

Transport and Environment Committee

10.00am, Thursday, 27 February 2020

Public Transport Priority Action Plan - Bus Stop Spacing Review Trial

Executive/routine Wards Council Commitments	Routine
---	---------

1. Recommendations

- 1.1 It is recommended that the Committee:
 - 1.1.1 notes the proposed bus stop spacing review methodology;
 - 1.1.2 notes that as part of a trial, the Lothian Bus Service 44 has been chosen to work through this methodology and the stops selected for removal are listed in the table in Appendix 2;
 - 1.1.3 notes that during the trial, the stops identified in the table in Appendix 2, would be bagged over. Notices on the reasons why that particular stop is out of use would be erected on site with contact details for consultation purposes; and
 - 1.1.4 notes that the outcome of the trial would be reported to Committee and if successful, approval would be sought to review bus stop spacing and positioning on a phased basis by corridors.

Paul Lawrence

Executive Director of Place

Contact: Ewan Kennedy, Service Manager – Transport Network

E-mail: ewan.kennedy@edinburgh.gov.uk | Tel: 0131 469 3575

Public Transport Priority Action Plan - Bus Stop Spacing Review Trial

2. Executive Summary

- 2.1 A review of the spacing of bus stops was identified by bus operators, in particular Lothian Buses whose services are most affected by the irregular spacing of stops within Edinburgh, as an essential action to be included within the 'Public Transport Priority Action Plan' (PTPAP), which was presented to the Transport and Environment Committee on 9 August 2018, with an update provided on 20 June 2019. This report presents the proposed bus stop spacing review methodology that has been developed in consultation with representatives from Lothian Buses.

3. Background

- 3.1 As noted above, one of the recommendations to this Committee on 20 June 2019 was to note that the Council was preparing a bus stop spacing review methodology which would be brought back to Committee for approval.
- 3.2 In Edinburgh for historical reasons, the spacing of bus stops can be less than recommended and concern has been raised by bus operators. It is difficult to maintain a reliable service on congested routes and often operators dispatch additional buses to meet their timetabled headway. These additional buses do affect the profitability of the route and ultimately this could lead to cancellation of services. There is therefore an opportunity to review the position and spacing of bus stops and to consider what destinations they are serving.
- 3.3 Discussions were held with Lothian Buses to establish if buses could skip certain bus stops rather than physically removing the stops. Lothian Buses expressed concerns that this approach may confuse passengers who are used to buses stopping at certain stops. In addition, physical removal of the stops would reduce street furniture making the streets more accessible, as well as reduce ongoing maintenance costs to the Council.

- 3.4 Lothian Buses has carried out an assessment of all their bus routes and have recommended a list of stops that could possibly be removed without significant impact on passenger accessibility. This report provides a breakdown of a proposed methodology which has been developed to review this list of bus stops in the context of criteria Transport Officers deem to be appropriate.
- 3.5 The bus service route that was used for the development of this methodology was the Lothian Bus Service 44 and the stops recommended for removal are listed in the table in Appendix 1.

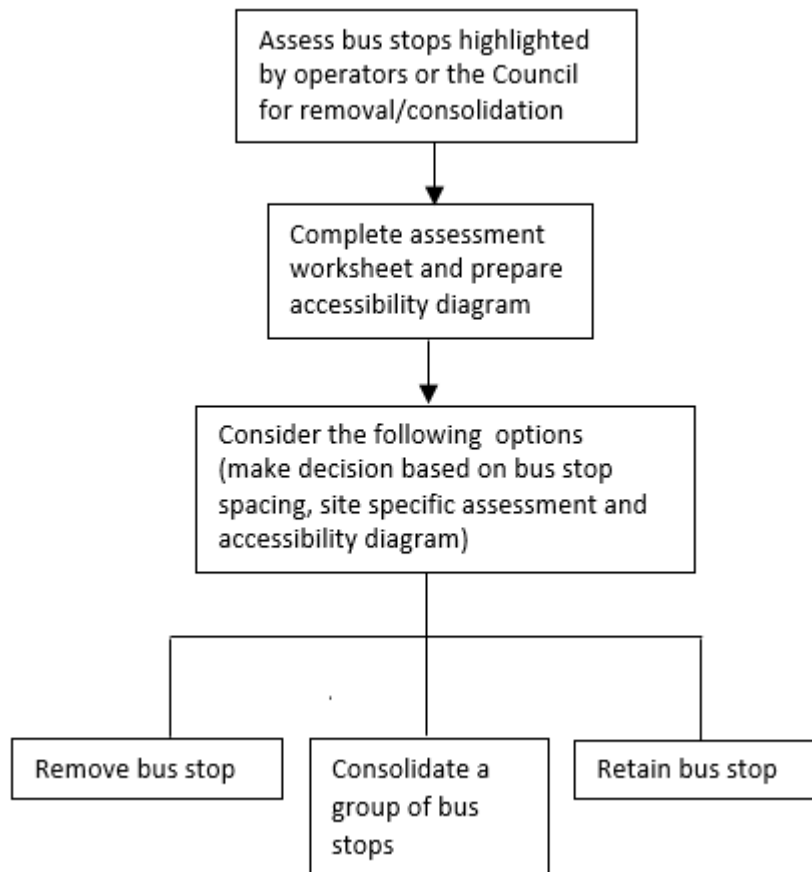
4. Main report

Details

- 4.1 In consultation with Lothian Buses, the Council has produced a bus stop review methodology for determining stops that could be removed to make bus stop journey times quicker and more reliable.
- 4.2 If this trial is successful, the intention is that this methodology would be applied on a phased basis to the rest of the bus network, by a corridor at a time.
- 4.3 Bus stop spacing can be considered on a reasonably regular basis. This is generally when other proposals are being considered such as the installation of pedestrian crossing facilities, cycle facilities or access for new development sites. Bus stops are respaced or removed as a result and this methodology would establish a consistent process for assessing the value of bus stop locations.

Methodology

- 4.4 Workshops on the proposed bus stop review methodology were held in the City Chambers on 11 September and 2 October 2019. These workshops were supported by staff from Lothian Buses and were attended by Councillors.
- 4.5 Figure 4.1 below shows the branch diagram outlining the stages of the process.



- 4.6 Bus stops highlighted for removal are assessed using the following criteria which is recorded on a worksheet to ensure that there is a consistent methodology being used:
- 4.6.1 Distances between the adjacent bus stops are measured. These bus stops are considered a group of bus stops in the process.
 - 4.6.2 A walking accessibility diagram is produced for use during this assessment process. This diagram displays an outline of 400 metres walking distance along footways and footpaths from each bus stop location. A copy of a typical plot is included within Appendix 1.
 - 4.6.3 A search is carried out of core facilities (i.e. medical centres, schools/nurseries etc) and desire lines within 400m of the bus stop for removal. These are noted (where the bus stop selected for removal is the closest one of the group).
 - 4.6.4 Measurements are taken to each noted facility from the bus stop for removal and the bus stops either side. This is to establish how much further will be required to walk from the next nearest bus stop.
 - 4.6.5 Any non-critical facilities are noted. Other facilities considered critical for that stop but not included in the core facilities are also noted and measurements are taken from each stop in the group.

- 4.6.6 Environmental conditions of each stop in the group are noted, for example the topography.

Guidance

- 4.7 The methodology developed is based around a 400m walking distance from each residence. This is based on design guidance from various reference documentation, including:
- 4.7.1 **DfT Inclusive Mobility (2005)** *'In residential areas bus stops should be located ideally so that nobody in the neighbourhood is required to walk more than 400 metres from their home.'*
 - 4.7.2 **Scottish Planning Policy (2014)** *'Planning permission should not be granted for significant travel-generating uses at locations which would increase reliance on the car and where ... access to local facilities via public transport networks would involve walking more than 400m.'*
 - 4.7.3 **TfL Accessible bus stop design guidance (2014)** *'An ideal spacing for bus stops is approximately 300m - 400m, although a closer spacing in town centres and residential areas may be required to meet passenger requirements.'*
 - 4.7.4 **Edinburgh Street Design Guidance (2018)** *'Bus stops should be spaced approximately every 400m along a route, although closer spacing may be appropriate in town centres or to meet special needs (eg sheltered housing complex).'*
 - 4.7.5 **CIHT Buses in Urban Developments (2018)** *'Distances between bus stops will generally be in the range of 200–400 metres. Wider spacing will be appropriate for Bus Rapid Transit, express and principal corridor services.'*

5. Next Steps

- 5.1 The Council will:
- 5.1.1 if approved by Committee, undertake localised consultation around the affected areas where removal of bus stops is being considered on the Service Route 44. Notices will be posted at the location of bus stops to be removed, giving local bus users the opportunity to feedback comments. Community Councils will be encouraged to disperse information to their members and seek feedback. The Council will work with Lothian Buses to ensure passengers are informed of the proposals. The Council has already consulted with the Edinburgh Access Panel, the representatives were encouraged to disperse information to their members and seek feedback.

- 5.1.2 update future Committee meetings on the outcome of the consultation exercise and also provide details from Lothian Buses on any benefit realised from the temporary suspension of bus stops. Dependant on consultation outcome, commence with bus stop removal and repositioning along this route.
- 5.1.3 provide support to Councillors impacted across the routes, a list of frequently asked questions is listed in Appendix 3.

6. Financial impact

- 6.1 As noted in the Update Report to Committee on 20 June 2019, the bus stop spacing review methodology will be contained within the allocated public transport budget. Full financial implications will be detailed in a later report.

7. Stakeholder/Community Impact

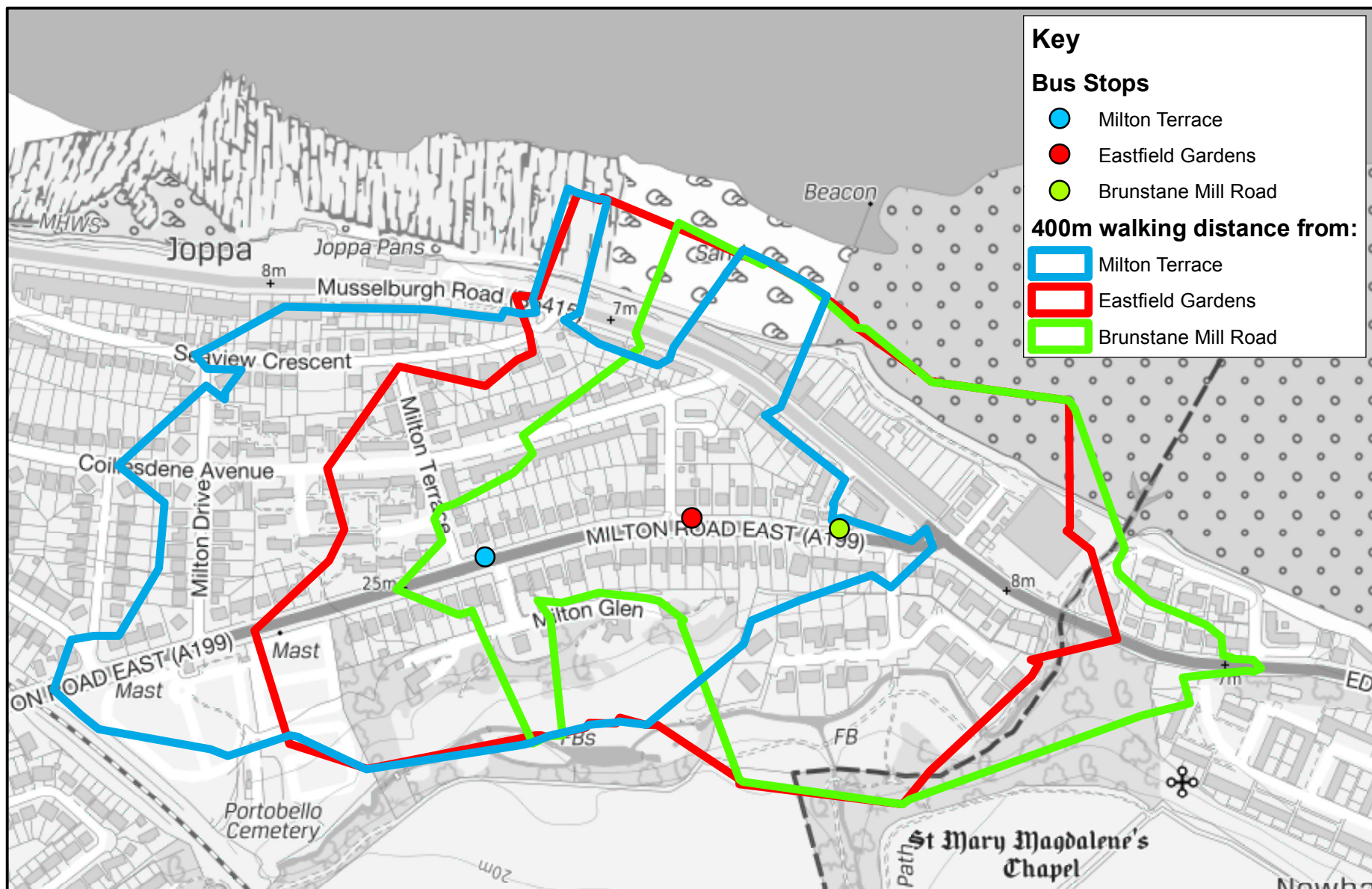
- 7.1 Workshops on the proposed review methodology were held in the City Chambers on 11 September and 2 October 2019. These workshops were supported by staff from Lothian Buses and were attended by Councillors.
- 7.2 Notices will be posted at the location of bus stops to be removed, giving local bus users the opportunity to feedback comments.

8. Background reading/external references

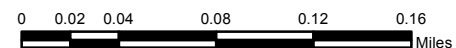
- 8.1 Public Transport Priority Action Plan report to the Transport and Environment Committee [9 August 2018](#) (item 7.2).
- 8.2 Public Transport Priority Action Plan Update report to the Transport and Environment Committee [20 June 2019](#) (item 7.6).

9. Appendices

- 9.1 Appendix 1 - Walking Accessibility Diagram
- 9.2 Appendix 2 - Bus Stops Selected for Removal
- 9.3 Appendix 3 – Frequently Asked Questions



Appendix 1 - Walking accessibility, 400m from each bus stop



Coordinate System: British National Grid
Central Meridian: 2°0'0"W

Appendix 2 - Bus Stops Selected for Removal

Bus Stop	Bus Stop (Descriptive name)	Direction	Reason for Removal
Eastfield Gardens - 238500	Milton Road East, 37m west of Eastfield Gardens	Balerno bound	Within close proximity to adjacent stops. Residential frontage on both sides which can be served from adjacent stops. No local facilities are accessed from this stop.
Eastfield Gardens - 210210	Milton Road East, 18m east of Eastfield Gardens	Wallyford bound	Within close proximity to adjacent stops. Residential frontage on both sides which can be served from adjacent stops. No local facilities are accessed from this stop.
Portobello Cemetery - 238520	Milton Road East, 44m west of Milton Drive	Balerno bound	Within close proximity to adjacent stops. Residential frontage to the north and Portobello Cemetery is located south, these can be accessed from adjacent stops.
Coillesdene Crescent - 210180	Milton Road East, 75m west of Coillesdene Crescent	Wallyford bound	Within close proximity to adjacent stops. Located on a bridge with no direct frontage. Surrounding area primarily comprises residential and a convenience store is located to the west, which can be accessed from adjacent stops. It does not have a paired stop.
Hope Lane - 238610	Duddingston Crescent, 110m west of Hope Lane	Balerno bound	Residential frontage on south side and Portobello High School playing fields is located to the north, these can be accessed from adjacent stops. No local facilities are accessed from this stop.
Hope Lane - 210100	Duddingston Crescent, 65m west of Hope Lane	Wallyford bound	Residential frontage on south side and Portobello High School playing fields is located to the north, these can be accessed from adjacent stops. No local facilities are accessed from this stop.
Northfield Crescent - 241170	Willowbrae Road, 31m south of Ulster Crescent Circus	Balerno bound	Within close proximity to adjacent stops, particularly stop to west. Residential frontage on both sides which can be accessed from adjacent stops. No local facilities are accessed from this stop.
Northfield Crescent - 208270	Willowbrae Road, 36m north of Northfield Crescent	Wallyford bound	Within close proximity to adjacent stops, particularly stop to west. Residential frontage on both sides which can be accessed from adjacent stops. No local facilities are accessed from this stop.
Abercorn Road - 241200	Willowbrae Road, 94m east of Abercorn Road	Balerno bound	Within close proximity to stop to east. Primarily residential frontage on both sides and local facilities are located

Appendix 2 - Bus Stops Selected for Removal

Bus Stop	Bus Stop (Descriptive name)	Direction	Reason for Removal
			nearby, these can be accessed from adjacent stops.
Abercorn Road - 208240	Willowbrae Road, 33m east of Abercorn Road	Wallyford bound	Within close proximity to adjacent stops. Primarily residential frontage on both sides and local facilities are located nearby, these can be accessed from adjacent stops.
Wishaw Terrace - 241650	London Road, 60m west of Lower London Road	Balerno bound	Within close proximity to stop to the east. Partner stop removal already agreed as part of Meadowbank Stadium works. Residential properties and local facilities are located to the north and south, these can be accessed from adjacent stops.
Brunswick Street - 242080	London Road, 28m east of Hillside Crescent	Balerno bound	Within close proximity to adjacent stops, particularly the stop to the west. Direct frontage comprises gardens on both sides. Nearby residential properties and local facilities are located nearby, these can be accessed from adjacent stops.
Brunswick Street - 207500	London Road, 100m east of Hillside Crescent	Wallyford bound	Within close proximity to adjacent stops, particularly the stop to the east. Direct frontage comprises gardens on both sides. Nearby residential properties and local facilities are located nearby, these can be accessed from adjacent stops.
Hutchinson Place - 248230	Slateford Road, 30m south of Appin Place	Balerno bound	Within close proximity to stop to east. Primarily residential frontage on both sides and local facilities are located nearby, these can be accessed from adjacent stops.
Hutchinson Place - 201730	Slateford Road, 25m south of Hutchinson Place	Wallyford bound	Within close proximity to adjacent stops. Primarily residential frontage on west side and local facilities are located to the east side, these can be accessed from adjacent stops.
Kingsknowe Park - 200850	Lanark Road, 88m south of Kingsknowe Drive	Wallyford bound	Within close proximity to adjacent stops. Residential frontage on west side and a public park is located to the east, these can be accessed from adjacent stops.
Dovecot Park - 249140	Lanark Road, 36m south of Dovecot Park	Balerno bound	Within close proximity to adjacent stops, particularly the stop to the east. Primarily residential frontage on both sides and Lanark Road Nursey is located to the south, these can be accessed from adjacent stops.

Appendix 2 - Bus Stops Selected for Removal

Bus Stop	Bus Stop (Descriptive name)	Direction	Reason for Removal
Hailes Grove - 200790	Lanark Road, 36m north of Hailes Grove	Wallyford bound	Within close proximity to adjacent stops. Residential frontage on east side and a golf course is located to the west, these can be accessed from adjacent stops.
Hailes Grove - 249210	Lanark Road, 45m south of Hailes Grove	Balerno bound	Within close proximity to the stop to the east. Residential frontage on both sides which can be accessed from adjacent stops. No local facilities are accessed from this stop.
Muirend Avenue - 249240	Lanark Road, 85m east of Muirend Avenue	Balerno bound	Within close proximity to the stop to the east. Operator has suggested low passenger numbers. Residential frontage on both sides and Tanners Bar and Restaurant is located to the west, these can be accessed from adjacent stops. This is a very narrow footway.
Muirend Avenue - 200750	Lanark Road, 34m west of Muirend Avenue	Wallyford bound	Within close proximity to stop to west. Operator has suggested low passenger numbers. Residential frontage on both sides and Tanners Bar and Restaurant is located to the east, these can be accessed from adjacent stops.
Juniperlee - 200710	Lanark Road, 20m east of Juniperlee	Wallyford bound	Within close proximity to adjacent stops. Operator has suggested low passenger numbers. Residential properties and local facilities are located to the north and south, these can be accessed from adjacent stops. Stop does not have a partner stop.
Easter Currie - 249350	Lanark Road W, 85m east of Kirkgate	Balerno bound	Within close proximity to stop to east. Residential frontage on south side and local facilities are located to the north, these can be accessed from adjacent stops.
Easter Currie - 200650	Lanark Road W, 82m east of Kirkgate	Wallyford bound	Within close proximity to stop to west. Residential frontage on south side and local facilities are located to the north, these can be accessed from adjacent stops.
Bavelaw Gardens - 200035	Bavelaw Road, 38m south of Oakdale	Wallyford bound	Within close proximity to stop to south. Residential frontage on both sides and local facilities are located nearby, these can be accessed from adjacent stops.
Greenfield Crescent - 249960	Cockburn Crescent, 70m west of Greenfield Crescent	Wallyford bound	Within close proximity to adjacent stops, particularly stop to west. Operator has suggested low passenger numbers. Residential frontage on north

Appendix 2 - Bus Stops Selected for Removal

Bus Stop	Bus Stop (Descriptive name)	Direction	Reason for Removal
			side which can be accessed from adjacent stops, fields are located to the south. No local facilities are accessed from this stop.

APPENDIX 3

Bus Stop Spacing Review FAQs

Why is the Council reviewing bus stop spacing?

As part of the Public Transport Priority Action Plan, the Council committed to undertake a review of bus stops in Edinburgh. As a result of new bus stop requests, changes to land use and existing stops seldom being removed, the spacing between stops has reduced over many years. The effect of this is that buses are frequently required to slow down and stop and are unable to achieve a reasonable travelling speed between stops, therefore extending journey times and reducing reliability. Many stop locations no longer meet current desire lines, or they impede traffic flow.

What are the benefits of reviewing bus stops?

Theoretical savings of at least 20 seconds per stop removed is supported by actual savings achieved elsewhere in UK. This may not seem significant but a conservative review of the stops on the Service 16 route for example, would produce a five-minute reduction on end to end journey times. In addition, maintenance costs will be reduced, kerb space utilisation will be improved and there will be less conflict with properties adjacent to stops.

What effect will this have on mobility impaired or blind people?

It is acknowledged that the removal of a bus stop does mean that there may be a greater distance between stops and may be more challenging for those with mobility issues. We are committed to having accessibility at the heart of this review and we will consult with affected groups prior to any decisions being made to ensure their needs are taken into consideration.

How will you decide which bus stops will be removed?

The Council has developed a bus stop review methodology in collaboration with bus operators. This will be used as a means of assessing which bus stops should be removed, retained, or relocated. Those stops identified for removal, will then be subject to further site investigation and consultation with local communities.

What is the recommended bus stop spacing?

Most national guidance, including 'Inclusive Mobility', recommends that in residential areas bus stops should ideally be located so that nobody in the neighbourhood is required to walk more than 400 metres from their home. In certain areas, where there is limited frontage development, the spacing between stops can increase.

What if the gradient of footpath is steeper to the adjacent stop?

'Inclusive Mobility' states that the spacing of bus stops should, where possible, take account of gradients on the footpaths within the vicinity of the stop. A suggested standard is to reduce the maximum walking distance (400 metres) to a bus stop by 10 metres for every 1 metre rise or fall.

How many bus stops will be removed?

The number and location of bus stops to be removed will be determined by the outcome of the assessment process for each corridor.

When will the bus stop removal process commence?

It is anticipated that the bus stop removal process will commence in early 2020 with a trial undertaken on the route served by Lothian Buses' Service 44. The outcome of this will be reported back to Committee. If successful and with appropriate approval, the intention is that it will be a phased programme of works and will be undertaken on a corridor basis.

Why remove a stop if it is well used?

Following a request from a bus operator to remove or combine bus stops, a comparison will be made of the distance from each stop to residential areas and key passenger generators before a decision will be taken on the removal of a stop.

Why are operators requesting that bus stops are removed?

Bus operators are struggling to maintain a reliable service against increasing congestion. Whilst larger operators can deploy additional buses to maintain their headway, smaller operators will not be able to fill the gaps. However, deployment of additional buses does reduce operating profit and can potentially lead to timetable changes or cancellation of the route.

Why are you removing the stop when there is no traffic congestion at this bus stop?

Theoretical savings of at least 20 seconds per stop removed is supported by actual savings achieved elsewhere in UK where stops have been removed. The time to stop and pull away does not include boarding time so for every bus stop that is removed, this time is saved and aggregated over a full route this can achieve significant benefits.