

Mound-George IV Bridge-Lauriston Place bus stop audit report

1. Introduction

In view of concerns about the variable quality of design, location and/or maintenance of bus stops across Edinburgh, Edinburgh Bus Users Group (EBUG) undertook a pilot 'audit' of a city centre corridor which includes two of the controversial temporary 'floating bus stops' introduced by the City of Edinburgh Council under the Spaces for People (SfP) programme.

The audit was undertaken by four EBUG Committee members on the morning of Friday 30 April, between the Foot of the Mound and Lauriston Place (Chalmers Hospital), comprising six 'outbound' and four 'city-bound' stops. Nine criteria were assessed for each stop, encompassing location, pavement widths (in relation to the *Edinburgh Street Design Guidance*, see Appendix 1), shelter condition, signage and lining, etc.

2. Summary of findings

The audit findings for each stop are summarised in Section 3 (and set out in detail in Appendix 2), while the main overall findings are listed below.

(We have not incorporated within this report our generic findings on the design of the JC Decaux bus shelters, which we view as being driven by advertising and financial considerations rather than bus user comfort and convenience).

In the case of five of the nine criteria, most or all of the stops **rated well**:

- every stop was clear of (illegally) parked vehicles in the eight applicable cases
- there were clutter-free surrounding pavements at seven of the eight applicable stops
- the stops were well-located, with one notable exception
- clear and well-maintained yellow lining at seven of the eight applicable stops
- there were sufficient yellow lining and 'upstream' parking restrictions to allow double-door buses to draw in parallel to the kerb at six of the eight applicable cases.

In the case of four of the nine criteria, a significant proportion of the stops **did not rate well**:

- there was no shelter at three stops (two of them temporary), and in the case of three of the other seven the shelter and associated facilities were not in good condition
- the two temporary stops which are 'floating' are inconvenient and potentially dangerous for bus users forced to cross the associated cycle lanes
- pavement widths partially non-compliant with SDG standards were found at eight out of 10 stops, while one was wholly non-compliant; another was fully compliant

- four out of 10 stops had no ‘bus stop clearway’ signs indicating that vehicles should not be parked by the kerb

In addition, **four stops have been taken out of use**. At three of these this results in bus users having to walk unreasonably long distances to catch the bus – in some cases the gap between stops is as much as 500m.

Not all the stops are well-distributed (particularly on Lauriston Place), and there is a slight imbalance between outbound (five stops) and city-bound (four stops) provision for the bus routes linking The Mound, George IV Bridge and Lauriston Place.

3. Stop-by-stop findings

As well as the eight permanent bus stops and the two temporary stops, we have also noted four missing / suspended stops taken out of use as part of the SfP programme.

i. Outbound / Foot of the Mound / identity (ID) ‘MD’



This stop is generally satisfactory, but the Clear Walking Zone is only 1.36m and the pavement width 2.98m. The pavement is in poor condition immediately beside the kerb.

ii. Outbound / The Mound North of Market St junction / missing (suspended) stop



This stop was taken out of use as part of the SfP programme – in order to create a cycle lane – and consequently leaves a gap of 500m between current stops. It was a useful stop for the

high-density business / residential area immediately to the south, and for passengers from Waverley Station wishing to join Lothian Bus services 23, 27, 41, 42 and 67.

iii. Outbound / George IV Bridge at Victoria Street / ID 206380 (temporary stop)



This 'floating bus stop' was created under the SfP Programme, closing a permanent stop with a shelter beside the carriageway, and replacing it with a narrow bus 'island' separated from the pavement by a temporary cycle lane, and with no shelter. This is inconvenient and potentially dangerous for bus users – and demonstrably does not prioritise people on foot, despite the Council policy that 'Pedestrians are at the top of the urban transport hierarchy'.

iv. Outbound / George IV Bridge at Victoria St / missing (suspended) stop



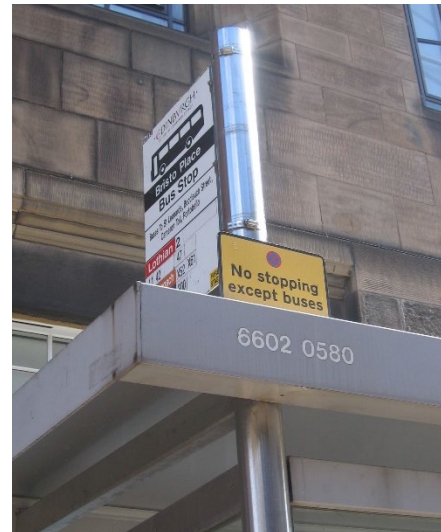
Suspended stop in middle distance

v. Outbound / George IV Bridge at Chambers St / missing (suspended) stop



This stop was taken out of use as part of the SfP programme, and leaves a gap between stops in excess of 400m in a very busy area for residents, shoppers and tourists.

vi. Outbound / Bristo Place / ID 206420



This stop has not been well maintained, and the CWZ is only 1.85m (v. 'preferred' 2m) and the pavement itself just 2.85m wide (v. the 'general minimum' of 3m).

NB: This stop is part of the corridor, but is not served by the buses which link the Mound, George IV Bridge and Lauriston Place.

vii. Outbound / Lauriston Place west of Forrest Rd junction / ID 243720



The layout at this stop jumbles together bus passengers and passing pedestrians in a CWZ of only 1m, on a pavement just 2.34m wide (v. the 'general minimum' of 3m). The bus shelter is damaged and dirty.

viii. Outbound / Lauriston Place at Heriot Place / ID 243730



There is no shelter here, and the length of 'upstream' yellow lining is insufficient – if cars are parked – to allow double-door buses to pull in fully parallel to the kerb.

ix. Outbound / Lauriston Place at Heriot Place / ID 243730



This was the worst of the permanent bus stops audited. The pavement is extremely narrow – only 1.65m (v. the SDG ‘absolute minimum’ of 2m) – waiting bus passengers are jumbled up with passing pedestrians, the shelter has graffiti, and the yellow lining is poorly-maintained and of insufficient ‘upstream’ length to stop parked cars preventing double-doored buses from pulling in fully parallel to the kerb.

The spacing of outbound bus stops on Lauriston Place is poor, including a gap of more than 400m between this stop and the next at Home Street. This gap should be addressed as part of a review of the three current stops on Lauriston Place.

x. City-bound / Lauriston Place east of Keir St / ID 206160



The CWZ width here is only 1.2m and the pavement just 2m (v. the SDG ‘absolute minimum’ of 2m).

xi. City-bound / Forrest Rd / ID 24349



This was the best of the permanent stops audited in terms of location, pavement width, shelter maintenance, signage and lining, etc – but suffers from the generic flaws of the JC Decaux shelter, ie inadequate protection from wind and rain, close exposure to passing vehicles (and splashing water), cold and hard seating, and confusing queuing arrangements.

xii. City-bound / George IV Bridge at Victoria Street / ID 206380 (temporary stop)



This temporary 'floating bus stop' – created through the SfP programme in order to allow a cycle lane to be provided – has replaced a permanent stop at virtually the same location. There is no longer a shelter, and bus passengers have to cross the cycle lane to a narrow bus 'island'. This is both inconvenient and potentially dangerous.

xiii. City-bound / North Bank St / missing (suspended) stop



This stop was taken out of use as part of the SfP programme, and consequently leaves a gap of 500m between current stops. It was a useful stop for the high-density business / residential area immediately to the south, and for passengers for Waverley Station using Lothian Bus services 23, 27, 41, 42 and 67.

xiv. City-bound / Foot of the Mound / ID 243575



This is an important interchange point for Princes St buses (albeit too far from Princes St due to junction constraints) but the pavement is too narrow and congested for such a key location – only 3m (v. the ‘desirable minimum’ width of 5m or more).

4. Conclusions & recommendations

Conclusions:

- (i) The design, condition and immediate surroundings of the bus stops audited are inconsistent, and in a significant number of cases unsatisfactory for the needs of passengers, particularly the elderly, those with mobility problems and various groups with special needs, eg wheelchair users, people with prams and with visual impairment.
- (ii) The position of some bus stops is sub-optimal in terms of spacing along the corridor, ie some are too far apart.
- (iii) Floating bus stops are seriously sub-optimal potentially for pedestrians accessing and exiting buses – and in particular for more vulnerable users, as above.
- (iv) The haphazard layouts of cycle lanes at and around bus stops are confusing for pedestrians / bus users.
- (v) Bus stops with no shelter or seating facility are unacceptable on a busy bus corridor.

Recommendations:

In conjunction with Lothian Buses, the City Council should:

- (i) Produce an upgrading plan for the design, condition and immediate surroundings of the bus stops along the corridor.
- (ii) Review the spacing of bus stops to optimise convenient access.
- (iii) Remove the floating bus stops and replace these with well-designed permanent facilities for bus users.
- (iv) Remove the temporary cycle lanes and design permanent facilities which ensure that 'Pedestrians are at the top of the urban transport hierarchy'.¹
- (v) Ensure that all stops have a shelter and seating facilities.
- (vi) Produce a city-wide plan for consistent upgrading of facilities for bus users.

¹ City of Edinburgh Council, 2020

Appendix 1: Street Design Guidance

Pavement and 'Clear Walking Zone' (CWZ) width measurements were assessed against the City Council's Edinburgh Street Design Guidance (SDG), which provides for the following CWZ width at bus stops:

- 3m – preferred on busy routes
- 2m – preferred
- 1m – absolute minimum, exceptionally allowed.

On pavements around but not immediately at bus stops, this SDG guidance applies:

Street name	Street type	'Absolute minimum' width	'General minimum' width	'Desirable minimum' width
The Mound	Service sector employment	2m*	3m	5m or wider
George IV Bridge / Bristo Place / Forrest Road	Retail / high streets	2.5m*	3m	4m or wider
Lauriston Place (from Forrest Road junction to Lady Lawson St junction)	Service sector employment	2m*	3m	5m or wider
Lauriston Place (from Lady Lawson St junction to Lauriston St junction)	Retail / high streets	2.5m*	3m	4m or wider

* 'only allowed in short sections'

Appendix 2: Audit criterion questions and answers

Immediately below are the nine criterion questions posed in relation to each of the 10 stops audited; followed by a table summarising answers for each stop, scored 1-5 where appropriate.

1. Is the bus stop in the best place in relation to access routes on foot / pedestrian crossings / traffic generators?

2a. Are the surrounding pavements (immediately beside the stop) suitably clutter-free to allow safe and convenient access?

2b. Does the pavement width comply with the SDG?

3. Are the bus shelter and associated facilities in good condition?

4a. Is a 'bus stop clearway' sign in place?

4b. Do the bus stop yellow lining and 'upstream' parking restrictions allow buses to draw in parallel to the kerb at each door?

4c. Is the bus stop yellow lining clear and well-maintained?

4d. Is the yellow-lined length of the bus stop free of parked vehicles and other obstructions?

5. If there is a bus boarder, is it long and unobstructed enough to allow passengers to leave the bus safely and conveniently, when the front of the bus draws up at the 'bus stop flag' position, with 'passengers facing oncoming vehicles while waiting'?

Stop	Location	Criterion question score / answer								
		1	2a	2b	3	4a	4b	4c	4d	5
i	The Mound (OB)	4	3	✓✗	4	✗	5	5	✓	n/a
iii	George IV Br. (OB)	5	5	✓✗	1	✗	n/a	4	n/a	1
vi	Bristo Place (OB)	5	5	✓✗	2	✓	4	5	✓	n/a
vii	Lauriston Pl. (OB)	5	5	✓✗	2	✓	5	5	✓	n/a
viii	Lauriston Pl. (OB)	4	5	✓✗	n/a	✓	2	5	✓	n/a
ix	Lauriston Pl. (OB)	2	4	✗	3	✗	1	1	✓	n/a
x	Lauriston Pl. (CB)	5	5	✓✗	4	✓	4	4	✓	n/a
xi	Forrest Road (CB)	5	5	✓	4	✓	5	5	✓	n/a
xii	George IV Br. (CB)	5	5	✓✗	1	✗	n/a	4	n/a	1
Xiv	The Mound (CB)	4	4	✓✗	4	✓	4	4	✓	n/a

OB = outbound CB = city-bound

✗ = no / non-compliant ✓ = yes / compliant ✓✗ = part-compliant

1= very poor 5 = very good

DS / EBUG / 28 June 2021