felt safer using the bus stop bypass, rather than remaining on the road and that around half of cyclists interviewed felt they would be more likely to cycle in central London if such cycle tracks were installed³.

Following this, during 2013 and 2014 we conducted research on the public's opinion of the bypasses as part of the Cycle Superhighway 2 extension between Bow Roundabout and Stratford. This research built on the off-street trials and revealed that 89 per cent of cyclists and 70 per cent of bus passengers and pedestrians supported their use. The surveys specifically included feedback on steps taken to mitigate impacts on pedestrians, such as signage and the use of iBus announcements.

The surveys also revealed that 92 per cent of cyclists on Stratford High Street used the bus stop bypass when there was a bus at the stop and 86 per cent when there was no bus at the stop.

Further monitoring of bus stop bypasses will take place on other schemes, particularly at locations where there are high numbers of bus passengers and cyclists, to ensure that any remaining issues are addressed.

We undertake a full 'Environmental Impact Assessment' for all programmes and projects and all designs go through a thorough road safety audit process.

The Accessible Bus Stop Design Guidance has been amended to provide practical recommendations to help reduce risks to pedestrians and cyclists in bus stop bypasses including:

 Measures to encourage considerate cycling should be considered ahead of the crossing to reduce potential cycle/pedestrian conflict. Clearer signage may support this message, particularly when the facility is initially installed;

³ http://www.trl.co.uk/solutions/sustainability/cycling/safer-cycling-innovations/bus-stop-bypass

 Visual contrast should be provided between the crossing area and the remainder of the cycle track, both to alert cyclists to the crossing and to highlight it for anyone with visual impairments.

TfL is committed to keeping the designs of bus stop bypasses under review, particularly in regards to the interaction between cyclists and pedestrians. As part of this process, we have an extensive monitoring strategy in place and are engaging with accessibility groups and will closely observe how these bus stop bypasses are being used. We are also currently trialling zebra crossing arrangements as part of the installation of the North-South Cycle Superhighway.

6.10 Chapter 12 - Longer term issues

London TravelWatch

"TfL should set itself a target of implementing fixed accessible stops along all sections of bus routes to replace Hail and Ride."

Our response

We are unable to set a target to implement fixed bus stops along all sections of hail and ride routes as this option may not be the appropriate solution in some instances. Each change to hail and ride services will need to reviewed on a case by case basis

LB Camden comment summary

"Trees can affect accessibility and ramp deployment, they can also grow and affect how close the bus can park to the kerb. Blocked gullys can cause ponding, which passing vehicles can splash onto waiting passengers."

Our response

We are open to engaging with Boroughs on these particular maintenance issues.

6.11 General comments

Ealing Transport for All - comment summary

"Who has been engaged with through this consultation?"

Our response

Please see Appendix C for a list of stakeholders consulted.

London TravelWatch

"We have great concerns about the bus stop bypasses."

Our response

Bus stop bypasses are an option in specific locations where cyclists may face a risk in overtaking stationery buses. A Road Safety Audit should be undertaken for each individual design to identify specific risks specific to the location and measures to reduce these.

City of London

"Consider consistency in design which is a key consideration for visually impaired people. Many references are made to the Traffic Signs Regulations and General Directions (TSRGD) 2002, however these regulations are expected to be updated in 2015. It may be beneficial to defer this guidance document until the TSRGD has been updated. Any revision to the regulations can therefore be incorporated, otherwise the guidance may soon be out of date."

Our response

We will review TSRGD once it is released and amend the guidance if necessary. However, we do not anticipate any significant changes affecting this guidance.

LB Kingston upon Thames comment summary

"Audio bus stops should be introduced."

Our response

We acknowledge this issue and we are looking at bus stop independent audio options to help blind and partially sighted people find their way around the network independently. Trials of audio information at bus stops were carried out in 2010 were unsuccessful due to objections from local residents. We will continue to keep this issue under review, but have not included it in this update of the guidance.

6.12 Additional comments

Comments from the Independent Disability Advisory Group were received after the consultation closed. A summary including our response has been included:

Comment summary

The overall concern is that, having identified passenger centred aims at the start, the design objectives are based largely on the needs of the bus. A clearer approach may be first to identify the barriers faced by disabled bus travellers, and then to consider how each barrier can be removed or reduced for those groups to make the stop accessible. Almost inevitably this will influence some of the technical design, particularly regarding the situation when several buses arrive at the same time. It may help to use a variant of the Human Factor Analysis (as deployed by the Transport Research Laboratory) to identify points of concern.

Access between the public highway and the bus stop is crucial when it comes to accessibility.

Visually impaired customers find it difficult to locate bus stops.

Adjacent bus shelters with the red seating may be one clear identifier, or design could consider some sort of tactile or sensory alert.

The adequacy of that waiting area is also an aim. Those waiting for buses need shelter. The recent Court of Appeal ruling (First Bus v Pauley) increases the possibility of wheelchair users waiting at the stop, so shelter needs to accommodate their needs.

Although it is useful to have the bus stop identifier at the top of the post, that is not available to disabled travellers who cannot see or read those data. Consideration should be given to putting the number in a more accessible place on the post.

Some thought needs to be given (in the context of security) to ensuring the bus stops do have access to mobile phone or Wi-Fi signal. In the event of a hazard, including a medical emergency, travellers need to make emergency calls.

Hail and Ride is only available to those who can see and identify the bus, and then hail it. A system under which waiting at an identifiable fixed point to be picked up will make the service accessible. It means that pick up points can be where the pavement is suitable for wheelchair users.

Our response

We are always seeking to improve design for all our customers, particularly those with disabilities. We regularly commission research in this area. The main barriers faced by those with disabilities which adversely impact on their ability to make regular public transport journeys, are often the same as those expressed by non-disabled customers (eg concerns about overcrowding and antisocial behaviour). Accessibility related issues, cost and comfort are also barriers to travel. At this time, we do not have plans to undertake human factor analysis, however, there may be opportunities to commission such a study in the near future.

The scope of the guidance is limited to the bus stop area. We recognise that access between the public highway and the bus stop is critical; but this is an issue for relevant local highway authorities. We will consult on 'Pedestrian Design Guidance' later in 2015 which will consider more general issues such as the state of footways.

In response to specific issues raised:

- The base of the bus stop flag is designed to be recognisable from other posts. It has the same shape, weight and texture. A guide dog or cane user can be trained to recognise how it feels.
- Tactile paving is designed to help identify the location of formal and informal crossing point and should not be used at other locations.
- Information on the routes and destinations served by the bus stop is available on the timetable panel which is at a lower level at the bus stop.
- We do not consider the provision of mobile phone signal to be a significant problem at the majority of bus stops. The provision of Wi-Fi at bus stops is not considered practical or necessary at the moment.
- Accessible boarding points may be installed on a route as per option 2b (Chapter 3) but will not be classed as a bus stop.

7 Conclusions

Following this consultation we have made a number of amendments to the guidance based on comments from consultees. Some of the more significant amendments include:

- Ensuring that diagrams are clear and appropriately sized
- More detail of the range of different user needs that London bus passengers have
- Chapter 10 'Interaction with cycle facilities' has been comprehensively rewritten to incorporate content published in the updated 'London Cycling Design Standards'. This includes comprehensive guidance on how to avoid conflict in infrastructure design at bus stops.

The following have been considered but are outside the scope of this guidance:

- The definition of an accessible bus stop will remain unaltered, whilst we progress in delivering 95 per cent of all bus stops being accessible by the end of 2016
- Accessibility is essential for the London bus fleet, particularly with regard to deployable ramps appropriately
- There is a need to ensure a wide coverage of accessible bus stops across London's bus network for customers, particularly those who use wheelchairs.

A number of comments were received regarding driver training. This guidance does not cover training, however comments have been provided to those involved in order to

improve TfL bus driver training and guidance. Other comments will also be raised with London bus operators.

7.1 Next steps

The next step will be publication of the Accessible Bus Stop Design guidance.

Appendix A – Copy of the Consultation Leaflet



<u>Accessible Bus Stop Design Guidance for public consultation 290914.pdf</u>, 1.4 MB (PDF document)

Appendix B – List of Questions

Below is the list of questions asked to consultation participants by TfL through our online questionnaire tool page. Questions 3-15 asked for specific references to paragraphs and/or figure numbers from the Accessible Bus Stop Design Guidance.

- 1. Are you directly responsible for designing accessible bus stops?
- 2. How would you use the Accessible Bus Stop Design Guidance?
 - Design
 Reference
 Research
 - Campaign purposes
 General interest
- 3. Do you have any comments on Chapter 1 "Introduction"?
- 4. Do you have any comments on Chapter 2 "Accessible bus services"?
- 5. Do you have any comments on Chapter 3 "Bus stop locations"?
- 6. Do you have any comments on Chapter 4 "Passenger waiting area"?
- 7. Do you have any comments on Chapter 5 "Bus stop area"?
- 8. Do you have any comments on Chapter 6 "Bus stop layouts"?
- 9. Do you have any comments on Chapter 7 "Bus boarders"?
- 10. Do you have any comments on Chapter 8 "Bus bays or lay-bys"?
- 11. Do you have any comments on Chapter 9 "Kerb profiles and heights"?
- 12. Do you have any comments on Chapter 10 "Interactions with other street facilities"?
- 13. Do you have any comments on Chapter 11 "Cycle facilities"?
- 14. Do you have any comments on Chapter 12 "Longer term issues"?
- 15. Do you have any comments on Chapter 13 "References / Data sources"?
- 16. How did you hear about this consultation?
 - Received an email from TfL
 Received a flyer from TfL
 - Saw an advert on the TfL website
- Read about it in the press
- Through social media
 Other
- 17. Do you have any general comments on Accessible Bus Stop Design Guidance?

Appendix C – List of Stakeholders Consulted

- Action on Disability and Work UK
- Action on Hearing Loss (formerly RNID)
- Age UK London
- Alzheimer's Society
- Aspire
- Business Disability Forum
- Christiane Link
- Connect
- Croydon Canal Restoration Group
- Croydon Mobility Forum
- Disability Rights UK
- Disabled Persons Transport Advisory Committee
- Ealing Transport for All & EPTUG
- Gosport Access Group and Disability Forum
- Greater London Forum for the Older People
- Greenwich Pensioners Forum
- Guide Dogs for the Blind Association
- Hammersmith and Fulham Disability
 Forum
- Haringey Mobility Forum
- Harrow Macular Disease Society
- Hillingdon Mobility Forum
- Hounslow Mobility Forum
- Inclusion London
- Independent Disability Advisory Group (IDAG)
- Islington Mobility Forum
- Joint Committee on Mobility for Disabled
 People

- Joint Committee on Mobility of Blind and Partially Sighted People
- Kensington and Chelsea Mobility Forum
- Kingston Mobility Forum
- Leonard Cheshire Disability
- London Boroughs
- London Visual Impairment Forum
- Mencap London
- MS Society
- National Autistic Society
- NHS England (London Region)
- PAMELA Improving transport and access to transport for people with barriers to mobility
- Royal Hospital for Neurodisability
- Royal London Society for Blind People
- Royal National Institute of Blind People
- Scope
- Southwark Independent Living Centre
- Sutton Mobility Forum
- Thomas Pocklington Trust
- Thurrock Council
- Tower Hamlets Mobility Forum
- Transport Associates' Network
- Transport for All
- Trailblazers Muscular Dystrophy UK
- Vision 2020
- Wandsworth Mobility Forum
- Whizz Kidz

Appendix D – Meeting Summary

A meeting was held at TfL offices on 26 January 2015 in response to a request for a meeting from Transport for All during the consultation, to give their members a chance to discuss their consultation comments in more depth. Due to time constraints during question and answer time, 12 additional unanswered questions were captured and have been included below.

TfL representatives were:

- Ryan Edwards, Consultation Specialist (Chair)
- David Field, Principal Strategy Planner
- George Marcar, Driver Communications Manager
- John Gowers, Bus infrastructure
- Scott Lester, Borough Programme Manager.

A summary of the main areas raised in the consultation were covered by the TfL representatives these included:

- Bus stop accessibility
- Updated Accessible Bus Stop Design Guidance
- Audio Information
- All Aboard! (Bus driver accessibility training)
- Cycling facilities
- Bus Stop Island design considerations
- Bus shelters
- Hail and Ride
- Kassel kerbs

Roger Blake, of Transport for All, gave a quick summary of the issues faced by their members, raised concerns regarding:

- Drivers not stopping in the bus cage area due to buses backing up
- Lack of audio provision at bus stops
- Concerns about cycling improvements that could require pedestrians to cross a cycleway to get to a bus stop.

He acknowledged that considerable improvements have been made through the introduction of new buses and improved information provision in the form of iBus.

Questions raised that had not been covered by comments already submitted in the consultation included:

Comment: "What changes will happen to the guidance as a result of the consultation?"

Response: A summary of the changes included is on page 4 of the consultation report.

Comment: "Cyclists need to be licensed."

Response: This is outside the scope of this guidance. However, the Mayor has previously stated that he does not support the registration of cyclists because of the unnecessary bureaucracy. In addition, any change to the law that would require cyclists to register their bikes, or to carry insurance, would require legislation at a national level and lies outside of the Mayor's jurisdiction.

Comment: It was suggested that cyclists should enrol in a licensing or insurance scheme in case of third party damage or injury.

Response: Road users can claim compensation for injury caused by an uninsured person, including cyclists.

Several thousand cyclists are members of cycling groups such as CTC (the national cycling charity) and the London Cycling Campaign (LCC). These groups offer automatic third party insurance for their members should they be involved in a collision with other road users, but there is no practical mechanism for making this compulsory in London.

Comment: "This guidance is not in a suitable format for people with learning disabilities."

Response: The guidance is primarily intended as a technical design document. We provide a range of other resources (eg accessible guides and maps, travel mentors) for people with learning disabilities, which advise how to use the bus network.

Comment: "How are people with visual impairments expected to locate bus stops?"

Response: The flag indicates to passengers where they should wait and serves as a marker to drivers to indicate where the bus should stop.

Comment: "Bus flags should be further away from the kerb for safety"

Response: The position of the flag should be considered as part of an assessment of bus stop safety issues. Flags should be positioned at a safe distance from the kerb but should not obstruct pedestrians.

Comment: "Wheelchair users should be allowed on buses first, currently we have to wait until last by which time the space is full of buggies and we can't often get on?"

Response: Wheelchair users should be given priority at bus stops. The Big Red Book states 'You must keep the front doors closed on two-door buses. This ensures the wheelchair user is given priority access and can board in safety and comfort'

Comment: "How is the proportion of accessible bus stops accessed?"

Response: TfL keep a record of accessible bus stops in each borough and this is available on request.

Comment: "Why are 'loop signs' at some bus shelters? There is no sound on T-switches."

Response: There is currently no audio bus service information provided at bus stops. This may refer to audio advertising information.

Comment: "I am concerned that Countdown signs which I find really useful are disappearing in favour of 'Text to 87287' which costs 20p."

Response: Countdown bus passenger information is currently installed at over 2,500 bus stops across London. There are no plans to reduce the overall number of countdown displays.

Comment: "Island bus stops are too revolutionary. A speaker mentioned that traffic lanes can be widened at stops which would be better."

Response: The preference is for bus or nearside lanes to be of sufficient width to enable cyclists to pass a stopped bus while staying within the lane. The London Cycling Design Standards, Chapter 4, provides guidance on carriageway widths. The working minimum where cyclists and buses can safely pass is 4.5m.

However, drawing on successful examples of similar infrastructure in other cities in Europe, the bus stop bypass can be considered in certain scenarios. These examples deliver a higher level of service to cyclists whereby they are separated from other traffic on the approach to and exit from the bus stop.

The guidance incorporates potential measures to reduce risks to pedestrians and cyclists in bus stop bypasses.

Comment: "All the Croydon Tramlink stops have step free level boarding from the platform on to the tram. Could something similar be done for bus stops? The wheelchair ramp is generally ONLY operated for persons in wheelchairs, and not for anyone else who may need step free level boarding."

Response: It is not practical or affordable to provide step free access at every London bus stop. The range of kerb heights specified in the guidance will ensure a consistent standard which is achievable and is suitable for ramp deployment. The use of the ramp is not limited to wheelchairs. A bus passenger may request to use the ramp for reasons other than a wheelchair eg for a mobility walker or shopping trolley. The Big Red Book (driver training manual) states: "Extend the ramp if a passenger with a mobility walker or shopping trolley asks you or kneel the bus if this helps."

Comment: "Could technology be used to park a bus at a bus stop so that the bus precisely lines up with the platform at a bus stop?"

Response: We are working with bus operators to ensure driver standards improve. This includes pulling into the bus stop. We will keep any new and emerging technology that could benefit bus passengers under review. This guidance provides advice to ensure bus stops are designed to allow drivers to pull in parallel to the kerb and deploy the ramp safely if necessary.

Other topics raised at the meeting included:

- A discussion of the React system of audio provision at bus stops used in Brighton. Our response was that this could not be compared to the intensity of provision needed in the capital
- A question was raised about why certain non TfL accessibility cards are not accepted by some drivers which we will look into
- The suggestion for tactile paving to encompass bus stops in their entirety. This is covered in the main consultation
- That Councils don't always help by introducing clutter around bus stops.
- Some attendees felt that they had not been aware of the consultation otherwise they would have given their comments earlier
- It should be made easier for people with disabilities to complain about driver behaviour
- It is important that information at bus stops such as maps, timetables and route changes is unified and accessible to all people

Actions included:

- Some delegates from Transport for All would be invited to a bus garage to engage with drivers on their behaviour
- Guide Dogs for the Blind invited TfL staff to attend a walk around bus stops from a visual impairment perspective. Staff from TfL attended this in March, and found it to be a very useful exercise

Appendix E – Additional Comments

The table below summarises 21 individual comments which we have made note of and incorporated where appropriate:

incorporated where appropriate:
Theme/Issue
The kerb height requirement will be useful
The introduction chapter was clear
The importance of bus drivers pulling up as near as possible to the kerb
Completely agree with Chapter 3 bus stop locations
Preference for fixed bus stops
Make passenger waiting areas bigger
Diagrams should be increased in size for accessibility purposes.
The bus stop area does need to be clearly marked out
A clear line of sight along the route of bus approach should be provided.
Have more bright street lighting and CCTV near bus stops
Concern about cycle facilities mentioned in Chapter 11
Would welcome design guidance that puts people first
Need to ensure throughout the document that clear and understandable English is used throughout
Width of the pavement because shared spaces can be dangerous
In Chapter 7, remove the hatching from the part infilled bay diagram.
It would be helpful to include contact details
Consideration needs to be given to view of those using wheelchairs of approaching bus
No shared spaces between cyclists and pedestrians who may be going to a bus stop - that will make it difficult for those who are blind to be able to get near the bus stop in safety.
You have not addressed the subject of temporary bus stops
Audio provision at bus stops

Have advertising board on the same side of the bus shelter as your information

The table below summarises the remaining 62 statutory bodies and other stakeholder comments which we have made note of and incorporated where appropriate, 24 of these comments related to formatting or content issues which we have amended.

Stakeholder	Theme/Issue
Ealing Transport for All summary	I doubt whether the bus stop accessibility target will be met
LB Lewisham	The introduction chapter was clear
	I feel the best practise and check lists in the maintenance of bus stops

LB Sutton	Very good on the placing of bus stop cages
	Chapter 7 is Good and comprehensive
	Good, clear and comprehensive advice - it could perhaps be shortened a bit and I think the advantages of bus lay bys for cyclists should have been mentioned
	As in Chapter 10, I think the advice should mention the advantages of full or half bus bays for cyclists
LB Ealing	Specific scale plan diagrams should be included under Section 11. Cycle Facilities to show how these should be arranged around bus stops. This is important as some facilities have been so badly designed in the past that they are not fit for purpose. The guidance needs to recognise in the diagrams that rubbish
	bins are normally positioned at bus stops as a facility for passengers.
	Generally Ealing welcomes the updated guidance in particular that it is concise in length. The flow diagrams and gant chart used in the previous guidance BP1/06 are a concise method of explanation and something similar should be included in the new guidance
City of London comments summary	The impact on streetscape needs to be taken into account regarding the full width boarder (figure 15).
Caninary	Figure 16: Alternative full width provides a visual barrier for wheelchair users and people of a reduced height to see the approaching bus due to insufficient length and adjacent parking bays causing a visual obstruction. Consider removing the first parking / loading bay on the approach to the bus stop for all bus boarders, particularly Figure 16 to avoid visual barriers. The impact on parking should be assessed at each location to ensure this is feasible.
	Removal of street clutter around bus stops is to be welcomed.
	We agree on the use of ramps and suggest kerb heights.
	Agreement that the waiting area layout at the bus stops must consider the footway width to ensure sufficient space is provided for wheelchair users to complete a 360° turn in a space with a minimum of 1500mm x 1500mm as stated in the DfT's Inclusive Mobility Guidelines.
	Consider including audible messages in the countdown bus passenger information for people with a visual impairment.
	Sufficient and well maintained drainage is important for all users but particularly wheelchair users. Guidelines on ponding on the

	footways and at the carriageway kerbside must be adhered to.
	Agreement of details provided about shared surfaces, off carriageway cycling and design considerations.
	Cyclist – pedestrian conflict is a particular concern for people
	with a disability and should be factored into all designs for segregated cycle facilities. The revised London Cycling Design
	Standards has recently been consulted. It would therefore be
	appropriate to reference this document.
London TravelWatch	In Chapter 3, Figure 3 is of the groups that particularly benefit
Travervvalcri	from accessible bus stops. This is fine, however able bodied passengers also benefit from accessible bus stops. The text
	should say: Figure 3 All passengers benefit from accessible
	bus stops. The groups shown will particularly benefit or similar
Transport for all comments	Don't forget people with visual impairments.
summary	We share grave concerns about shared space
	We really welcome the commitment to 95% bus stop
	accessibility across London. We would like to invite bus stop
	design leads on the project to visit some bus stops with some of
	our disabled and older members. We would like to have a roundtable meeting to facilitate further deliberative engagement
	on this issue, which is a very important one to our members
Age UK London	Figure 3: we would normally recommend use of the term "older
comment summary	people" rather than "elderly people" in most contexts.
	We very much welcome the existence of this guidance and wish
	TfL every success in achieving compliance with it, while asking for it to be strengthened as set out above.
	In Q2 I would also have liked to tick that I will use the guidance
	for research purposes and reference purposes, but the form
	seems to allow one response only.
Thurrock Council	Buses being permitted to stop on the exit side of zig-zag
comment summary	markings is decision made by the local authorities traffic or highways department for road safety reasons.
Summary	nighways department for four safety feasons.
	A clear line of sight along the route of bus approach should be provided.
	Under heading Figure 6 - Considerations for bus stop locations
	on page 8 clarification is required in the first paragraph as to
	whether locating stops on pedestrian crossing facilities also concerns new or proposed pedestrian crossing facilities.
	On page 9 under the heading Stop Spacing whereby the
	paragraph states "An ideal spacing for bus stops is
	approximately 300m - 400m confirmation is required whether
	this also relates to bus routes in rural areas or on narrow country lanes.

	Page 12 on the last paragraph in the left column whereby the sentence states Information posts which display a bus timetable and other information, clarification should be made whether this refers to rural as well as urban areas. In addition many local authorities are required to consult local residents and property owners that are directly affected by the bus stop proposal. Does TfL also consult before a bus stop or associated furniture is installed?
Guide Dogs	We concur with the proposals highlighted and the imperative to keep street furniture to a minimum in this area. Historically, badly positioned street furniture situated in line with the middle doors has had a direct and negative impact on vision impaired users.
	Road markings which highlight and define the area of the bus cage should be properly maintained and re- painted regularly as it forms a useful function in alerting passengers with some residual vision to identify its presence.
LB Hillingdon - Access and Mobility Forum	 Page 4 – Para 5 – It would seem that many buses have kneeling suspension only at the front. The onus should be on the driver to level the suspension and not rely on passengers having technical knowhow or awareness that the bus can in fact kneel. Not all buses kneel at the rear so it is paramount for the kerb height to be greater than 100mm. P22 Bus Boarders and Full Width Boarders should be introduced in all situations where practicable.
	Half Width Boarders should be the minimum standard where environmental conditions permit
LB Camden comments summary	Page 14 – Multiple buses at one stop - Guidance on distance to be allowed for multiple vehicles at one stop when designing the length of the cage (previously 9m, 7m absolute min.) has been removed. This also affects the 'boarding/alighting' zones particularly when considering usage from different bus types. Page 16 - Earlier in the chapter a typical footway width of 2m is
	provided. No guidance is offered for shelters on footways with narrow widths, such as the typical 2-3m i.e. shelter not recommended.
	The use of a bus boarder can be integrated with nearside cycle facilities, similar to those described in Chapter 11, maybe this should be mentioned. The document is very clearly laid out and easily understood.
LB Havering	We would add that new connections to the highway from developments, vehicle crossings etc might have an impact on existing accessibility. We have dealt with the issue on our "new" stops by paving the accessible area in a different paving so other highways staff are aware of the extent of the area and to

	veter te ve it ekserne ere needed
	refer to us if changes are needed.
Gosport Access group and Disability Forum	I am happy with the changes in content. However, the 2006 version has more useful tangible examples, figures and pictures - which are useful when trying to illustrate to others what the issues are when designing and installing new bus stops.
LB Redbridge	Redbridge welcomes the new guidance and supports its principles as set out within the document;
	The document states that 95% of bus stops in London will be accessible by 2016. Although this is desirable, it is suggested that this target is ambitious. Redbridge cannot guarantee that the same level of bus stops within its Borough boundary will be fully accessible with all the required features of an enforceable bus cage, 24 hour time waiting plate and at least 100mm kerb height.
	The Borough supports the addition of examining the walking routes to bus stops and considering areas around bus waiting environments. This should improve the public transport experience for all users;
	The Borough welcomes the admission that, in some limited circumstances, it may be appropriate to affix the bus flag to a lamp column. This will help reduce street clutter on narrow footpaths. However, will Boroughs be able to pass onto TfL the cost for illuminating any bus flags/ timetables and will the columns be wind tested for extra loading capacity?;
	The Borough does not support the installation of bollards on bus build outs as shown in figure 15, page 23. The law clearly states that if such interventions are adequately lit it does not need further safety features. Installation of bollards also goes against the Mayor of London's proposals to de clutter London's streets and Redbridge removed these bollards on its build outs some years ago;