

AGENDA

No.	Item	Presenting	Pages	Time
Meeting business item				
1.	Apologies for absence	Chair	None	
2.	Declarations of Interest	Chair	None	
3.	Chair's Remarks	Chair	None	
4.	Minutes of the last meeting	Chair	1 - 8	
5.	Matters Arising	Chair	None	
6.	Correspondence/ Petitions	Chair	None	
7.	Lead Member Positions and Responsibilities for 2017 -18	Chair	9 - 12	
8.	Financial Monitoring Report	Linda Horne	13 - 24	10 mins
9.	Capital Programme Delivery Monitoring Report	Sandeep Shingadia	25 - 32	10 mins
10.	TfWM Infrastructure Report	Andy Thrupp	33 - 40	10 mins
11.	Accessible Transport Report	Jon Hayes	41 - 44	10 mins
12.	Updating the West Midlands Alliance Aims & Objectives	Guy Craddock	45 - 52	10 mins
13.	Busting Delay on the Bus Network - Bus Stop Rationalisation	Danny Gouveia	53 - 152	10 mins
14.	West Midlands Rail Franchise Award	Malcolm Holmes	153 - 170	10 mins
15.	WMCA Update - Transport Reports For Information Only (to be advised on 31 August 2017)	Laura Shoaf	None	
16.	Notices of Motion To consider any notices of motion lodged by the deadline of 12 noon on 31 August 2017	Chair	None	
17.	Questions To consider any questions submitted by the deadline of 12 noon on 31 August for written questions and 12 noon on 1 for oral questions.	Chair	None	

18.	Forward Plan	Chair	171 - 176	
19.	Any Other Business		None	
20.	Date of Next Meeting - Monday. 9 October 2017, 1.00pm		None	

This page is intentionally left blank



WEST MIDLANDS COMBINED AUTHORITY

Transport Delivery Committee

Monday 10 July 2017 at 1.00 pm

Minutes

Present

Councillor Phil Davis (Vice-Chair)	Birmingham City Council
Councillor Pervez Akhtar	Coventry City Council
Councillor Adrian Andrew	Walsall Metropolitan Borough Council
Councillor Mohammed Fazal	Birmingham City Council
Councillor Mohammed Hanif	Dudley Metropolitan Borough Council
Councillor Kath Hartley	Birmingham City Council
Councillor Diana Holl-Allen	Solihull MBC
Councillor Roger Horton	Sandwell Metropolitan Borough Council
Councillor Chaman Lal	Birmingham City Council
Councillor Keith Linnecor	Birmingham City Council
Councillor Ted Richards	Solihull Metropolitan Borough Council
Councillor Judith Rowley	City of Wolverhampton Council
Councillor David Stanley	Dudley Metropolitan Borough Council
Councillor Daniel Warren	City of Wolverhampton Council
Councillor David Welsh	Coventry City Council

In Attendance

Guy Craddock	Transport for the West Midlands
Wayne Farrington	West Midlands Combined Authority
Jon Hayes	Transport for the West Midlands
Matt Lewis	Transport for the West Midlands
Steve McAleavy	Transport for the West Midlands
Sandeep Shingadia	Transport for the West Midlands

Item Title

No.

- 1. Appointment of Chair**

The committee noted the appointment of Councillor Richard Worrall to the position of Chair that was made at the AGM of the West Midlands Combined Authority Board on 23 June 2017.
- 2. Appointment of Vice-Chairs**

The committee noted the appointment of Councillor Philip Davis and Councillor Timothy Huxtable to the position as Vice-Chairs that was made at the AGM of the West Midlands Combined Authority Board on 23 June 2017.
- 3. Apologies for absence**

Apologies for absence were received from Councillor Robert Alden, Councillor Gurcharan Sidhu and Councillor Richard Worrall.

4. Chair's Remarks

Councillor Philip Davis took that Chair as Councillor Richard Worrall was unavoidably away on family business. The Vice-Chair welcomed returning members and new members Councillor Mohammed Hanif and Councillor Gurcharan Sidhu to the Authority's Transport Delivery Committee.

5. Minutes of the meeting held on 12 June 2017

The minutes of the meeting held on 12 June 2017 were agreed and signed by the Vice-Chair as a correct record.

6. Matters Arising

(a) Financial Outturn Report (minute no. 121(a)16 refers)

Councillor Ted Richards expressed concern at the continued changes being made to the X70 timetable and its route. The Head of Network Delivery explained the reasoning behind National Express West Midlands decision to make more changes to the X70 service and assured the committee that Transport for West Midlands continued to monitor and review these changes.

(b) Financial Outturn Report (minute No. 121/(b)16 refers)

Councillor Judith Rowley explained that she had yet to receive a briefing note with regard to rail station cycle facilities. The Head of Programme Development agreed to re-send a copy of the briefing note to Councillor Judith Rowley.

7. Correspondence/ Petitions

Councillor Mohammed Fazal submitted a petition containing 77 signatures requesting the installation of a bus stop between Fernley Road and Evelyn Road, Sparkhill, Birmingham.

Resolved:

(1) That the petition be noted.

8. Terms of Reference

The committee considered a report of the Head of Governance that set out the terms of reference for the Transport Delivery Committee which had been agreed by the West Midlands Combined Authority Board on 7 April 2017, as part of the WMCA's Constitution. Councillor Philip Davis welcomed the terms of reference as continuing to reflect the core oversight role of Transport Delivery Committee and the detailed work members did for and with transport users and providers.

Resolved:

(1) The terms of reference for Transport Delivery Committee for 2017-18 as set out in the report be noted.

9. Calendar of Meetings 2017/18

The committee considered a report of the Head of Governance that set out the schedule of meetings for the Transport Delivery Committee for 2017-18.

Resolved:

(1) Meetings of the Transport Delivery Committee be held at 1:00pm on the following dates:

4 September 2017
9 October 2017
6 November 2017
4 December 2017
8 January 2018
5 February 2018
5 March 2018
9 April 2018
14 May 2018
11 June 2018

10. Appointments 2017/18

The committee considered a report of the Head of Governance on the appointment of Lead Members and members to sit on other bodies for 2017-18.

The Transport Delivery Committee for 2016-17 had three lead members (in addition to the Chair and Vice-Chair). At its meeting on 12 June 2017, this committee agreed a motion that proposed a proportional model of working, within its existing Special Responsibility Allowance budget, namely: 1 x Chair (Labour) x2 Vice-Chairs (x1 Labour and x1 Conservative) and Lead Members (x2 Labour and x1 Conservative). This approach was approved by the West Midlands Combined Authority Board on 23 June 2017.

The Vice-Chair reported that the appointments to Lead Member positions and the specific portfolio responsibilities had yet to be determined. He proposed that a Task & Finish Group be established consisting of Chair and Vice-Chairs to undertake a review of the appointments and portfolio responsibilities. A report would be submitted to the next meeting, along with a recommendation as to the appointments to the Lead Member positions for 2017-18 and portfolio responsibilities.

Pending the review the current Lead Members would remain in post, subject to the following agreed change in the Safe & Sustainable Transport Lead. The Vice-Chair explained that Councillor Judith Rowley would be replaced by Councillor Diana Holl-Allen as a Lead Member for 2017-18. He thanked Councillor Judith Rowley for her work and contribution to safety, equality and sustainable transport issues over the years.

Resolved:

- (1) A Task & Finish Group be established that comprised of the Chair and Vice-Chairs to review the appointments to the Lead Member positions and specific portfolio responsibilities; and
- (2) A report with a recommendation as to the appointments to the Lead Member positions for 2017-18 and portfolio responsibilities be presented to 4 September meeting.

11. TDC Annual Review 2016/17

The committee considered a report of the Chair and Vice-Chair on the achievements of the Authority's Transport Delivery Committee during 2016-17.

Councillor Daniel Warren welcomed the report and commented that the Wolverhampton Interchange project, which was considered to be one of the biggest interchange projects happening in the region at the moment, was not mentioned within the report. Councillor Philip Davis proposed that in future the Annual Review Report be circulated to members in draft for comments.

Resolved:

- (1) The report be noted.

12. Financial Monitoring Report

The committee considered a report of the Head of Finance that set out the financial position as at 31 May 2017; the first report for 2017-18 financial year.

Councillor David Stanley enquired about the cost of the Metro track replacement works in Wolverhampton, previous works undertaken on the Bilston Road in Wolverhampton and remedial track replacement works in Birmingham City Centre. The Lead Accountant for Transport agreed to provide a briefing note in relation to the costs associated to these schemes to Councillor David Stanley, Councillor Roger Horton, Councillor Daniel Warren and Councillor Judith Rowley.

Resolved:

- (1) The year to date net revenue expenditure for 2017-18 showed a favourable variance of £0.194m compared to budget be noted. There was no change in the full year position to date;
- (2) The total capital expenditure within the overall transport programme was over budget by £0.3m (5%) be noted; and
- (3) It be noted that the treasury indicators were within expected range and there were no issues to highlight.

13. Capital Programme Delivery Monitoring Report

The committee considered a report of the Head of Programme Development that provided a progress monitoring update on the approved TfWM led 2017-18 programmes and projects.

The Vice-Chair asked about the current status of the WMCA Asset Management System project. The Head of Programme Development, stated that the position had improved since the performance dashboard report was prepared.

Councillor Timothy Huxtable enquired about the length of time the Birmingham City Centre One Station project would be on hold and highlighted the importance of its introduction alongside the opening of HS2 in 2026. The Head of Programme Development provided further details around the status of the project and, as requested, agreed to arrange a briefing for the Vice-Chair and Councillor Roger Horton.

Councillor Timothy Huxtable proposed that a briefing session for Transport Delivery Committee be held when further information about the scope of the project had been received, giving members the opportunity to comment on the proposals in terms of connectivity and how the project would work for the region. The Head of Programme Development noted this request and agreed to arrange a briefing session for this committee at the appropriate time.

Councillor Roger Horton requested a progress update on the improvements to the ground infrastructure to improve wifi on-board the trams. The Head of Programme Development agreed to provide a briefing note to Councillor Roger Horton in respect of the project.

Councillor Adrian Andrew enquired about the Bus Station Refurbishment project, making particular reference to Walsall St Pauls and the visioning workshop that was held on 26 May. The Director of Transport Services agreed to provide Councillor Adrian Andrew with a briefing note in respect of the workshop and on the progress to date.

In response to a question raised by Councillor Roger Horton, the Head of Programme Development explained the reasons for the delay in the installation of the new totems at New Street Station and envisaged that this would be installed during August.

Resolved:

- (1) The achievements since 8 May 2017 meeting of the Transport Delivery Committee be noted;
- (2) Progress of deliverables under the 2017-18 Capital Programme be noted; and
- (3) Variations from the baseline programme where indicated be noted.

14. Solihull Advanced Quality Bus Partnership Scheme

Councillor Kath Hartley presented a report seeking the endorsement of Transport Delivery Committee for the West Midlands Combined Authority Board to formally make the Solihull Town Centre Advanced Quality Partnership Scheme.

The Head of Network Delivery explained that as part of the governance process the proposal for a Solihull Town Centre Advanced Quality Partnership Scheme had to be presented to Solihull Metropolitan Borough Council on 10 August 2017 for formal approval, and he therefore proposed an amendment to recommendation no. 2 of the report as follows:

“As per the terms of reference for the Transport Delivery Committee, it be recommended to the West Midlands Combined Authority Board that the Solihull Town Centre Advanced Quality Bus Partnership Scheme is formally agreed and made in August 2017 for implementation in November 2017, subject to approval by Solihull Metropolitan Borough Council at its meeting on 10 August 2017”.

The Head of Network Delivery added that an Advanced Quality Partnership Scheme was introduced in towns and cities where there was investment going into the area and the introduction of the Solihull Advanced Quality Partnership followed the improvements made as part of Solihull Gateway and Lode Lane schemes.

Councillor Timothy Huxtable added that when implementing partnership schemes orbital routes also needed to be considered due to the substantial amount of investment. He referred to the no. 11 service and traffic gyratory system at the junction of Flaxley Road/Iron Lane/Station Road.

Councillor Roger Horton enquired about the roll out of future Advanced Quality Partnership Schemes and in particular Sandwell town centre. The Head of Network Delivery explained that for the Authority to meet its objectives of partnerships across the West Midlands these had to be introduced at key centres including West Bromwich that would also benefit other centres, and as more of these partnerships were introduced Sandwell would also receive the benefit of the scheme.

With regard to the procedure that was followed to implement an Advanced Quality Partnership Scheme, the local Transport Act 2008 stated that the scheme was to be advertised within the local newspaper but specifically stated that the Authority was not required to undertake a full public consultation on the scheme.

Resolved:

- (1) The approval of the making of the Solihull Town Centre Advanced Quality Bus Partnership Scheme (AQBPS) in August 2017 for implementation in November 2017 be endorsed; and

- (2) As per the terms of reference for the Transport Delivery Committee, it be recommended to the West Midlands Combined Authority Board that the Solihull Town Centre AQBPS was formally agreed and made in August 2017 for implementation in November 2017, subject to approval by Solihull Metropolitan Borough Council at its meeting on 10 August 2017.

15. Presentation : Swift Delivery Update

The committee received a presentation from the Head of Swift on the progress being made in relation to Swift.

The presentation provided information on the success to date of the Swift vending machine pilot at Wolverhampton bus station and the rollout of a further 20 machines to a number of locations, Swift Add-on to nTrain and nNetwork, Swift and the Big Sleuth, Swift and child ticketing, Swift as a wider payment platform and Swift and the Commonwealth Games.

Councillor Chaman Lal enquired about the Swift vending machines and the provision of cash payments. This payment option was not included as part of the pilot at Wolverhampton bus station but it was considered that it would be useful to ask the customer, through the 'on-screen' survey, about their preferred method of payment. The Head of Swift agreed to feedback to Transport Delivery Committee prior to the further rollout of the Swift vending machines.

In response to a question raised by Councillor Timothy Huxtable with regard to the rollout of Swift to non-constituent areas, the Head of Swift agreed to ensure that the information on the rail map that was included within the presentation corresponded with the list of non-constituent councils that were identified in the report presented to the West Midlands Combined Authority Board on 23 June 2017.

The Head of Swift noted Councillor Roger Horton's comments in relation to those customers with a visual impairment being able to use the Swift vending machine to make a purchase.

Councillor Philip Davis asked whether there was a threat to Swift investment because of the number of contactless payment options available. The Head of Swift noted that these two services enhanced each other and statistics had shown that 20% of people did not have a bank card.

The Head of Swift agreed to forward a copy of the rail map included within the presentation to all members of Transport Delivery Committee.

Resolved

- (1) That the presentation be noted.

16. WMCA Update -Transport Reports for Information Only

The committee considered three reports that had been approved by the West Midlands Combined Authority Board at its meeting on 23 June 2017.

These were: Canal and River Trust – agreement of a memorandum of understanding, Swift vending machines wider roll-out and Swift on rail at non-constituent member stations.

In respect of the Memorandum of Understanding between the West Midlands Combined Authority and Canal and River Trust, the Head of Programme Development provided an update on some of the examples of joint working and the challenges. A Memorandum of Understanding between the Canal and River Trust and Network Rail was proposed as both operated alongside each other.

Resolved:

(1) That the reports be noted.

17. Forward Plan

The committee considered a report of agenda items to be submitted to future meetings.

Resolved:

(1) That the report be noted.

18. Date of Next Meeting

Monday 4 September 2017 at 1:00pm

The meeting ended at 3.00 pm.

Date: 4 September 2017

Report Title: Lead Member Positions and Responsibilities for 2017-18

Report of: The Chair of Transport Delivery Committee

Report has been considered by: Cllrs. Davis, Huxtable and Worrall; Steve McAleavy and Laura Shoaf

Recommendations for action or decision

The Transport Delivery Committee is recommended to:

1. In light of the new Governance arrangements approved by WMCA Board which provide for a sixth Special Responsibility (4 Labour, 2 Conservative in 2017-18) to allocate a Lead Member role to each of the six members.
2. To create a sixth Lead Member role, both to fully reflect the proportional ethos and also the need to enable due member-level focus on the urgent, growing, priority to address traffic congestion and air quality issues
3. To approve related matters set out at 3.0, 'Next Steps' below.

1.0 Purpose

This report updates the Transport Delivery Committee on the outcome and recommendations of the Task & Finish review of Lead Member positions and portfolio responsibilities undertaken by the TDC Chair and Vice-Chairs (minute 10 of the TDC meeting of 10 July refers).

2.0 Background

2.1 Special Responsibility Allowances and Lead Member responsibilities were considered and approved by WMTDC and the Combined Authority Board in the course of the previous municipal year, 2016-17, and provided for five SRAs and five Lead Member roles (with all nineteen TDC members signed up to one of the five Lead Member Reference Groups), as follows:

- Finance & Performance (Vice-Chair - Cllr. Davis)
- Putting Passengers First (Cllr. Hartley)

- Rail & Metro (Cllr. Horton)
- Safe & Sustainable Travel (Cllr. Rowley, succeeded for 2017-18 by Cllr. Holl-Allen under new proportional arrangements)
- Sprint (Chair - Cllr. Worrall)

2.2 The Task and Finish Review Group met three times and Laura Shoaf and Steve McAleavy were consulted in the course of this. There were four key areas of consideration, as follows:

- a. Do the current Terms of Reference cover all the key policy areas TDC members should be briefed and working upon, and is due emphasis given to key, developing, policy areas?
- b. Given the recently-approved proportional model of TDC Governance should there be five Lead Member positions or six?
- c. In light of the experience of the Lead Member Reference Groups in 2016-17, should there be any change to the arrangements for populating these?
- d. Given the acknowledged pressures on officer time, how do we ensure that any new scheme does not create additional work for staff?

2.3 The review's conclusions are as follows:

- a. That there should be a new Lead Member responsibility to enable due focus to be given to Air Quality, Highways and Congestion, recognising that, while delivery lies primarily with the Local Highway Authorities, TfWM has a role on co-ordination and consistency of approach; further, given the priority to deliver a number of key Sprint schemes as part of the HS2 Connectivity Package, the Sprint Lead Member Group should continue.
- b. New Terms of Reference are needed, both for Air Quality, Highways & Congestion, and Sprint, and where elements of these are already contained in other TORs, they should be deleted from these to avoid duplication;
- c. in light of the experience of 'open access' Lead Member Reference Groups of various-size memberships and sometimes patchy attendance in 2016-17, and given the new proportional governance arrangements, these groups should consist of the respective Lead Member and two others appointed by the TDC on a proportional basis;
- d. a guiding principle informing the addition of a sixth Lead Member role is that the work of all six Reference Groups should not require more officer time

than currently (ideally less!), this to be achieved, for example, through focus on key policy areas, informal or smarter working, and a degree of self-discipline on the part of Lead Members and their respective Reference Groups: for example, formal meetings (if any) and specific briefings should be called only when all parties acknowledge a clear need - just as a sixth Lead Member role was created within existing (financial) resources, so the work of a sixth Lead Member Reference Group must be achieved within the (staffing) resources available to service the existing five.

3.0 Next Steps

3.1 Subject to agreeing the recommendations, and the findings of the Task & Finish Review, the political groups are asked to make their nominations to the six Lead Member Reference Groups as set out below, these nominations to be reported to the October meeting of TDC:

- Air Quality, Highways & Congestion: Cllr. Davis + 1 Conservative, 1 Labour
- Finance & Performance: Cllr. Worrall + 1 Conservative, 1 Labour
- Putting Passengers First: Cllr. Hartley + 1 Conservative, 1 Labour
- Rail & Metro: Cllr. Horton + 1 Conservative, 1 Labour
- Safe & Sustainable Travel: Cllr. Holl-Allen + 2 Labour
- Sprint: Cllr. Huxtable + 2 Labour

3.2 All Lead Members should agree, in conjunction with their Reference Group colleagues and respective officers an outline forward plan for the remainder of 2017-18, together with a modest and do-able timetable of informal briefings and/or meeting dates up to June 2018, to be reported to the TDC's October meeting.

3.3 Officers are asked to do a (minor) review of existing Terms of Reference to eliminate any duplication, most particularly having regard for the new TORs for Air Quality, Highways & Congestion, and Sprint, and to report the outcome to the October TDC meeting, view to its approval of the revised scheme of ToRs.

4.0 Financial Implications

None

5.0 Legal Implications

None

This page is intentionally left blank



Transport Delivery Committee

Date	4 September 2017
Report title	Financial Monitoring Report
Accountable Director	Mark Taylor Director of Finance Tel 0121 214 7066 Email - Mark.Taylor@wmca.org.uk
Accountable employee(s)	Linda Horne, Head of Finance Tel 0121 214 7508 Email lindahorne@centro.org.uk
Report to be/has been considered by	Cllr Davis (Lead Member- Finance and Performance Monitoring)

Recommendation(s) for action or decision:

The Transport Delivery Committee is recommended to:

1. Note that the year to date net revenue expenditure for 2017/18 shows a favourable variance of £374,000 compared to budget and a full year favourable variance of £944,000 following the first re-forecast of the year.
2. Note that total capital expenditure to the end of July 2017 within the overall transport programme was over budget by £0.3m (12%)
3. Note that the treasury indicators are within expected range and there are no issues to highlight.

1.0 Purpose

1.1 This report sets out the financial position as at 31 July 2017 and is the first report for the 2017/18 financial year. The content relates to the financial position of the Combined Authority's Transport Delivery Revenue and Capital Budgets. The report consists of the following Sections:

Section A Summary TFWM Revenue Budget

Section B Summary TFWM Capital Budget

Section C Treasury Management Indicators

SECTION A

2.0 Summary Revenue Position

2.1 As at the end of July 2017 there is a net favourable variance against budget of £374,000. Following the first re-forecast of the year there is a favourable full year position of £944,000 against budget.

2.2 Year to Date Variances:

Within the year to date position notable operational variances are within External Advice where there is total adverse variance of £298,000 mainly due to an unbudgeted contribution to Midland Metro Ltd (MML) to support mobilisation of £267,000. Whilst this has been approved to be repaid to the Authority from future revenue, it is considered prudent at this stage to provide for the liability. This is largely offset by vacant posts and an under-spend against the recruitment budget due to the timing of expenditure totalling £235,000.

In addition there are favourable variances relating to a one off rates refund of £65,000 received in relation to Wednesbury Parkway and various other park and ride sites and additional ticketing commission received as a result of an agreement being reached with NX during April. Within Financing costs there are savings against Loan Interest of £88,000 as no borrowing has taken place so far in the year and a small saving due to the approved upfront pension deficit contribution.

2.3 Full Year Variances:

Key movements in the full year position reflect expected savings of £1.1m within the ENCTS and Child concessionary budgets as a result of lower patronage and savings against bulk pass re-issue costs. In addition there are savings of £1.0m against the staffing budget due to vacant posts and within Loan Interest of £275,000 due to revised borrowing requirements and the pension fund savings.

These favourable variances are partly offset by an increase in expected External Advice expenditure due to the prudent provision for MML mobilisation work of £800,000 along with additional contractors being required within Metro Operations, £161,000, and additional work

of £111,000 being commissioned by the Strategy and Policy team as a result of vacant posts not being filled.

There is also an addition to the building maintenance provision of £289,000 to cover costs of refurbishing the 7th & 8th floors along with a re-fit of the 4th floor and an expected increase in Routine Maintenance of £105,000 due to a number of one-off maintenance activities relating to Bromsgrove rail station and cost pressures being experienced on Bus Stations and On-street infrastructure.

- 2.4 The proposed 16-18 year old apprentices and trainees pilot (which is going to the next WMCA Board for decision) will be funded from savings achieved from the current 2017-18 Child Concessionary scheme. One of the conditions to be built into this new scheme is that there will be an agreed fixed level of exposure to the WMCA. If the costs of the pilot scheme exceed this level, operators will incur those additional costs as part of their agreement to take on the commercial risk.
- 2.5 Approval will be sort in the mid-year Treasury Management update to change the WMCA Minimum Revenue Provision (MRP) in relation to historic and future TfWM Transport borrowing. If approved, this will deliver significant savings against the Transport revenue budget with a total of £5.2m available in the current financial year.
- 2.6 It should be noted that there will be emerging cost pressures relating to various TFWM activities and initiatives for the remainder of this year that will reduce this current forecast surplus position and these will be reported in subsequent financial reports through the year.

	July 2017 Year to Date			Full Year 2017/18		
	Actual £'000	Budget £'000	Variance £'000	Forecast £'000	Budget £'000	Variance £'000
INCOME						
Transport Levy	40,514	40,514	0	121,542	121,542	0
Total Income	40,514	40,514		121,542	121,542	
EXPENDITURE						
Concessions						
National Bus Concession	17,581	17,623	42	52,019	52,519	500
Metro / Rail	1,470	1,470	0	3,837	4,409	572
Child Concession	3,390	3,390	0	9,609	9,609	0
Passes and Permits	107	106	(1)	12	0	(12)
Concessions Total	22,547	22,589	42	65,477	66,537	1,060
Bus Services						
Bus Stations / Infrastructure	1,592	1,503	(89)	4,274	4,245	(28)
Subsidised Network	2,554	2,569	15	7,772	7,772	()
Tendering / Monitoring	224	281	57	809	819	10
Accessible Transport	2,456	2,456	1	7,369	7,369	0
Bus Services Total	6,826	6,810	(16)	20,224	20,206	(18)
Rail and Metro Services						
Metro	663	423	(240)	2,303	1,421	(882)
Rail Operations	67	65	(3)	211	193	(18)
Car Park and Ride	345	432	87	1,427	1,427	1
West Midlands Rail	121	161	40	302	316	14
Bromsgrove Rail Station	32	109	77	161	326	165
Rail and Metro Services Total	1,228	1,189	(39)	4,405	3,685	(720)
Integration						
Safety and Security	313	308	(5)	970	926	(44)
Passenger Information	1,840	1,971	130	5,519	5,572	53
Sustainable Travel	12	17	5	55	60	5
Integration Total	2,165	2,295	130	6,544	6,558	14
Business Support Costs Total	1,157	1,292	135	3,676	3,938	262
Policy and Strategy and Elected Member Services Total	603	634	31	2,050	2,090	39
Finance Charges						
Finance Costs	5,174	5,252	77	15,384	15,673	289
Deregulation Pension Costs	438	452	14	1,337	1,356	18
Transport Development	500	500		1,500	1,500	
Finance Charges Total	6,113	6,203	91	18,222	18,529	307
Total Expenditure	40,639	41,013	374	120,598	121,542	944
Net	(125)	(499)	374	944	0	944

3.0 Midlands Connect

3.1 The Midlands Connect Programme is a self-contained fully funded programme and therefore reported separately to the WMCA revenue budget in section 3. The Midlands Connect financial Summary for July 2017 is as follows:

	JULY 2017 YEAR-TO-DATE			FULL YEAR 2017/18		
	ACTUAL £000	BUDGET £000	VARIANCE £000	BUDGET £000	FORECAST £000	VARIANCE £000
Income						
Midlands Connect (DfT Grant)	779	655	124	842	842	0
Midlands Connect (LEPs)	16	19	(3)	19	19	0
Midlands Connect (SCP Grant)	54	66	(12)	158	158	0
Midlands Engine (Nottingham City Council)	29	0	29	0	31	(31)
Midlands Connect 2017-2020 Programme DfT Grant	0	0	0	0	5,000	(5,000)
Total Income	878	740	138	1,019	6,050	(5,031)
Operational Expenditure						
Staff (inc support costs)	(278)	(244)	(34)	(328)	(1,069)	741
WP1- Strategy Development	(15)	(15)	0	(15)	(15)	0
WP2- HS2 Readiness	(6)	(8)	2	(8)	(6)	(2)
WP3&4 –Midlands Connect Hubs and Corridors	(18)	(335)	317	(438)	(20)	(418)
WP5a- Midlands Connect Freight	0	0	0	0	0	0
WP6- Smart Connectivity	(54)	(66)	12	(158)	(158)	0
WP7- Communications Plan	(34)	(33)	(1)	(33)	(33)	0
Midlands Connect (LEPs)	(16)	(19)	3	(19)	(19)	0
WP8- Sub-National Transport Body	(20)	(20)	0	(20)	(20)	0
Midlands Engine Recharges	(30)	0	(30)	0	(31)	31
1-2 Midlands Connect MRN Report	0	0	0	0	(250)	250
2-1 HS2 Hybrid Bill (Stage 1)	(50)	0	(50)	0	(100)	100
2-3 A46- Cross Midlands Strategic Study	0	0	0	0	(250)	250
2-4 East Midlands Gateway Connectivity Study	0	0	0	0	(250)	250
2-5 Pan-Midlands Rail Corridor	(62)	0	(62)	0	(500)	500
2-8 Midlands Motorway Hub	(275)	0	(275)	0	(459)	459
2-9 Midlands Rail Hub	0	0	0	0	(2,000)	2,000
2.11 Discussion with HE on RIS2	0	0	0	0	(100)	100
2-17 A49 Hereford Bypass	0	0	0	0	(150)	150
2-18 Account Based Ticketing Trial in East Midlands	0	0	0	0	(125)	125
2-19 Evaluation of Trial	0	0	0	0	(50)	50
2-20 Proposal for Smart Multi-Operator and Multimodal	0	0	0	0	(125)	125
2-21 Draft STB Proposal for Consultation	(20)	0	(20)	0	(20)	20
2-22 Final STB Proposal for Ratification	0	0	0	0	(10)	10
2-23 Submission of STB Proposal to DfT	0	0	0	0	(20)	20
3-3 Midlands Connect Communications Strategy	0	0	0	0	(270)	270
Total Operational Expenditure	(878)	(740)	(138)	(1,019)	(6,050)	5,031
Grand Total	0	0	0	0	0	0

*Residual 16/17 Programme Works

3.2 The year to date spend totals £0.877m against a budget of £0.740m, resulting in an over-spend of £0.138m. This is mainly due to the unbudgeted Midlands Motorway Hub works which covers the Motorway surveys and Highways England contribution, works which are both fully DfT Grant funded.

- 3.3 The latest forecast spend for 2017 / 2018 Midlands Connect Programme totals £6.050m (consisting of £4.932m against technical work streams, £1.068m against Staff costs, £0.019m against LEPs Contribution, and £0.031m against Midlands Engine Recharges) against budget of £1.020m resulting in an overspend of £5.031m. The variance is mainly due to the additional £5m DfT Grant released in May 2017 for 2017 / 2018, £3m for Core Midlands Connect activity and £2m earmarked for Midlands Rail Hub and £0.031m unbudgeted Midlands Engine expenditure covering the Interim Midlands Engine Director secondment costs which are fully recovered by Nottingham City Council, the accountable body for Midlands Engine.

SECTION B

4.0 Summary Position TFWM Capital Budget

- 4.1 Overall TfWM Capital Programme expenditure is greater than the year to date budget by £1.58m (12%) at the end of July 2017. The forecast for year is an over-spend of £7.4m mostly due to advancement of Investment Programme schemes.

	JULY YEAR TO DATE			FULL YEAR 2016 / 2017		
	ACTUAL £000	BUDGET £000	VARIANCE £000	FORECAST £000	BUDGET £000	VARIANCE £000
INVESTMENT PROGRAMME SCHEMES	(12,609)	(11,694)	(915)	(59,494)	(51,966)	(7,528)
OTHER MAJOR SCHEMES	(669)	(413)	(256)	(8,644)	(9,212)	568
MINOR WORKS PROGRAMME	(1,578)	(1,173)	(405)	(4,749)	(4,261)	(488)
TOTAL	(14,856)	(13,280)	(1,576)	(72,887)	(65,439)	(7,448)

- 4.2 The TfWM Investment Programme contains schemes which feature in the WMCA Devolution Deal Investment Programme to be delivered by TfWM. These schemes are all, to some extent, funded from the West Midlands Combined Authority Devolution Deal funding arrangements.
- 4.3 Investment Programme scheme expenditure at the end of July totalled £12.6m which is £0.91m greater than the year to date budget. The variance mostly consists of acceleration against Edgbaston Metro Extension and Bilston Road Track Replacements as detailed within this report. The full year forecast against this programme shows an expected overspend of £7.5m mostly due to accelerated activity against Edgbaston Metro, Wednesbury to Brierley Hill Metro and East Birmingham to Solihull Metro.
- 4.4 Within the Other Major Scheme programme, spend to date is £0.67m against a year to date budget of £0.41m giving a minor variance of £0.27m. The full year variance against this programme suggests a £0.59m underspend mostly due to a re-profile of the Longbridge Connectivity Package works.
- 4.5 The Minor Works Programme spend to date totalled £1.58m against a budget of £1.18m to give an over-spend of £0.405m. The forecast for the year against this programme shows a £0.49m overspend against the budget of £4.26m.

TfWM Delivered Investment Programme Schemes

INVESTMENT PROGRAMME SCHEMES	JULY YEAR TO DATE			FULL YEAR 2016 / 2017		
	ACTUAL £000	BUDGET £000	VARIANCE £000	FORECAST £000	BUDGET £000	VARIANCE £000
SPRINT - Hagley Road	(85)	(97)	12	(2,152)	(2,162)	10
A45 Sprint	(108)	(158)	50	(437)	(700)	263
Metro Centenary Square Extension	(2,209)	(2,946)	737	(10,793)	(11,423)	630
Metro Birmingham Eastside Extension	(441)	(502)	61	(2,664)	(1,678)	(986)
Metro Wolverhampton City Centre Extension	(1,727)	(2,065)	338	(5,864)	(8,500)	2,636
Metro Edgbaston Extension	(2,840)	(1,633)	(1,207)	(12,695)	(7,647)	(5,048)
Wednesbury to Brierley Hill Metro Extension	(658)	(738)	80	(3,980)	(2,133)	(1,847)
Metro East Birmingham to Solihull	(433)	(831)	398	(4,875)	(2,024)	(2,851)
Bilston Road Track Replacement	(4,014)	(2,724)	(1,290)	(15,699)	(15,699)	0
HS2 connectivity package	(94)	0	(94)	(335)	0	(335)
TOTAL INVESTMENT PROGRAMME SCHEMES	(12,609)	(11,694)	(915)	(59,494)	(51,966)	(7,528)

4.6 Expenditure against TfWM delivered Investment Programme schemes totals £12.61m at the end of July which is £0.92m greater than the budget of £11.69m. The main contributors to the variance are as follows:

- Edgbaston Metro Extension £1.207m year to date over-spend; due to acceleration of utilities works.
- Bilston Road Track Replacement £1.291m year to date over-spend; due to construction works commencing approximately 6 weeks ahead of schedule.
- Centenary Square Metro Extension £0.737m year to date under-spend; following a phased start to the construction activity due to site permissions being obtained from the Local Authority.
- Wolverhampton Metro Extension £0.338m year to date under-spend; due to a deferral of activity on site following agreement of a revised construction strategy to align with the delivery of the overall Interchange Project programme.

4.7 The 2017/18 forecast against the Investment Programme Schemes programme suggests spend in excess of the £51.97m budget of £7.25m. This is attributable to:

- Edgbaston Metro Extension £5.05m full year over-spend; due to further accelerations of construction activity being planned for 2017/18 in expectation of gaining full DfT approval in September 2017.
- East Birmingham to Solihull Metro £2.85m full year over-spend; due to acceleration of development and design works following agreement to the owners brief.
- Wednesbury to Brierley Hill Metro Extension £1.85m full year over-spend; due to acceleration of development and design works following agreement to the owners brief.

- Wolverhampton Metro Extension £2.64m full year under-spend; due to a deferral of activity on site following agreement of a revised construction strategy to align with the delivery of the overall Interchange Project programme.

Other Major Works

4.8 Spend against the Other Major Works Programme to the end of July was £0.67m which equates to a variance of £0.26m against budget, mostly due to acceleration of activity against the final stages of the Birmingham Metro Extension.

4.9 The forecast for the year suggests an under-spend of £0.57m, mostly due to a re-profile of the Longbridge Connectivity Package delivery into 2018/19.

OTHER MAJOR SCHEMES	JULY YEAR TO DATE			FULL YEAR 2016 / 2017		
	ACTUAL £000	BUDGET £000	VARIANCE £000	FORECAST £000	BUDGET £000	VARIANCE £000
BCCE Metro Extension	(459)	(317)	(142)	(950)	(800)	(150)
District Delivered : National Productivity Investment Fund Programme	(81)	(81)	0	(6,166)	(6,166)	0
Bromsgrove Station Relocation	(11)	0	(11)	0	0	0
Metro Catenary Free	(90)	(6)	(84)	(50)	4	(54)
Birmingham City Centre One Station	0	0	0	(250)	(250)	0
Longbridge Connectivity Package	(22)	(9)	(13)	(1,228)	(2,000)	772
TOTAL OTHER MAJOR SCHEMES	(669)	(413)	(256)	(8,644)	(9,212)	568

Minor Schemes Programme

MINOR WORKS PROGRAMME	JULY YEAR TO DATE			FULL YEAR 2017 / 2018		
	ACTUAL £000	BUDGET £000	VARIANCE £000	FORECAST £000	BUDGET £000	VARIANCE £000
TBT Infrastructure	(277)	(196)	(81)	(694)	(638)	(56)
TBT RTI	(142)	(81)	(61)	(511)	(512)	1
Smart Ticketing	(25)	(12)	(13)	(52)	(76)	24
Solihull Traffic Signal Technology	0	0	0	0	(5)	5
TBT PROGRAMME TOTAL	(442)	(289)	(153)	(1,260)	(1,231)	(29)
Cycle Facilities Provision	(102)	(107)	5	(121)	(121)	0
Accessibility / Interchange Improvements at Stations	(15)	0	(15)	(56)	0	(56)
Park and Ride Improvements	(14)	0	(14)	(83)	0	(83)
TRT PROGRAMME TOTAL	(131)	(107)	(24)	(260)	(121)	(139)
Way Finding Infrastructure	(4)	(44)	40	(91)	(65)	(26)
INFORMATION & MAPPING PROGRAMME TOTAL	(4)	(44)	40	(91)	(65)	(26)
Asset Management System	1	(7)	8	(108)	(108)	0
ICT Rolling Programme	(1)	0	(1)	(10)	(10)	0
Replacement of Life Expired ICT	(32)	(33)	1	(110)	(110)	0
SYSTEMS ARCHITECTURE PROGRAMME TOTAL	(32)	(40)	8	(228)	(228)	0
Walsall Cutting	(140)	(1)	(139)	(145)	(94)	(51)
Life Expired Asset Replacement - Bus Stations	(62)	(58)	(4)	(471)	(253)	(218)
Life Expired Asset Replacement - CCTV & RTI	(328)	(338)	10	(629)	(628)	(1)
Life Expired Asset Replacement - Park & Ride	(80)	(18)	(62)	(528)	(528)	0
ASSET MANAGEMENT PROGRAMME TOTAL	(610)	(415)	(195)	(1,773)	(1,503)	(270)
Other Project Development	(19)	(22)	3	(57)	(50)	(7)
Interchange / Bus Station Development	(172)	(101)	(71)	(259)	(259)	0
Park And Ride Development	(65)	(66)	1	(602)	(594)	(8)
PROJECT DEVELOPMENT PROGRAMME TOTAL	(256)	(189)	(67)	(918)	(903)	(15)
Metro Op - Line 1 Enhancements	(89)	(89)	0	(148)	(148)	0
Tram Communication Enhancements	0	0	0	(62)	(62)	0
Metro 2030	(14)	0	(14)	(9)	0	(9)
METRO PROGRAMME TOTAL	(103)	(89)	(14)	(219)	(210)	(9)
MINOR WORKS PROGRAMME TOTAL	(1,578)	(1,173)	(405)	(4,749)	(4,261)	(488)

- 4.10 The Minor Scheme Programme spend to the end of July totalled £1.58m against a budget of £1.17m to give a variance of £0.40m. The variance is mostly made up of minor variances across a number of schemes, with the only variance of note being in relation to Walsall Cutting (£0.14m year to date over-spend), where cost increases in relation to clearance of Japanese Knotweed and additional landscaping / drainage works have increased the overall forecast out-turn for the scheme. It is considered that the over-spend can be accommodated from within the Asset Management Programme.
- 4.11 The Minor Scheme Programme forecast for 2017/18 suggests a £0.49m over-spend. Again, this mostly consists of minor variances against a number of projects with the most significant being the £0.218m over-spend in relation to Life Expired Asset Replacement at Bus Stations where the Bus Station Refurbishment work-stream now accommodates additional costs for the installation of automatic doors at Dudley Bus Station in addition to costs for refurbishment works at Walsall Bus Station. These costs are to be funded from the overall Asset Management Programme.

SECTION C

5.0 Summary Treasury Indicators

5.1 Below are the Treasury Management Indicators set in the 2017/18 Treasury Management Strategy to ensure overall borrowings and investments are within the expected ranges. These indicators will be monitored throughout the year and reported to this Committee accordingly.

Summary Prudential Indicators

Measure	2017/18 Revised Forecast £000's	2017/18 Original Forecast £000's	2018/19 Forecast £000's	2019/20 Forecast £000's
Affordability				
Ratio of financing costs to net revenue stream:				
(a) financing costs	13,839	15,109	18,063	24,504
(b) net revenue stream	158,042	158,042	200,954	203,845
Percentage	8.76%	9.56%	8.99%	12.02%
Estimates of Capital Investment on Income (%)	(0.22%)	(0.59%)	(1.47%)	(3.16%)
Prudence				
Gross borrowing and the capital financing requirement:				
Gross Borrowing (excludes inherited debt)	229,585	229,585	394,205	534,017
Capital Financing Requirement <small>(Gross borrowing in year 2017/18 must not exceed year CFR in 2019/20)</small>	256,085	256,085	420,703	560,523
Capital Expenditure, External Debt and Treasury Management				
Capital Expenditure	143,032	171,211	362,563	411,421
Operational boundary for external debt				
Operational boundary for borrowing	312,305	312,305	476,924	627,391
Authorised limit for external debt				
Authorised limit for borrowing	312,305	312,305	476,924	627,391
Interest rate exposures				
Upper limit on fixed rate exposures	10%	10%	10%	10%
Upper limit on variable rate exposures	30%	30%	30%	30%
Investments longer than 364 days				
Upper limit	8,000	8,000	8,000	8,000

5.2 The finance costs indicator and gross borrowing indicator have been revised down from £15.109m to £13.839m and £229.585 to £162.351 retrospectively due to MRP recalculation and planned project related borrowing not taken out.

5.3 All treasury management activities undertaken between April and July complied fully with the CIPFA Code of Practice and the Authority's approved Treasury Management Strategy, including the financial tolerances WMCA are expected to operate within. Further details will

be provided within the Treasury Management Mid Year update report produced by the Combined Authority.

This page is intentionally left blank



WEST MIDLANDS
COMBINED AUTHORITY

Transport Delivery Committee

Date	4 September 2017
Report title	Capital Programme Delivery Monitoring Report
Accountable Chief Executive	Laura Shoaf, Managing Director, TfWM 0121 214 7444 laura.shoaf@tfwm.org.uk
Accountable Employee	Sandeep Shingadia, Head of Programme Development, TfWM 0121 214 7169 sandeep.shingadia@tfwm.org.uk
Report has been considered by	Councillor Phil Davis

Recommendation(s) for action or decision:

Transport Delivery Committee is requested to:

1. To note the achievements since 10 July 2017 meeting of the Transport Delivery Committee.
2. To note the progress of deliverables under the 2017/2018 Capital Programme.
3. To note, where indicated, any variations from the baseline programme.

1.0 Purpose

- 1.1 To provide this committee with a progress monitoring update on the approved TfWM led 2017 / 2018 programmes and projects.
- 1.2 The financial aspects of the TfWM Capital Programme are reported separately under the Financial Monitoring Reports to this committee.

2.0 Background

- 2.1 The 2017/2018 Capital Programme was approved by WMCA Board as part of the wider Transport Plan on 17th March 2017.
- 2.2 The ITB allocation for 2017/2018 is fully utilised on continuing committed schemes and in attempting to manage the existing asset base with respect to replacement and or renewal of life expired/obsolete equipment, in order to endeavour to maintain a steady state of asset condition across the estate.
- 2.3 The Capital Programme in 2017/2018 will be a one year transition period by bringing existing schemes to a conclusion and will allow TfWM to re-focus subsequent programmes towards supporting Asset Management, Network Resilience and Capacity Enhancement projects from April 2018, or sooner should funding become available.
- 2.4 Attached to this report (Appendix 1) is the detailed monitoring report for the 2017/2018 TfWM Capital programme outlining these deliverables, indicating the baseline date (endorsed through March report) with an indication of the current forecast date with a RAG indicator.

3.0 Achievements

- 3.1 The following elements within the 2017/18 Capital Programme have been completed during June and July 2017:
 - Network Wide P&R Resurfacing Programme – Shirley Station Car Park completed.
 - Digital Advertising Panel rollout – 38 new shelters have been installed with digital advertising to date.
 - TBT Platinum Route RTI Equipment Upgrades – All painting and refurbishment works completed.
 - Network Wide P&R Lighting Enhancements – 19 sites have been delivered.

4.0 Variations to Baseline Programme

- 4.1 The following schemes have had variations to their established baseline programmes:

Strategic Economic Plan Schemes:

- Birmingham City Centre One Station – project currently on hold while consideration is given to wider connectivity improvements that are being developed for Curzon Street and Moor St as part of HS2. Discussions are ongoing with Birmingham City Council and HS2 Ltd.
- Wolverhampton City Centre Shelters – implementation will follow once City of Wolverhampton Council complete their pedestrianisation works. The expected date for installation of the shelters is March 2018.

5.0 Financial implications

5.1 The detailed financial aspects of the TfWM 2017/2018 Capital Programme are reported separately under the Financial Monitoring Report to this Committee. A summary of the final year position in financial terms is, however, attached to this report as Appendix 2.

6.0 Legal implications

6.1 There are no direct legal implications arising from the recommendations set out in this report. However, legal will support, as necessary, any deliverables that may arise moving forward into 2017/2018.

7.0 Equalities implications

7.1 There are no equality implications arising from the recommendations set out in this report. However, Anna Sirmoglou will support as project requires any deliverables within the 2017/2018 capital programme.

8.0 Schedule of background papers

8.1 2017/2018 TfWM Capital Programme Delivery Monitoring Report read at Transport Delivery Committee 8 May 2017 from Laura Shoaf Managing Director TfWM.

9.0 Appendices

APPENDIX 1 – Progress of Deliverables against 2017/18 Baseline Programme
APPENDIX 2 – Capital Programme and Financial Summary

10.0 Glossary of Terms

BCC = Birmingham City Council
BCCI = Birmingham City Centre Interchange
CA = Combined Authority
CC = City Council
CCTV = Closed Circuit Television
DfT = Department for Transport

HIL = Highway Improvement Line
HOPS = Host Operator or Processing System
HoT = Heads of Terms
HS2 =High Speed 2
ICT = Information and Communications Technology
IT = Information Technology
ITB = Integrated Transport Block
LED = Light Emitting Diode
NR = Network Rail
OBC = Outline Business Case
OJEU =Official Journal of the European Union
P & R = Park and Ride
RTI = Real Time Information
TBT = Transforming Bus Travel
TWA = Transport and Works Act
WMCA = West Midlands Combined Authority

Transport Delivery Committee Dashboard

Capital Projects Delivery Status

2017/18 Programme Summary

	Project Name	Status	Baseline Comp Date	Forecast Date	DCA	DCA Trend	Exec Summary
Strategic Economic Plan							
1	BCC One Station	On Hold					Project currently on hold while consideration is given to wider connectivity improvements that are being developed for Curzon Street and Moor St as part of HS2. Discussions are ongoing with BCC and HS2 Ltd.
2	Metro Wolverhampton City Centre Extension	Contribution					
Transforming Bus Travel							
3	TBT Wolverhampton City Centre Shelters	Delivery		March 2018			Upgraded shelter facilities in City Centre. Impacted by WCC pedestrianisation plans.
4	TBT Birmingham City Centre Shelter Design Optimisation	Rolling Programme					Works continue to update and manage the City Centre Shelters.
5	TBT Highway Scheme Development (Bus reliability and punctuality)	Development	March 2018	March 2018	Green		Currently there is £31,500 of development work commissioned under this budget of £120,000 £26,000 has been commissioned to Atkins to develop the Birmingham Growth Point Public Transport Package, with outputs and invoices now settled. £4,500 has been commissioned to Atkins to develop bus access mitigation measures at QE Hospital, with outputs and invoices now settled. The remaining budget has been allocated for South Birmingham Bus Network Review mitigation and is expected to be fully committed by Jan 18
6	Digital Advertising Panel rollout	Rolling programme					38 new shelters have been installed with digital advertising to date 17/18. The next rollout will commence Jan 18 (numbers of new shelters to be confirmed as Clear Channel intend to roll out 2 sided digital advertising which should reduce the amount of new shelters required to achieve the agreed target of panels)
7	TBT Platinum Route RTI Equipment Upgrades	Rolling programme					All painting and refurbishment works are complete. 31 new shelters should all be installed by end of Feb 18 as 8 of the 31 shelters are being used for digital advertising and Clear Channel don't wish to upgrade these till Jan 18. We expect the other 23 to be installed Sept/Oct17.
8	Network Wide SWIFT Procurement						
9	Network Wide SWIFT Vending	Closed			Green	Same	The Swift Vending machine lessons learned session was held so this project can now be closed
10	Traffic Signal Technology, Solihull Contribution	Contribution					
11	Network Wide P&R Lighting Enhancements	GW 5 Delivery and Handover	11/04/2017	28/07/2017	Amber/Red	Same	19 sites have been delivered. Delivery of remaining 6 sites is on hold pending Change Request. This scheme has an Amber/ Red DCA because additional funding will be required to deliver the final six sites.
Information & Mapping							
12	New Street Station Totems	GW 5 Delivery and Handover	11/01/2017	13/09/2017	Amber/Red	Same	1. Budget - A Formal Change request was presented to programme board on 12/7/17. A decision has been deferred until a potential funding source has been identified to cover the overspend. The Sponsor is currently assisting with this information. 2. Programme - Artwork is scheduled to be updated during early August 2017, installation is potentially September 2017 subject to resources and a successful funding bid. 3. An Amber/ Red DCA has been given because additional funding is required to deliver the works.
13	Interconnect Development	GW -2 Options			Green		The first project progress meeting has been confirmed for 11th August, in Dudley. With further meetings scheduled for the following dates: 7th September - Project progress meeting – City ID, WMCA, Dudley MBC

	Project Name	Status	Baseline Comp Date	Forecast Date	DCA	DCA Trend	Exec Summary
					Green		28th–29th September - Open studio workshops – City ID, WMCA, Dudley MBC + wider stakeholders Consultation with citywide partners and other public and private organisations Presentation of the review, research and analysis work undertaken, network planning and initial concept development 19th October - Final project presentation – City ID, WMCA, Dudley MBC Presentation of project development plan, key recommendations and next steps Programme has been updated to reflect key meeting dates
Systems Architecture Programme							
14	WMCA Asset Management System	GW 6 Closure and LL	10/07/2020	12/09/2017	Green	Improved	A lessons learnt workshop took place on the 19th July 2017. A report will be compiled for both TfWM/Corporate Services leadership Board and Project Program Board External Legal services have been engaged to work with the WMCA to bring Contract to an end
15	ICT Rolling programme – IT service management	Rolling Programme	March 2018	March 2018	Green		<ul style="list-style-type: none"> Service Management - New system and services for ICT Replacement hardware Continuation of Cyber Security Project <i>Paul Beckley / Louise Capener</i>
Asset Management							
16	North Walsall Cutting and Stourbridge Junction Structural Improvements	GW 5 Delivery and Handover	14/12/2016	18/05/2017	Green	Same	Scheme complete. Final outturn negotiated down to £1.824M against scheme budget of £1.793M. Change control to be completed w/c 24th July.
17	Network Wide Bus Station Refurbishment Phase 1	Design & Delivery	March 2018	March 2018	Green		<ul style="list-style-type: none"> Merry Hill RTI. Nearly completed. Summary screens installed, few minor items of snagging outstanding. Lessons learnt to be scheduled. £74k- Toilet refurbishment at Wolverhampton & West Bromwich. Currently building a specification to go out to suppliers £500k- Walsall St Pauls MLR. Visioning workshop with key internal and external stakeholders held at the bus station to build a specification which enhances the customer experience and ensures the asset is as efficient as possible. This will help feed into a specification to go out to tender. Customer satisfaction surveys are being carried out to ensure we concentrate any spend on the right areas that are important to the customer.
18	Metro Line One CCTV Replacement	Complete					
19	Network Wide CCTV Infrastructure Upgrade	GW 5 Delivery and Handover	13/12/2017	15/12/2017	Amber/Red	Same	<ol style="list-style-type: none"> A Change Request for Help Point replacement works to be removed from the Project was approved at Transport Operations on 12/7/17. Programme of installations is ongoing and on schedule for completion of first phase of sites by December 2017. A Change Request to capture the Variations and Phasing activities will be submitted to Programme Board for information. An Amber/ Red DCA has been given because funding supports delivery of 23 out of 44 sites (first phase of works up to December 2017).
20	Network Wide Rail RTI – Life Expired Replacements	Contribution to TOC					
21	Network Wide P&R Resurfacing Programme	Rolling Programme	28/03/2018	17/01/2018	Green	Same	Shirley works completed. Procurement exercise completed for both Marston Green and Yardley Wood – works at both proposed to take place during October. Change request approved to remove both The Hawthorns and Lye from 2017/18 deliverables, and replace with Sutton Coldfield resurfacing, and Yardley Wood footpath works. Additional procurement piece underway to gain quotes for Sutton Coldfield. DCA remains as green as project continues to progress well..
22	Network Wide P&R upgrades (cycle facilities and height restrictions)	Rolling Programme	March 2017	March 2018	Green		Life-expired replacement of assets across our P&R sites, prioritisation activity underway poster case, fencing, signage, cycle shelters and cycle lockers.
Project Development Programme							
23	CCTV Shared Services Development	GW -1 Sponsors Remit			Green	Same	Consultants in final stages of accruing baseline costs from suppliers and contractors for all buildings and technical works associated with relocation of police team and expansion of 6th floor. Final report submission extended to end July.
24	Dudley Interchange	GW -1 Sponsors Remit		01/06/2021	Amber/Red	Same	Traffic modelling works ongoing to confirm / prove design and due to complete by September. Overall indicative cost estimate for scheme is £18M. Monthly meetings scheduled with WMCA / MMA / DMBC and Portersfield Developers to align designs and agree scope of works. Co-Op building acquisition negotiations to commence if Sponsor approval is received. Shortfall in budget advised to Sponsor for development funding and Co-Op building costs. Retail options meeting proposed with Bruton Knowles 21st July to understand potential requirements. DCA remains amber / red due to shortfall in funding required.
25	Walsall Town Centre Interchange Feasibility Study	GW -2 Options			Amber	Same	Wayfinding Strategy was issued out to tender on 21 July 2017. Walsall MBC have advised that the Area Action Plan Examination in Public will commence on 16 th October 2017 which will include the land-take within Jerome Retail Park for Bradford Place relocation scheme.

	Project Name	Status	Baseline Comp Date	Forecast Date	DCA	DCA Trend	Exec Summary
							DCA is amber because funding is yet to be identified.
26	Bradley Lane P&R	GW 4 Procurement	22/01/2019	22/01/2019	Green	Same	DCA status is Green. Procurement activities underway as per schedule.
27	Network wide Park & Ride Expansion Developments	Development / feasibility	N/A	31/03/2018	Green	Improved	High-level schedule in place for delivery of this work within 2017/18 financial year. Development/feasibility work on Whitlocks End, Sandwell & Dudley, Tame Bridge and Hall Green. A desktop study of additional high priority sites will also be held, with the potential to develop two of these sites further. Whitlocks End – liaison with SMBC underway to review previous progress of scheme development, and to inform our future actions. DCA set at green as sites identified to form part of the deliverables for this year, and work underway to progress delivery.
28	Tipton Park & Ride	GW 1 Project Brief		18/05/2018	Green	Same	DCA status is Green. Detailed design phase underway as per schedule. Risk workshop scheduled.
Metro Programme							
29	Metro Line One Upgrade	Contribution					
30	Tram WIFI Ground Infrastructure Improvements	Complete					

Project Delivery Confidence Assessment (DCA) Definitions

G	Successful delivery of the project/programme to time, cost and quality appears highly likely and there are no major outstanding issues that at this stage appear to threaten delivery significantly
G/A	Successful delivery appears probable however constant attention will be needed to ensure risks do not materialise into major issues threatening delivery
A	Successful delivery appears feasible but significant issues already exist requiring management attention. These appear resolvable at this stage and if addressed promptly, should not present a cost/schedule overrun
A/R	Successful delivery of the project/programme is in doubt with major risks or issues apparent in a number of key areas. Urgent action is needed to ensure these are addressed, and whether resolution is feasible
R	Successful delivery of the project/programme appears to be unachievable. There are major issues on project/programme definition, schedule, budget required quality or benefits delivery, which at this stage do not appear to be manageable or resolvable. The project/programme may need re-base lining and/or overall viability re-assessed

APPENDIX 2 - CAPITAL PROGRAMME & FINANCIAL SUMMARY

	JULY YEAR TO DATE			FULL YEAR 2017 / 2018		
	ACTUAL £000	BUDGET £000	VARIANCE £000	FORECAST £000	BUDGET £000	VARIANCE £000
Birmingham City Centre One Station	0	0	0	(250)	(250)	0
Metro Wolverhampton City Centre Extension	(586)	(586)	0	(586)	(586)	0
SEP SCHEMES PROGRAMME TOTAL	(586)	(586)	0	(836)	(836)	0
TBT Wolverhampton City Centre Shelters	0	0	0	(42)	(42)	0
TBT Birmingham City Centre Shelter Design Optimisation	(105)	0	(105)	(131)	(75)	56
TBT Highway Scheme Development (Bus reliability and punctuality)	0	(30)	30	(120)	(120)	0
Digital Advertising Panel rollout	(172)	(166)	(6)	(402)	(402)	0
TBT Platinum Route RTI Equipment Upgrades	(143)	(81)	(62)	(512)	(512)	0
Network Wide Swift Procurement	(15)	(11)	(4)	(33)	(57)	(24)
Network Wide Swift Vending	(10)	(2)	(8)	(20)	(20)	0
Solihull Traffic Signal Technology	0	0	0	0	(5)	(5)
TBT PROGRAMME TOTAL	(445)	(290)	(155)	(1,260)	(1,233)	27
Network Wide P and R Lighting Enhancement	(14)	0	(14)	(83)	0	83
TRT PROGRAMME TOTAL	(14)	0	(14)	(83)	0	83
New Street Station Totems	(3)	(4)	1	(31)	(4)	27
Interconnect development	0	(40)	40	(60)	(60)	0
INFORMATION & MAPPING PROGRAMME TOTAL	(3)	(44)	41	(91)	(64)	27
WMCA Asset Management System	1	(7)	8	(108)	(108)	0
ICT Cyber Security Project	(1)	0	(1)	(10)	(10)	0
ICT Rolling Programme	(32)	(33)	1	(40)	(40)	0
ICT Service Desk	0	0	0	(70)	(70)	0
SYSTEMS ARCHITECTURE PROGRAMME TOTAL	(32)	(40)	8	(228)	(228)	0
North Walsall Cutting and Stourbridge Junction Structural Improvements	(2)	(1)	(1)	(5)	(94)	(89)
North Walsall Cutting	(138)	0	(138)	(140)	0	140
Network Wide Bus Station Refurbishment Phase 1	(61)	(58)	(3)	(471)	(253)	218
Metro Line One CCTV Replacement	(2)	(2)	0	(2)	(2)	0
Network Wide CCTV Refresh and Installation (inc APNR)	(326)	(336)	10	(600)	(600)	0
Network Wide Rail RTI- Life Expired Replacements	0	0	0	(27)	(27)	0
Network Wide P and R Resurfacing Programme	(67)	(5)	(62)	(379)	(379)	0
Network Wide Park and Ride Upgrades (Cycle Facilities Height Restrictors)	(13)	(13)	0	(150)	(150)	0
ASSET MANAGEMENT PROGRAMME TOTAL	(609)	(415)	(194)	(1,774)	(1,505)	269
CCTV Shared Services Development	(11)	(22)	11	(50)	(50)	0
Dudley Bus Station Development	(169)	(99)	(70)	(256)	(256)	0
Walsall Town Centre Interchange Feasibility Study	(3)	(2)	(1)	(3)	(3)	0
Bradley Lane Park and Ride	(42)	(39)	(3)	(217)	(201)	16
Network Wide Park and Ride Expansion Developments -Phase 2	(9)	(20)	11	(240)	(240)	0
Tipton Park & Ride	(14)	(7)	(7)	(145)	(154)	(9)
PROJECT DEVELOPMENT PROGRAMME TOTAL	(248)	(189)	(59)	(911)	(904)	7
Metro Line One Upgrade	(89)	(89)	0	(148)	(148)	0
Tram Wifi Ground Infrastructure Improvements	0	0	0	(62)	(62)	0
METRO PROGRAMME TOTAL	(89)	(89)	0	(210)	(210)	0
GRAND TOTAL	(2,026)	(1,653)	(373)	(5,393)	(4,980)	413



WEST MIDLANDS
COMBINED AUTHORITY

Transport Delivery Committee

Date	4 September 2017
Report title	TfWM Infrastructure Report
Accountable Director	Steve McAleavy, Director of Transport Services Email Steve.McAleavy@tfwm.org.uk Tel: 0121 214 7388
Accountable Employee	Andrew Thrupp, Operations Manager (Customer Facilities) Email Andrew.Thrupp@tfwm.org.uk Tel: 0121 214 7372
Report to be/has been considered by	Councillor Hartley, Lead Member for Putting Passengers First

Recommendation(s) for action or decision:

The Committee is recommended to note the contents of the report.

1.0 Purpose

To report matters relating to the operation and enhancement of TfWM Customer Infrastructure. TfWM provides 12 bus stations, 2 travel centres, 5200 shelters, 6625 stops, 59 Park & Ride sites and is Station Facility Owner of Bromsgrove Railway Station. This report includes:

Section 2	Bus Stations, Interchanges and Travel Centres
Section 3	Safety & Security, Real Time Information (RTI) and Swift Collectors
Section 4	Shelters, Stops, Park & Ride Enhancements and Bromsgrove Railway Station

2.0 Bus Stations, Interchanges and Travel Centres

This section of the report highlights a number of initiatives that TfWM has delivered or is working on across our bus stations, interchanges and travel centres.

Merry Hill Bus Station

2.1 Following a review of the bus station which aimed to improve safety and customer experience, Intu Merry Hill and TfWM worked in partnership to deliver a modern, safer and welcoming bus interchange for customers. This project was completed in May 2017 and customers now benefit from:

- An up to date bus station with CCTV
- New enclosed waiting shelters and covered walkways
- Automatic doors that only open when a bus is at the stand
- Real Time and Electronic Passenger Information boards

2.2 TfWM ensured the facility remained open throughout the development work to minimise disruption to customers.

2.3 The project, which is substantially complete has received positive feedback in relation to the improved waiting areas, information and safety measures. Work is ongoing with Intu Merry Hill to explore further enhancements to five of the bus departure stands in order to make accessing bus services easier from the current level access stands.

Dudley Bus Station Redevelopment

2.4 Proposals to redevelop Dudley Bus Station to provide a high quality, attractive and fit for purpose gateway facility continue to be developed.

2.5 There are a number of physical constraints relating to the potential redevelopment of the site including adjacent buildings, the topography of the site and in particular, the requirement that any proposed development scheme is future proofed to provide for a Wednesbury to Brierley Hill future Metro route. The proposed bus/tram interchange is to also provide improved connectivity to Dudley town centre and the proposed Portersfield development, whilst providing improved public realm, as part of an overall co-ordinated town centre development.

2.6 The key objectives of a redevelopment scheme will include:

- Creating a joint interchange facility for bus and Metro services
- A safe environment for operators and bus station users
- Sufficient capacity for services
- Improved waiting facilities and staff facilities building
- Enhanced RTI and wayfinding signage
- Cycle storage to promote sustainable travel
- Improved pedestrian walking routes to access the town centre, Metro and adjacent Portersfield development site

2.7 Current activities include the development of concept designs and traffic modelling to ensure that the schemes will work efficiently within the local highway network.

Bus Activated Automatic Doors at Dudley Bus Station

2.8 In the shorter term, TfWM will be carrying out vital Health and Safety upgrade works at Dudley Bus Station by installing bus activated automatic doors to make our facility safer for customers. These will restrict access into the bus carriageways from the 19 stands and therefore greatly reduce the risk to our customers.

2.9 The decision to carry out these safety modifications follows an assessment of risk which identified high numbers of customers taking shortcuts across the carriageways. Additional staff members brought in to manage the risk through intervention and educating customers, have had limited success in reducing the overall problem with similar levels of footfall in the carriageways being recorded month to month.

2.10 As customer safety is a priority, the automatic doors will be installed as soon as possible to bring Dudley in line with the standards of other TfWM owned bus stations. This approach has proven to be highly effective at other bus station sites and compares favourably financially to the additional and less effective staff resources that are currently in place. Before and after studies at other locations where bus activated automatic doors have been installed have achieved a 90% reduction in customers accessing the carriageways. Once the work commences on the new Interchange, the automatic doors can be used at other Bus Stations across the West Midlands to renew older assets.

Walsall St Pauls Bus Station- Mid Life Refurbishment

2.11 Walsall Bus Station is 17 years old following its opening in August 2000. The facility has 3 satellite departure stands situated on St Pauls Street and 11 departure stands within the main operating area of the bus station. Good use of resources have been made to maintain the facility and keep it clean and safe and it is now due for refurbishment to ensure that the facility is retained in good working order.

2.12 Customer surveys will be undertaken to ensure that funding is spent in the areas that will make the most positive impact on the customer experience. The survey results will be available in early September and will be used to finalise the scope of works for the refurbishment programme.

2.13 Working within the funds available and subject to customer feedback, TfWM will be looking to improve the seating and flooring in the bus stands and remove the current furniture and concrete walls which make the customer waiting areas feel very restricted. The overall impression of the bus station is considered dull and cold and this is an opportunity to brighten the station up with LED lighting and explore the feasibility of painting the concrete areas (including the roof). Customer Infrastructure (RTI Totems, Bins, Seating) within the stands need updating in line with other sites as well as the public toilet facilities. TfWM will be considering whether to charge for toilet access on a site by site basis and will seek customer feedback. Due consideration will be given to ensuring that Operator staff have free access to the toilets.

Toilet Refurbishment Projects at West Bromwich & Wolverhampton

2.14 TfWM toilet facilities at West Bromwich & Wolverhampton bus stations are due to be refurbished. The current facilities receive poor customer feedback and works to refurbish these facilities will be carried out over the next 6 months.

2.15 A specification to engage with possible suppliers to carry out this work is underway. It is intended that the scope will include upgrades to all fabrics, water efficiency measures, flooring, ventilation and the installation of pay to use toilet turnstiles at West Bromwich (these are already operating in Wolverhampton).

Other Opportunities

2.16 A number of other enhancements are being considered in respect of customer facilities including initiatives such as WIFI, Vending and other retail opportunities.

3.0 Safety & Security, Real Time Information and Swift Collectors

This section of the report outlines a number of technology and safety/security enhancements.

Safety & Security

3.1 CCTV has been upgraded to state of the art High Definition at West Bromwich, Coventry, Dudley, Stourbridge, Wednesbury, Halesowen Wolverhampton and Walsall bus stations. These join Cradley Heath, Bearwood and Bilston which have already been upgraded. At Park and Ride Sites, TfWM has also upgraded Tile Hill, Canley and Rowley Regis, with a programme to upgrade many more. A programme of works has also been put in place which will see the upgrade of a number of rail station platform systems too. Recent contractual agreements will see the transfer of CCTV services from Walsall MBC to WMCA – making the bus and rail stations an integral part of a much wider town centre management system.

3.2 Wednesbury, Cradley Heath, Halesowen, Bearwood, Wolverhampton, Coventry, Stourbridge and Bilston have all been independently assessed and achieved the National Safer Bus Station Award. Cradley Heath and Coventry were the first in the country. The remaining bus stations are planned later in 2017.

3.3 The TfWM Control Centre received its annual external and independent audit in December 2016. This was carried out by the SSAIB who confirmed that we would emphatically retain British Standard 5978. The auditor who hadn't previously visited the site commented that it was the best managed and operated control room he had seen and offered no immediate action points, no remedial action points, and one single note for improvement (to publish a document on the WMCA website - which will be done over the next few months). The auditor also suggested that he would invite the Surveillance Commissioner himself to issue the award as he believed the control room to be a national model of best practice.

3.4 Success has been seen from CCTV systems installed in bus shelters across the region. The footage has assisted in identifying a number of offenders of criminal damage as well as other crimes not relating to public transport. The CCTV in shelters has also been used to provide evidence for high profile city centre crimes, leading Police colleagues to praise the quality of the systems.

Real Time Information (RTI)

3.5 TfWM currently provide 1,800 RTI units across the West Midlands, providing our customers with accurate, real time information about when their bus will be arriving.

3.6 Halesowen is the only bus station that does not benefit from full RTI provision for customers. TfWM will be upgrading this site in 2017-18 providing a consistent RTI service at all of our bus stations.

3.7 Following National Express' progress in maintaining a reliable real-time system, TfWM is working with other operators to support them becoming Real Time providers. Some operators have installed equipment on their vehicles to allow them to be tracked and now need this integrated into TfWM passenger information systems. Another challenge is to smoothly transition National Express as they will be installing new ticket machines on their buses. These will be trialled in the Coventry area before full rollout. The ticket machines provide critical information to our systems without which we could not provide customers with a Real Time Information experience.

3.8 TfWM has further enhanced the customer offer for RTI by providing predicted arrivals and departures on Google Maps.

Swift Collectors

3.9 In April 2017, TfWM installed a further Swift Collector at Merry Hill Bus Station as part of the redevelopment of the Bus Station which completes the roll out of these at Bus Stations and most key interchanges. The collector, which allows customers to top up their Swift cards is already being well used.

3.10 There are currently 114 swift collectors on the network with usage continuing to grow. The most popular collector is at Wolverhampton bus station and has assisted over 5,000 customers since it was first installed in May 2015.

Swift Kiosk

3.11 In April 2017, a Swift Kiosk, in partnership with Cammax, was launched at Wolverhampton Bus Station. The Kiosk is part of a 6 month pilot project to ascertain the level of customer demand for a self-service retail point using a ticket vending machine.

3.12 The Kiosk offers a simple, streamlined, 24/7 customer solution for Swift by retailing:

- Swift Pay As You Go
- Swift season tickets for bus & tram
- e-Daysavers
- nbus multi-day

The above products can either be topped-up to an existing card, or issued on a brand new card. In addition to this, the Kiosk can also act as a Swift Collector, allowing customers to load any product(s)/credit purchased online, to their cards in addition to our Swift App or network of over 100 Swift Collector sites.

3.13 The Swift Kiosk is the first ITSO ticket vending machine in the country which possesses a photo-capture feature. A photo can be taken and printed on a pre-encoded photo card in just over a minute.

3.14 The Kiosk has proved really popular with customers with the survey results showing an average 4.6 out of 5 satisfaction rate. As of week 13 of the pilot the Kiosk had issued 975 card top-ups and 169 new Swift cards, taking £25K of revenue.

3.15 Despite the pilot not expiring until autumn 2017, due to the success already seen, the roll out of these across the network has already been agreed by the WMCA Board subject to business case.

4.0 Shelters, Stops and Park & Ride Enhancements

This section of the report details key enhancements on highway infrastructure and park & ride facilities.

Highway Infrastructure Works

4.1 TfWM is currently seeking to prioritise further investment to ensure that standards of infrastructure are maintained and improved over the coming years. This is linked to our deliverables through the Bus Alliance.

4.2 110 shelters have been refurbished along the X3, X4, X5 and 14 platinum routes and the 907 route in Sutton Coldfield towards Birmingham City Centre. These upgrade works have included re-glazing, deep cleans and repainting and a further 31 of the older shelters will be replaced with new shelters starting September 2017.

Park & Ride Works

4.3 Work continues to identify sites for Park and Ride expansion as well as mechanisms to fund these expansions as Park and Ride usage continues to grow.

4.4 TfWM continue to ensure that high quality car parking facilities are provided for our customers and ongoing maintenance & enhancement programmes are being undertaken. TfWM resurfaced Shirley park & ride in July 2017. Work will be undertaken at Marston Green (Planned October 2017), Yardley Wood (Planned October 2017) and Sutton Coldfield (Planned to take place in February 2018).

4.5 Work is being undertaken to look at expanding Park and Ride by 3000 spaces across the region for rail, Metro and future Sprint sites. Three strategic sites have been identified for multi-storey rail park and ride expansion: Longbridge (part funded), Tile Hill (fully funded) and Sandwell & Dudley (no identified funding). Other sites identified for future potential TfWM Capital Programmes include Tipton, Tile Hill, Whitlocks End, Tame Bridge Parkway and Hall Green.

4.6 We are actively engaging with the market to explore how these and other schemes / expansions can be capital funded, delivered and how to offset operational expenditure through commercialisation opportunities. New third party managed Park & Ride sites are being considered which should allow sites to become operational in a shorter period of time minimising costs to TfWM. A report providing a more detailed update on Park and Ride will be brought to the Transport Delivery Committee meeting on 9 October 2017.

4.7 TfWM will be creating a new Metro Park & Ride at Bradley Lane and this will provide customers with 196 spaces. Procurement activities are currently underway and it is anticipated that ground stabilisation works will commence in January 2018. Once complete, the physical construction of the park and ride will take place thereafter. The expected overall completion will be early 2019.

Bromsgrove Railway Station

4.8 TfWM is the Station Facility Owner for Bromsgrove Railway Station, which means we are responsible for the repair, maintenance and operation of the station in line with rail industry requirements.

4.9 TfWM took on this role to ensure the delivery of the relocation of the station to enable electrification of the railway between Longbridge and Bromsgrove. This is an important strategic scheme for the West Midlands region which:

- Supports the regeneration and development of Bromsgrove as an important regional town by providing the capability to considerably improve its connectivity, especially with Birmingham;
- Provides the capability to provide more rail capacity through longer trains (through longer platforms) and increased service levels. This includes an increased frequency from one to four trains an hour between Birmingham and Bromsgrove Monday to Saturday daytimes and a significantly improved service on Sundays from next year;
- Provides a significantly expanded car park and better quality facility;
- Improves the performance of rail services for passengers, in particular by moving the station away from the Lickey Incline and;
- Supports the delivery of the region's rail strategy – without the station relocation and electrification scheme at Bromsgrove, the business cases for other future network improvements would be significantly weakened.

4.10 The relocated station opened to the public on 12 July 2016. The revenue generated by the station, less operating costs, is used to pay back the cost of the construction of the station, ensuring that the scheme does not lead to an overall cost to TfWM or Worcestershire County Council (who are partners in the project) over the 25 year business model period.

4.11 London Midland, the main train company serving the station, currently operate and manage a number of areas of the station on our behalf including cleaning, staffing, ticket sales, some maintenance, passenger information, rail industry engagement, arrangements and reporting, and car park management. The existing contract terminates at the end of the existing West Midlands franchise (anticipated to be 10 December 2017). We are currently reviewing these arrangements ready for discussions with the new West Midlands franchisee when they are announced.

5.0 Financial implications

There are no direct financial implications as a result of this update report with all on-going activities and agreed enhancements funded within existing revenue and capital budgets. However, costs in relation to any future proposed enhancements and redevelopments at sites will need be considered as part of the business case(s) that will be evaluated as part of the overall funding sources available

6.0 Legal implications

There are no further legal issues flowing directly from this report. However it should be noted that early legal involvement and support will be required in order to facilitate and implement any future project work emerging from this report and early engagement is recommended in order to consider resourcing and costs.

7.0 Equalities Implications

A number of the initiatives in this report have or will have a positive impact on accessibility and inclusion. Any future proposed projects (i.e. bus station refurbishments) will need to be fully equality impact assessed. For major projects consultation with key equality/disability groups will also be required.

8.0 Glossary of Terms

Acronym	Explanation
RTI	Real Time Information
EPI	Electronic Passenger Information- scheduled departures
LED	Light emitting diode
LEP	Local Enterprise Partnership
RADAR	Royal Association of Disability And Rehabilitation
CCTV	Closed Circuit Television
ANPR	Automatic Number Plate Recognition
SSAIB	Security Systems and Alarm Inspection Board
BCLEP	Black Country Local Enterprise Partnership



WEST MIDLANDS
COMBINED AUTHORITY

Accessible Transport Report

Date: 4th September 2017

Report Title: Accessible Transport Report

Accountable Director: Steve McAleavy

Accountable employee(s): Richard Mayes

Report Considered by: Cllr Kath Hartley,
Lead Member – Putting Passengers First

Cllr Diana Holl-Allen,
Lead Member – Safe and Sustainable Travel

Recommendation(s) for action or decision:

- To note the report regarding Accessible Transport

Purpose of Report

1. To report matters relating to Accessible Transport in the West Midlands, the performance of the Ring & Ride service, and progress with regard to the Service 89. This report includes:

Section A **Ring & Ride Update**

- Patronage May 2017 – June 2017

Section B **Service 89**

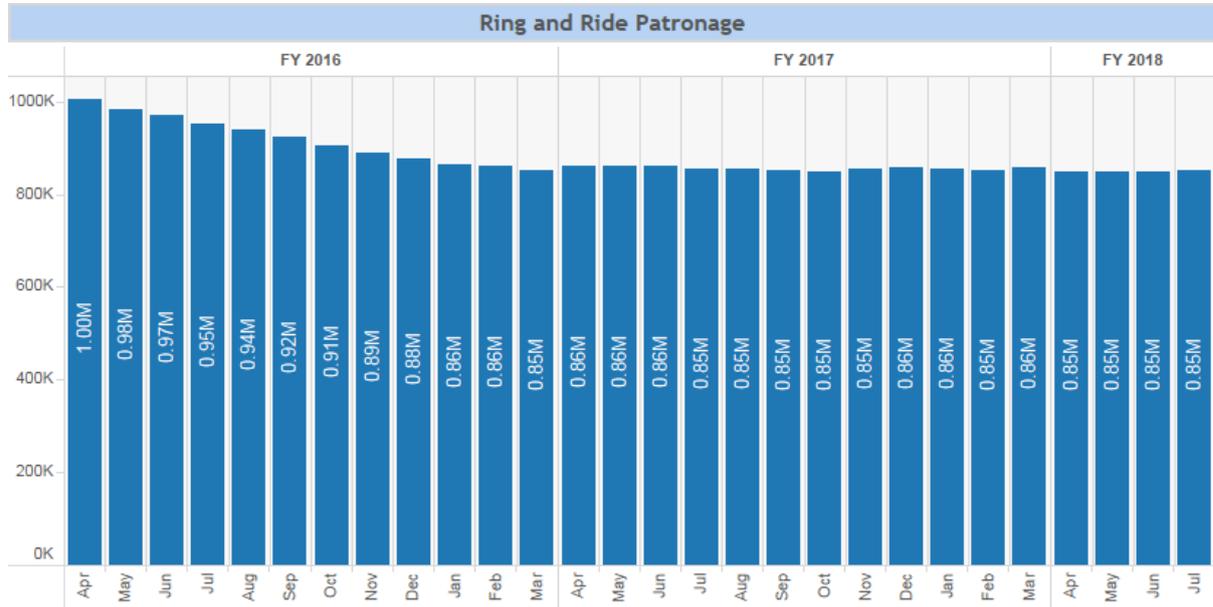
- Progress Update

Section A – Ring and Ride Update

2.1.1 Patronage for Ring and Ride from May 2017 to July 2017 has continued to be steady overall, although with a very slight rise of 0.82% compared to the period May 2016 to July 2016. This equates to approximately 1750 more passenger journeys in the 3 month period and averages to approximately 580 additional passengers per month.

2.1.2 Patronage each month has fluctuated, with May 2017 seeing a rise of 1.82% over May 2016, June 2017 seeing a slight decrease of 0.19% over June 2016, and July 2017 seeing an increase of 0.87% over July 2016

2.1.3 A graph, detailing patronage up to and including July 2017 is included below and shows that annualised numbers remain stabilised at between 0.85 million and 0.86 million passengers.



2.1.4 From 1st May 2017, as recorded previously, Ring and Ride increased some of its fares (generally by 20p for an adult fare)

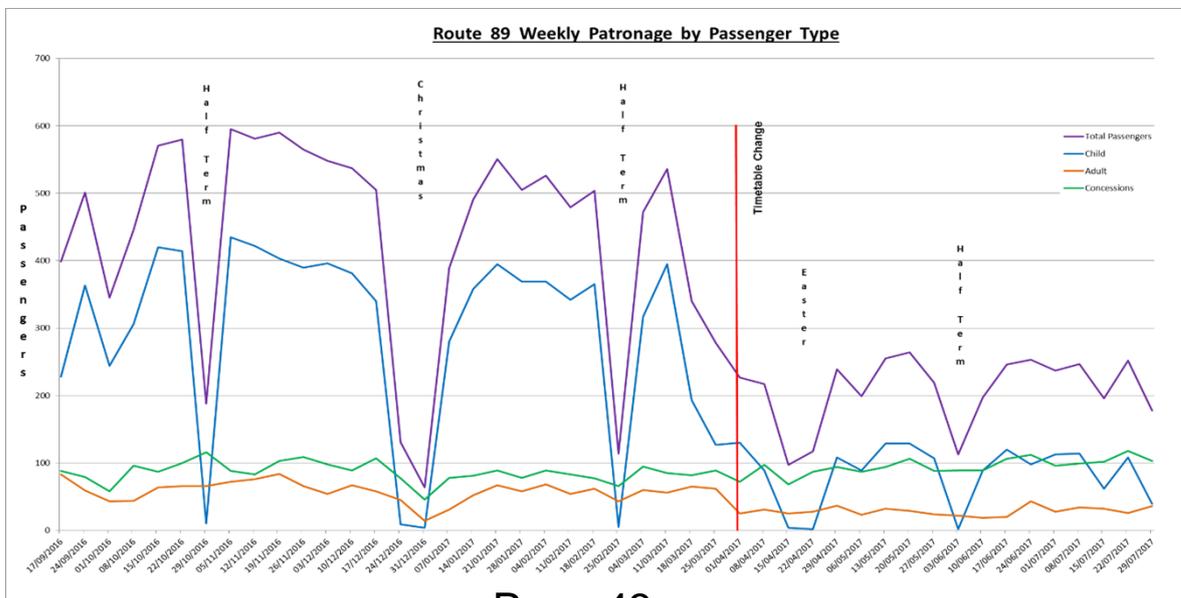
2.1.5 The impact of the increase in fares, whilst not apparent during May or June, may have a longer term impact on patronage. Any effect should be apparent in the coming months, and appropriate updates will be provided on this.

2.1.6 ATG reports that they are undertaking a number of initiatives at present. This includes integrating the Ring and Ride service with Igo bus routes and a trial is underway where passengers in Sandwell are able to connect directly with the 10H service in Quinton, to link with Birmingham City Centre. They are looking to link into services that would assist Ring and Ride service users in reaching hospitals and appointments. ATG is also looking at attracting new customers to the Ring and Ride service through social media, and have been highlighting the service to schools where pupils have Special Educational Needs.

2.1.7 A mid-term review is being undertaken shortly by consultants SYSTRA, on behalf of Transport for West Midlands. This review will provide an independent and impartial examination of the Ring and Ride service, to help ensure that the service is meeting the need, and provides value for money. Further updates will be provided regarding this review as information becomes available.

Section B – Service 89

- 3.1.1 The Service 89 replaced the Taxibus in the Heart of England from 5th September 2016, and a revised timetable was introduced from 27th March 2017. The annual cost of the 3 year contract in place is £70,000 a year up to 1 September 2018 and then £59,500 for the final year covering 2 September 2018 up to 1 September 2019
- 3.1.2 In addition, a feeder mini-bus is provided three days a week to help ensure that those who cannot reach the Service 89 directly, still have access to public transport. This provides a service between 09:45 to 14:00 on Tuesday and Friday, and 09:00 to 16:00 on Wednesday. It links into the Service 89, other public transport services, and provides local journeys for those who cannot access the Service 89. The funding for the feeder mini-bus is currently in place until 30th March 2019 at a cost of £11,359 a year.
- 3.1.3 The service 89 bus is continuing to operate into two key ‘roaming zones’ in Meriden and Balsall Common, allowing better coverage of these areas and for residents to be collected from or returned to their front door, or closer to their homes, but also now roams to Peel Close, Hampton-in-Arden, following feedback.
- 3.1.4 Since 27th March 2017, the bus has operated from Balsall Common, through Berkswell, Meriden, Hampton-in-Arden and Catherine-de-Barnes to Solihull on Monday, Wednesday and Friday, and from Meriden through Berkswell and Balsall Common to the Cannon Park shopping centre and Coventry on Tuesday and Thursday.
- 3.1.5 Following the recent service change there has been a sustained drop in patronage. The adult figures are below those observed before the change, and this is believed to be as a result of the bus operating a different service on different days of the week (Monday, Wednesday and Friday to Solihull, Tuesday and Thursday to Coventry). This revised operation was designed to better meet the users in the area for whom the service was designed, however the expected uptake in concessionary pass uagage has not been seen. The child figures have reduced significantly, partly through bus operators working with schools to manage school loads across different services, but also due to the change of timetable as some conections are no longer able to be made.



- 3.1.6 Options are currently being considered regarding the timetable, and Transport for West Midlands will be approaching key parish groups in the next few weeks to discuss a proposed return to the original timetable, albeit with potential improvements to maintain certain links, such as that with Cannon Park shops. A further update will be presented when available.

Financial Implications

5. The budgeted Ring and Ride service grant for 2017-18 is £7.3m which based on latest rolling year patronage numbers equates to £8.59 per passenger trip. Funding for the Service 89, and the feeder bus are accommodated for within the agreed 2017-18 budgets for Subsidised Bus and Community Transport provision.

Legal Implications

6. There are no legal implication directly arising from the contents of this report.

Equality Implications

7. No specific equality comments as this report is for information.

Media Implications

8. No implications are expected to arise as a result of this report.



WEST MIDLANDS
COMBINED AUTHORITY

Transport Delivery Committee

Date	Monday 4 th September 2017
Report title	Updating the West Midlands Bus Alliance Aims and Objectives
Cabinet Member Portfolio Lead	Cllr Kath Hartley
Accountable Chief Officer	Steve McAleavy Email steve.mcaleavy@tfwm.org.uk Tel 0121 214 7452
Accountable Employee	Guy Craddock Email guy.craddock@tfwm.org.uk Tel 0121 214 7109
Report to be considered by	West Midlands Combined Authority Programme Board and West Midlands Combined Authority Board

Recommendation(s) for action or decision:

The Transport Delivery Committee is recommended to:

1. Endorse the approval by the West Midlands Combined Authority Board of the revised West Midlands Bus Alliance objectives and deliverables.
2. Endorse that there will continue to be half yearly reports on the progress of the West Midlands Bus Alliance to the Transport Delivery Committee and an annual report to the West Midlands Combined Authority Board.
3. Endorse that TfWM continues to work with Bus Alliance partners to agree the revised objectives with a view to a public launch in autumn 2017.

1.0 Purpose

1.1 This report provides an update to the Transport Delivery Committee on proposed revisions to the West Midlands Bus Alliance aims and objectives. This follows input from partners and the West Midlands Bus Alliance Board.

2.0 Background

2.1 In March 2015 the West Midlands Integrated Transport Authority (ITA) agreed the following policy objectives to help create a 5% growth in bus usage over the next five years:

- Improvement in peak time journey speeds.
- More intuitively understandable core turn-up-and-go routes.
- Fare rises of no more than the RPI +1% per annum.
- Zero or ultra-low emissions with every other bus at least Euro VI.
- Customer satisfaction levels remain over 85%.
- Discounted young person's travel for everyone under 19 years old.
- Integrated ticketless travel in line with intelligent mobility policy.
- Network Development Plans to support the economic objectives of the next decade.
- Increased investment in highways infrastructure to aid journey times and reliability.
- The financial benefits of increased patronage contribute towards infrastructure and buses.
- Improvement on board through improved seating, next stop announcements and wifi.

2.2 The West Midlands Bus Alliance was established on 17th September 2015 as the delivery mechanism for these objectives. The Bus Alliance further strengthens the relationship between the region's Transport Authorities and private sector bus operators. It is very much a voluntary partnership arrangement, albeit with strong governance and shared responsibility for the delivery of objectives.

2.3 The objectives of the Bus Alliance align closely with those of the Strategic Transport Plan and as such an effective Alliance is essential to ensure successful delivery of these wider objectives.

2.4 Nationally, the Department for Transport has taken a keen interest on how the West Midlands Bus Alliance has evolved and operated. This is with a view to it potentially being used as a model for other areas for delivering bus partnerships, using the powers in the Bus Services Act 2017. Already there are similar Bus Alliance schemes in the Merseyside and West Yorkshire Combined Authority areas.

2.5 The Board is supported by a number of sub-groups who have responsibility for delivering initiatives on a day-to-day basis that contribute towards the successful achievement of the objectives.

3.0 Progress

3.1 Key Performance Indicators (KPIs) have been developed for each of the objectives and are outlined in paragraph 2.1. These are being tracked to measure the effectiveness of the Bus Alliance and assess where greater attention is required.

3.2 A six-monthly KPI report is presented to the Bus Alliance Board at their May and November meetings. The latest results, dated May 2017, are attached in Appendix 1.

4.0 **Developing the Bus Alliance**

4.1 The Bus Alliance was established with the agreement of the partners to work together to deliver the objectives outlined in section 2.1. These objectives were met by the delivery of set deliverables which contributed towards the delivery of the overarching objective or outcome. Whilst the work to date has been successful the partners have never formally signed up to these objectives and associated deliverables.

4.2 With the increasing focus on the Bus Alliance and competing pressures within all partnership organisations a consensus has been reached by the Bus Alliance Board that having a formally agreed and signed set of objectives and deliverables will cement the delivery of the Bus Alliance objectives and deliverables within each organisation. This will ensure all partner organisations are fully committed and accountable for the delivering the stated objectives.

4.3 TfWM have led on evaluating the current objectives and worked with Bus Alliance partners and the Board to revise them as follows:

- Improve bus emissions standards
- Make bus travel more attractive for young people
- Make bus journeys better value
- Tackle congestion and make bus journeys quicker
- Make it easier to buy a ticket
- Make it easier to catch the bus
- Shape the bus network to deliver economic growth
- Make it more pleasant to travel by bus

4.4 Under these eight key objectives the Bus Alliance partners will sign up to the delivery of around 50 more detailed delivery objectives. All are directly linked to delivering the eight objectives and are shown in Appendix 2.

4.5 The success of the Bus Alliance will be evaluated against the revised objectives and achieving the associated deliverables, to ensure improved outcomes for bus travel that will be reported to the Bus Alliance Board via the KPI reports.

4.6 To support the delivery of the revised objectives and deliverables a review of the Bus Alliance Governance is currently being undertaken. This will put in place responsible leads for each of the objectives and the associated deliverables. It is proposed these will also be supported by the existing supporting sub-groups including; Area Partnerships, Bus Operators Panel, Bus Operators Group, and the West Midlands Traffic Management Group.

4.7 The review is also looking at the current membership of the Board to ensure it provides the right level of challenge and strategic influence. This work is being done with the current chair of the Board.

5.0 **Next Steps**

5.1 When formal agreement is reached on these proposed revisions it is planned to have public facing signing event to mark the two year anniversary of the Bus alliance and this refresh. At this event bus operators and other partners will formally sign up to the revised Bus Alliance objectives and commitments.

5.2 It is proposed that the half yearly progress reports to the Bus Alliance Board and the annual reports to the Transport Delivery and West Midlands Combined Authority Board would continue based on the revised Bus Alliance objectives and commitments.

6.0 Financial implications

6.1 There are no direct financial implications as a result of this report with all on-going related TfWM activities and agreed enhancements funded within existing revenue and capital budgets. However, any future proposed enhancements in relation to delivery of the Bus Alliance objectives where TfWM input/support is required will need be formally considered and evaluated so any one-off and on-going financial implications can be quantified before any decision is made.

7.0 Legal implications

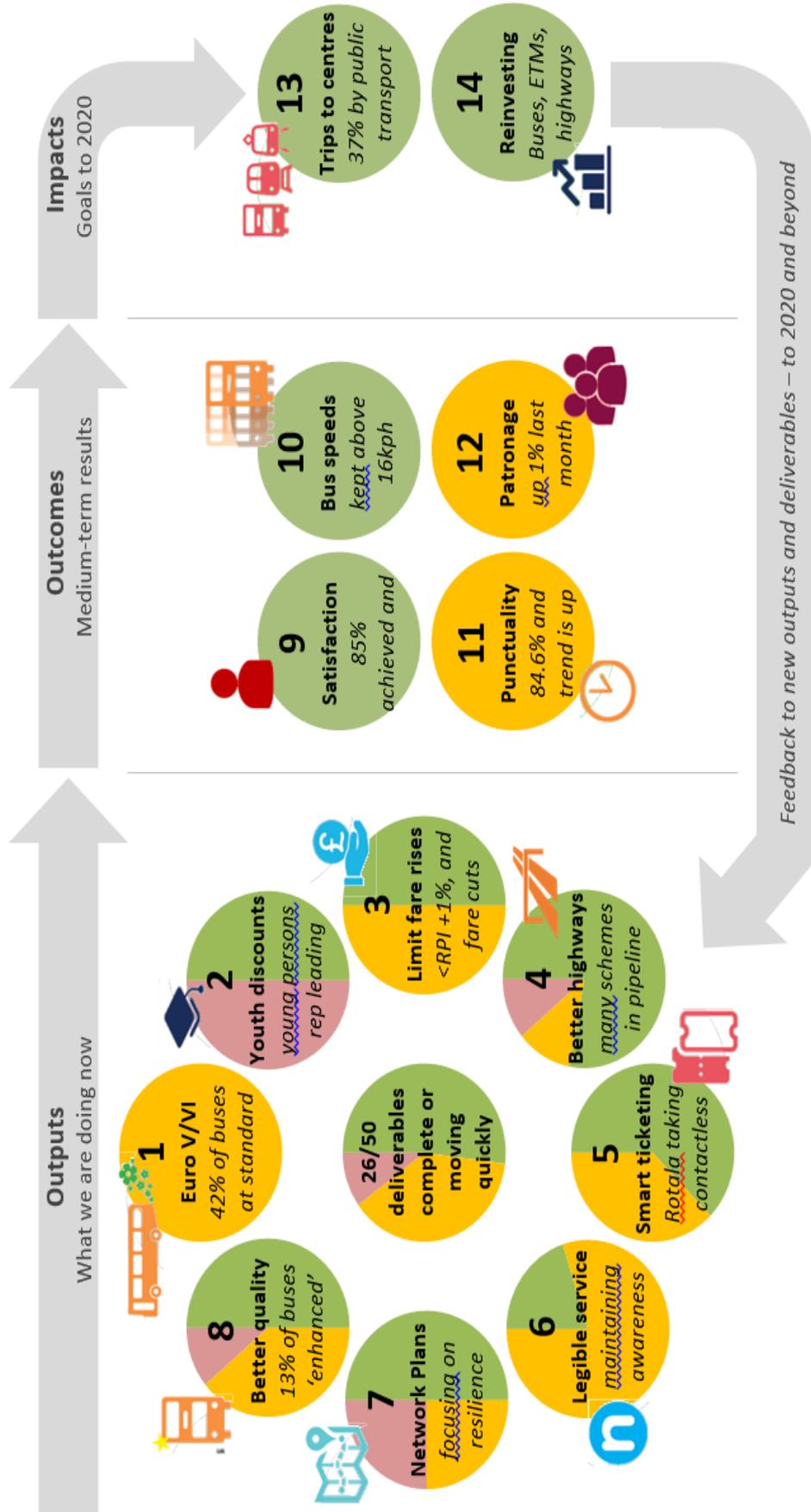
7.1 There are no immediate legal implications flowing from the contents of this report.

8.0 Appendices

- Appendix 1 – The May 2017 infra-graphic summary sheet showing progress against objectives
- Appendix 2 – The proposed alliance deliverables

Appendix 1

West Midlands
BUS ALLIANCE
 Summary of Key Performance Indicators – May 2017



Appendix 2

The headings in bold are the eight proposed objectives (as outlined in 4.3) and the numbered items under each are the relevant partner commitments to deliver these.

Improve bus emissions standards

1. By May 2020, bus operators will have invested in at least 350 environmentally-friendly new vehicles.
2. By May 2020, all buses operating across the region will be at least Euro V or VI standard.
3. By 31 December 2019, all buses operating in clean air zones will be at least Euro VI standard , or sooner as required.
4. By May 2020, we will pilot zero emission buses (such as electric or hydrogen) on at least two corridors.

Make bus travel more attractive for young people

5. TfWM will continue to run the Child Concessionary Fares Scheme which ensures discounted travel for the under-16s.
6. We will introduce discounted travel to those over 16 and under 19, including apprentices (giving unlimited bus travel from around £1 a day, including evenings, weekends and holidays).

Make bus journeys better value

7. We will limit fare rises to no more than the Retail Price Inflation (RPI) rate which reflects the impact on operating costs.
8. All operators will be required to enter into a three-month consultation period with TfWM on fare rises.
9. We will introduce fare capping, using both contactless and Swift cards on all services from 2019.
10. We will continue to work to reduce fares wherever practical and introduce new offers and promotions to grow patronage.
11. We will restrict annual departure charge increases from bus stations to no more than the RPI rate in any single year.
12. We will revamp and enhance the Workwise scheme which offers discounted travel to jobseekers.

Tackle congestion and make bus journeys quicker

By tackling existing bottlenecks and hotspots:

13. We will continue to implement highways 'quick wins' to tackle bottlenecks and congestion.
14. From October 2017, all partners will work together with the police to keep the highways clear by improving enforcement and mitigating utility works.
15. We will develop a network resilience strategy to reduce the impact of major developments as part of the Network Development Plans.
16. We will increase co-operation, through continued co-location of bus operator staff, in urban traffic control centres.
17. We will openly share data on punctuality and bus speeds to improve highways and speed up journeys.

By investing in highways upgrades:

18. From October 2017, we will employ a city centre manager to mitigate the effects of central Birmingham developments such as HS2 and Midland Metro.
19. We will develop a highways implementation strategy including bidding for upgrade funding from local and national sources.

Make it easier to buy a ticket

20. Capitalising on the ability to pay for a journey with your phone on most buses, we will ensure this is available on all services by 2020.
21. Operators will invest 1% of fare revenue into digital innovations such as apps and smart ticketing.
22. We will continue to display relevant fare information at bus stops.

Make it easier to catch the bus

Through simpler network branding:

23. We will work towards creating a single look and feel for all public transport across the West Midlands.
24. From October 2017, we will introduce a colour-coded network map covering all modes of public transport.
25. From January 2018, we will extend route-specific colours to buses, bus stops and information.

Through better information:

26. We will develop and support journey planning apps to make it easier to plan your journey.
27. We will undertake joined-up public transport marketing, with a pooled marketing budget, with immediate effect.
28. From October 2017, we will co-ordinate services between operators to make better use of resources and simplify the network, through route-based partnership agreements.
29. We will engage and consult with the new West Midlands Rail Franchise holder's representative at least once a quarter on issues including timetable changes, directional signage to bus and rail services, multi-modal ticketing, bus stop facilities and safe/secure pedestrian routes linking them to rail facilities.
30. Through regular liaison with the West Midlands Rail Franchisee, up-to-date bus and rail information will be made available at key bus/rail interchanges and we will share proposed timetable changes ahead of service registration with the rail operator.
31. We will engage and consult with the Midland Metro operator at least every quarter on issues including timetable changes, directional signage to bus and Metro services, multi-modal ticketing, bus stop facilities and safe/secure pedestrian routes linking them to Metro stops.
32. Every newly-purchased bus will feature next-stop audio-visual announcements and we will explore all options to meet national legal requirements to introduce this on existing vehicles.
33. We will ensure every bus is tracked and provides Real Time Information (RTI) at suitably- equipped bus stops, on Apps and Internet.
34. TfWM will improve the accuracy of real time displays at bus stops and publicise monthly KPI reports.

Shape the bus network to deliver economic growth

35. We will develop Network Development Plans to guide network changes and support growth on an area by area basis for the whole region.
36. We will undertake extensive consultation with the public and stakeholders on all significant bus service changes in line with Network Development Plans.
37. Any significant bus service changes will be committed and agreed following extensive public consultation, four weeks' prior to the registration date.
38. Space will continue to be made available at 16 Summer Lane to co-locate - think something maybe missing here

Make it more pleasant to travel by bus

By upgrading bus stops and interchanges:

39. By April 2018, we will refurbish Walsall bus station and enhance the customer experience.
40. We will upgrade Dudley bus station to include a Midland Metro interchange as part of the construction of the light rail extension to Merry Hill Shopping Centre.
41. We will invest a minimum of £1m to improve bus shelters.

42. By January 2018, we will extend the Dudley customer service pilot project to all other interchanges, ensuring staff from all partners work together seamlessly.

By making it easier to feed back:

43. We will introduce a Customer Charter, so customers know what they can expect from us.
44. We will provide a refund if you're not completely satisfied with the service you receive (aka 'the Big Ticket').
45. From March 2018, we will introduce a system to rate your journey via an app.
46. We will introduce a joined-up social media strategy to provide disruption information and advice.
47. From January 2018, we will simplify and align our customer contact channels to give a prompt and joined-up response.

By engaging staff:

48. From May 2019, we will roll-out enhanced training and progression programmes (such as the National Express Master Driver programme) to cover all frontline staff.
49. From May 2018, we will roll-out enhanced safety processes and technology such as DriveCam, to cover the vast majority of all frontline staff.
50. From January 2018, we will pay the Living Wage Foundation living wage to all staff.
51. Managers from TfWM and bus operators will 'adopt a bus route' - riding the service, talking to staff and customers and feeding back on ways to improve it.

By reducing crime and antisocial behaviour:

52. We will continue to fund and enhance the Safer Travel Partnership, increasing the number of police inspectors and officers patrolling our network, supported by the best CCTV and technology.
53. TfWM will continue to lobby Government through the Mayor to seek greater powers to tackle anti-social behaviour as part of the devolution of powers to the West Midlands.



Transport Delivery Committee

Date	4 September 2017
Report title	Busting delay on the bus network - Bus stop rationalisation
Lead Member	Councillor Kath Hartley
Accountable Director	Steve McAleavy Director of Transport Services (interim) steve.mcaleavy@tfwm.org.uk 0121 214 7452
Accountable Employee	Danny Gouveia, Bus Scheme Development Manager danny.gouveia@tfwm.org.uk 0121 214 7288
Report to be/has been considered by	

Recommendation(s) for action or decision:

The Transport Delivery Board is recommended to:

- 1 Note work to develop a Strategic Action Plan to arrest the significant recent declines in bus speed and reliability across the West Midlands; and,
- 2 Approve a pilot to rationalise bus stops within the South Birmingham Network Review area, as set-out within the report, and pursuant to the emerging objectives of the wider Strategic Action Plan.

1.0 Purpose

- 1.1 To update Transport Delivery Committee on work to develop a Strategic Action Plan for the bus network and seek approval to pilot bus stop rationalisation on high frequency corridors in South Birmingham, in line with technical corridor studies completed for each route.

2.0 Background

The region's congestion challenge

2.1 Traffic in the West Midlands reached record levels in 2016 with 8.5 billion vehicle miles driven on the region's roads, beating the previous 2007 record. Inevitably, the corollary is record levels of peak hour congestion, rising markedly in three years up to 2015/16, as shown in figure 1 below.

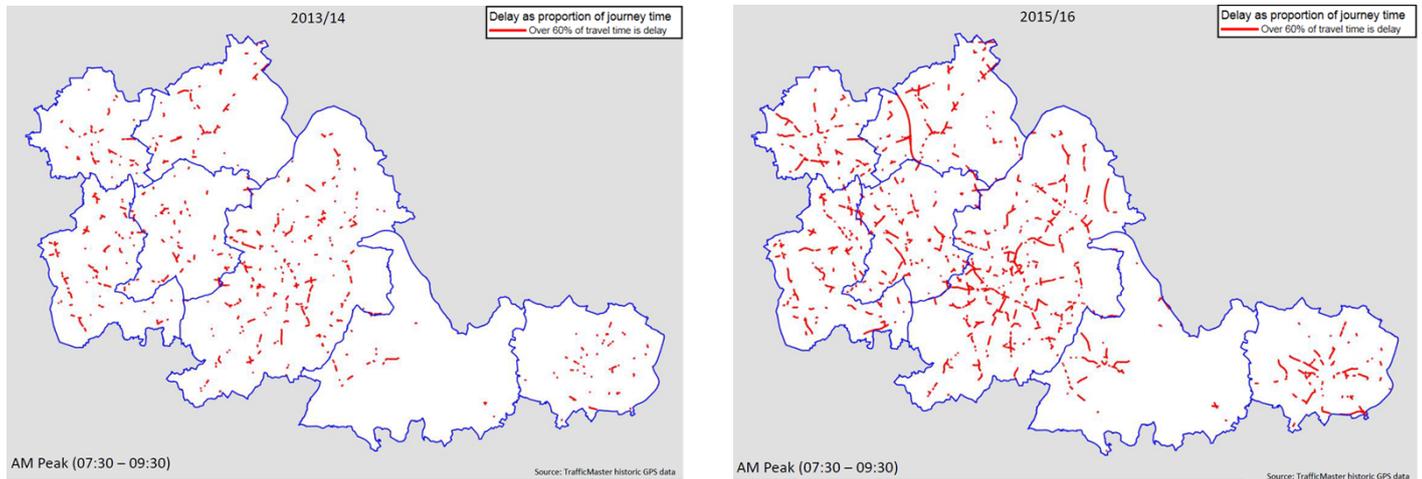


Figure 1 – Relative change in congestion - 2013/14 – 2015/16

2.2 The HS2 Growth Strategy and the region's Strategic Transport Plan *Movement for Growth* contain over-arching strategies to ensure all residents are within a 45 minute journey time of at least three strategic centres. Delivering this aggregated level of mobility will be critical in capitalising on the once-in-a-generation opportunity HS2 brings whilst also supporting the wider objectives of the Strategic Economic Plan to create 506,000 new jobs by 2030. Congestion, however, means that nearly 217,000 fewer people are within this target journey time by public transport, compared to 2011 - as shown in figure 2 below.

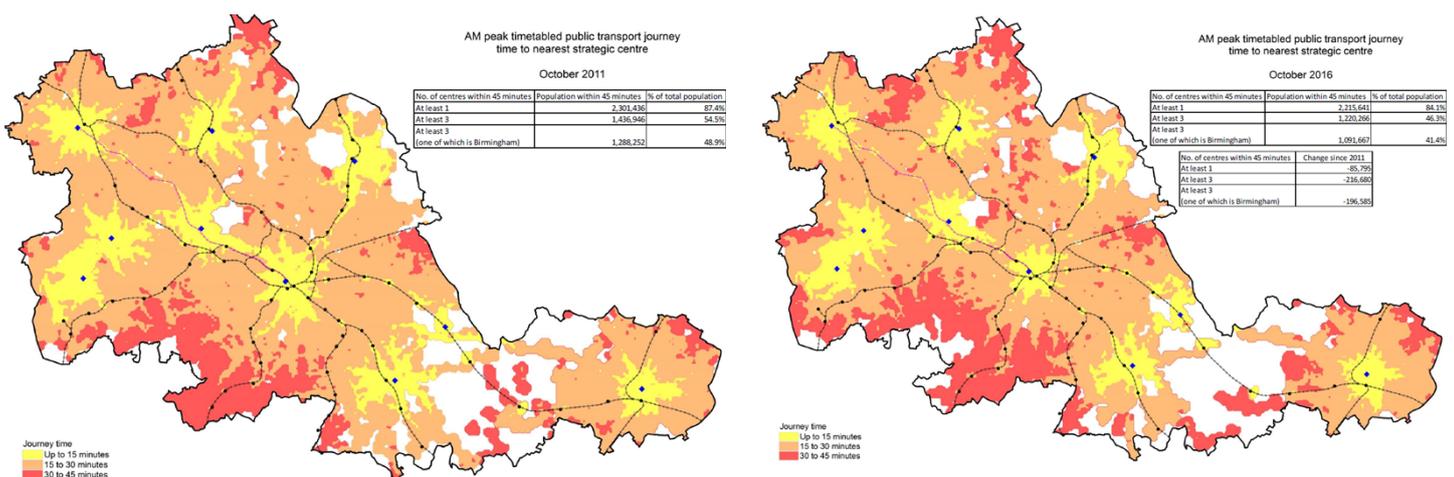


Figure 2 – Relative change in 45 minute public transport accessibility to strategic centres 2011 - 2016

ty in the

2.3 This picture is also set within the context of the imminent disruptive challenges from unprecedented levels of investment in the region, arising from the programmes within the WMCA Strategic Economic Plan (SEP), HS2 Phase 1, 2026 Delivery Plan and Highways England Road Investment Strategy. Whilst the region is preparing well for these challenges,

acute roadspace pressures remain in the short-term in managing the associated construction impacts.

The impact on the bus network

2.4 Average peak hour bus speeds in the region have reduced by 20% in the AM peak and 14% in the PM peak in the last three years. On some radial corridors, brisk walking now competes with bus for speed. Reliability has also suffered with more people waiting longer for buses that take longer to get to their destination. For example, figure 3 below shows journey time variability on the Bartley Green to Birmingham corridor in the AM peak; the worst 5% of journeys now take nearly 175% of the advertised timetabled journey time. Passengers therefore have little certainty on journey time, effectively having to factor the additional time in red as contingency.

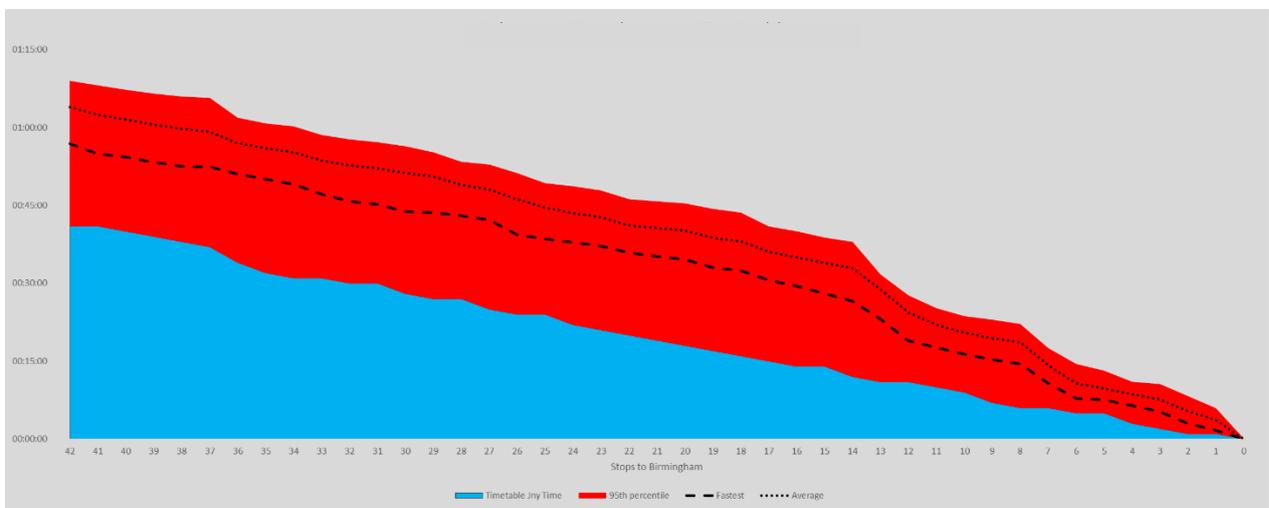


Figure 3 – Journey time variability – advertised journey time v real journey time

2.5 Bus users bear a disproportionate impact from congestion; they seldom have other route choices during periods of network delay and cannot readily compensate for poor reliability. It is perhaps unsurprising that a clear relationship between bus speed and patronage exists, where the progressive slowing of the bus network perpetuates a cycle of fewer bus passengers leading to more car trips and creating yet more congestion.

Delivering a strategic action plan for the bus network

2.6 Despite continued falling bus patronage in the region, four in every five public transport journeys continue to be made by bus. There can be no doubt that an efficient, effective and resilient transport system that unlocks the region’s ambitious growth potential is reliant on the bus network as its backbone.

2.7 Officers are therefore working closely with bus operators and district authorities to develop a *Strategic Action Plan* to respond to the challenges posed by congestion. The action plan will focus on establishing a framework to increase and sustain investment for highway schemes to improve bus speeds and reliability on key corridors.

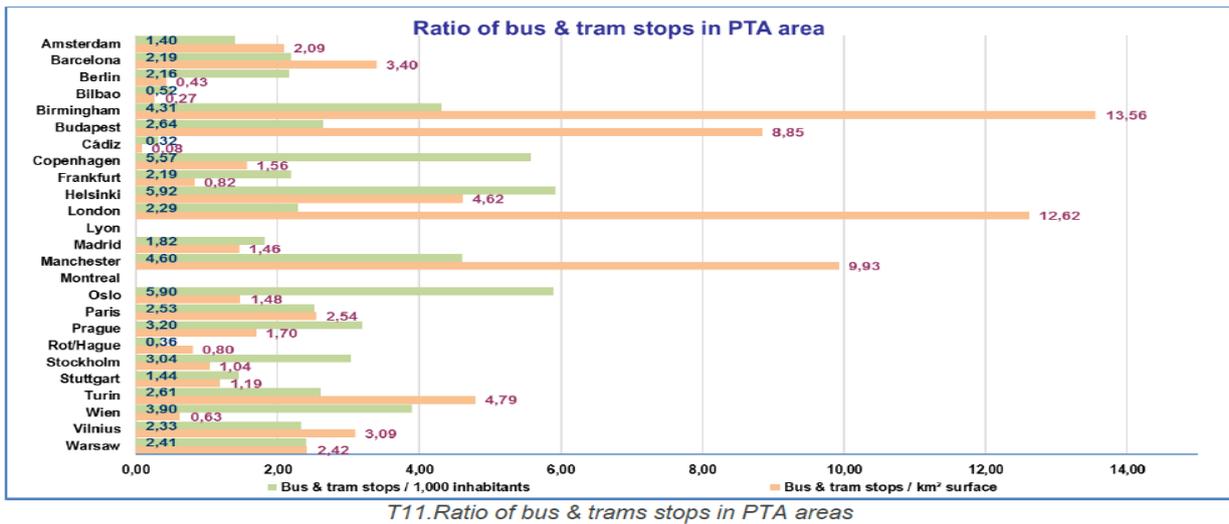
2.8 In positioning schemes to attract funding, the action plan will develop a robust evidence base, underpinned against alignment to wider local and regional policy objectives whilst, at

the same time, developing schemes to 'shovel ready' stage to allow the authority to quickly and positively respond to funding opportunities.

- 2.9 The action plan is currently under development and will be subject to further approval by Transport Delivery Committee. However, a number of investment themes are emerging to treat both the symptoms and causes of congestion on the bus network, comprising:
- Quick-wins
 - Delivery of intervention that could be mobilised quickly at congestion hotspots and network bottle-necks to realise immediate benefits to the highway network;
 - Possible early delivery of some Sprint intervention.
 - Optimising existing assets
 - Reviewing and optimising traffic signals, reviewing bus lanes.
 - Strategic bus priority
 - Development of strategic bus priority schemes to transform bus transit, focussed on connecting growth areas and catalysing benefit realisation of Metro/Sprint.
- 2.10 The action plan will be supported by Network Development Plans (NDPs) which will be produced for all areas in the region. NDPs will take a long term, spatial approach to planning the bus network to support growth and development. They will analyse proposed development sites, including details of numbers and phasing of houses and jobs growth and provide evidence to influence how major sites should best be served by bus and the associated transport infrastructure required to support bus access. NDP's will therefore provide important tool to support the action plan's delivery and help unlock new development with high quality bus access.

Bus stop rationalisation

- 2.11 An emerging programme under the quick-win theme comprises rationalisation of bus stops on those corridors most affected by recent increases in congestion. Whilst 90% of the region's urban area is within TfWM's adopted 400m 'access standard' to bus stops, a progressive incremental approach to bus stop installation over the years, as a result of ad-hoc customer/Member requests and land uses, means some locations are now over-served. Bus stops on some corridors are spaced as little as every 130m, providing significant over-provision relative to the adopted access standards.
- 2.12 This point is further reinforced in the graph below (European Metropolitan Transport Authorities barometer of public transport in the European Metropolitan Areas) showing the region (identified as the Birmingham PTA area) has the highest ratio of bus stop density in Europe.



2.13 It is clear that passenger densities and land use patterns have undergone a drastic change over the years where bus stops may not now be commensurate. Moreover, changes to highway layouts and lane designations have resulted in some bus stop locations not being fit for purpose by requiring difficult bus manoeuvres and/or causing buses to obstruct traffic flow.

2.14 Data from National Express West Midlands (NX) shows that a bus stopping at a bus stop to allow one passenger to board or alight can add 35 seconds to journey time. Where close bus stop spacing is combined with low levels of use, the aggregated effect of stop/start delay can materially add to journey time and compound reliability issues, benefitting relatively few passengers but disproportionately disadvantaging the majority.

Proposed bus stop rationalisation trial - South Birmingham Bus Network Review

2.15 At the same time as defining a possible bus stop rationalisation programme, NX approached officers about its intention to review the bus network in south Birmingham. The review is a direct response to increasing delay to buses and includes options to split existing services, remove some local services altogether and provision of new less frequent local routes. Members will be verbally updated on the results of the consultation at Committee.

2.16 As part of the review, NX has sought support from TfWM and Birmingham City Council (BCC) to identify and implement highway measures that could reduce congestion for buses and avert some of the more severe possible network changes. This has led to TfWM and BCC officers working closely to define and develop a package of highway interventions for the area. Work continues in this respect, with most schemes requiring further transport planning and approval.

2.17 This work has, however, so far identified several corridors over-served by bus stops and where quick-wins to increase bus speed and reduce journey time could be achieved by their rationalisation. The corridors include:

- 8a/8c – Inner-circle;
- 50 - Alcester Road;
- 45/47 - Pershore Road;

- 63 - Bristol Road; and,
- 6 – Birmingham to Solihull (A34 & B4102)

- 2.18 A study has consequently been commissioned to specifically review bus stop locations along these corridors against a number of metrics covering:
- TfWM adopted bus stop access standards;
 - Relative levels of use (according to fare stage);
 - Accommodating future development;
 - Connectivity to local services and facilities; and,
 - Interchange to other transit.
- 2.19 The study concluded that a significant number of bus stops could be removed along the corridors without affecting the adopted 400m access standard nor connectivity to key local services/facilities and/or interchange to other transit. Importantly, unlike other types of highway intervention to prioritise the bus, rationalisation of bus stops can be implemented quickly and cost effectively, realising immediate benefits for the bus network.
- 2.20 Technical studies have been completed for each route, identifying the specific bus stop locations recommended for removal. Hard copies of the report will be available at the Committee meeting and on the CA website.
- 2.21 As part of NX's consultation for the South Birmingham Network Review, it has asked '*should [NX] consider taking carefully selected stops out of routes to help speed them up?*' To date, NX has received 3,000 responses to the consultation with over 70% of respondents supportive to the removal of carefully selected stops.
- 2.22 With all of the above in mind, it is proposed to pilot bus stop rationalisation within the South Birmingham Bus Network Review area. This is in accordance with the recommendations of the technical studies contained in Appendix A and the wider emerging strategic action plan to ameliorate the challenges of congestion to the bus network.
- 2.23 As the proposal would effectively form a trial, it is not proposed to physically remove any stops at this time. Instead, bus stops would be closed using barriers with clear signage erected two-weeks prior to commencement to notify passengers of closure. This will be further complemented by a full communications strategy.
- 2.24 It is proposed that the pilot operates for a period of six months, between late September 2017 and late March 2018. Bus performance, in terms of patronage, journey time, reliability and variability will be assessed on a monthly basis whilst customer feedback will be closely monitored throughout the period. A full monitoring report and proposed next-steps will be reported to Transport Delivery Committee in spring 2018.

Impact of bus stop rationalisation not being implemented

- 2.25 Without highway mitigation to improve the efficiency of the bus network in south Birmingham, significant changes to bus services will be required. As described above, this could include splitting existing services, removing some local services altogether and provision of new less frequent local routes.

- 2.26 The proposed bus stop rationalisation pilot forms a critical part of the highway mitigation package. Whilst the more substantive highway changes will take time to mobilise and deliver, bus stop rationalisation can be delivered very quickly, realising immediate improvements to bus services on high frequency corridors.
- 2.27 This mitigation programme will ensure existing levels of services can be maintained on high frequency corridors without the need for additional resource. In turn this reduces the likelihood of resource from marginal services on local routes being reduced and transferred to other higher priority corridors.

3.0 Impact on the Delivery of the Strategic Transport Plan

- 3.1 The proposed pilot will support the bus network by treating some of the symptoms of existing severe congestion in South Birmingham and forms part of a wider strategy aimed to release the bus network from congestion. The impact of the contents of this report on delivery of the 15 STP Policies and/or the development/operation of:
- The National & Regional Tier
 - The Metropolitan Tier
 - Rail and Rapid Transit Network
 - Key Route Network
 - Strategic Cycle Network
- 3.2 The policies that are supported include:
- Policy 1 - Accommodate increased travel demand by existing transport capacity and new sustainable transport capacity;
 - Policy 2 - Use existing transport capacity more effectively to provide greater reliability and average speed for the movement of people and goods;
 - Policy 3 - Maintain existing transport capacity more effectively to provide greater resilience and greater reliability for the movement of people and goods.
 - Policy 6 – To improve connections to areas of deprivation.
 - Policy 8 – To improve connections to new housing development locations to help them flourish, primarily through sustainable transport connections.

4.0 Wider WMCA Implications

- 4.1 The emerging strategic action plan to support the bus network will promote bus use through mode transfer thereby accommodating anticipated increases in travel demand expected by the SEP and HS2 Growth Strategy. Bus stop rationalisation forms a package of this wider strategy by cutting journey times and improving reliability on key high frequency bus corridors.

5.0 Progress, options, discussion, etc.

- 5.1 As outlined above, it is proposed that the pilot operates for a period of six months, between late September 2017 and late March 2018. Bus performance and customer feedback will be closely monitored in this time. A full monitoring report and proposed next-steps will be reported to Transport Delivery Committee in spring 2018.

6.0 Financial implications

6.1 There are no direct immediate financial implications as a result of this report. No physical removal of bus stops are included within the pilot. There are, therefore, no capital expenditure implications as a result of the report.

6.2 In the event of the trial being successful, permanent bus stop closure and infrastructure removal will be subject to a further report, identifying:

- initial capital costs/implications for removal
- revenue income implications in removing stops with advertisements
- future whole life revenue cost savings associated with maintenance/replacement/energy savings.

7.0 Legal implications

7.1 There are no legal implication arising directly from the contents of this report.

8.0 Equalities implications

8.1 Potential stop closures/removals may have a negative impact on accessibility especially for older and disabled customers as well as parents with young children. However, without measures to improve the efficiency of the bus network in South Birmingham, significant changes to the bus services are likely which could split services and potential focus buses on key corridors at the detriment of local bus services. This would have significant equality impacts on the most vulnerable passengers.

8.2 During the south Birmingham pilot, officers would carefully monitor and listen to feedback from vulnerable customers around the impact of bus stop rationalisation on their accessibility. This feedback may result in the final proposals changing as well as shaping a potentially wider roll-out of the programme.

8.3 A full equality impact assessment of a potential wider programme of rationalisation will be completed to identify risks and key equality considerations and will be provided as an update at Committee.

7.0 Other implications

7.1 Whilst the bus stop rationalisation proposal substantively focusses on South Birmingham, the A34 Stratford Road corridor extends into Solihull. Closure of any bus stops within Solihull will be subject to further consultation with Solihull's Cabinet Member for Transport and Highways (Cllr Ted Richards).

8.0 Schedule of background papers

8.1 None

9.0 Appendices

Appendix A - Equalities Impact Assessment (to follow as update at meeting)

Technical note

Project:	Birmingham Bus Stop Consolidation	To:	Matthew Till / Danny Gouveia
Subject:	6 Draft Report	From:	Andy Clark / Anna Little / Tim Colles
Date:	21 st July 2017	cc:	Adrian Taylor

1. Introduction

Atkins has been commissioned by National Express West Midlands to undertake a study investigating the scope for bus stops on several routes in Birmingham to be rationalised. This is in response to growing concern from National Express West Midlands and Transport for West Midlands (TfWM) regarding increasingly long and unreliable bus journeys in the West Midlands.

Bus patronage is dropping sharply as congestion increases. The average speed of buses has reduced by 3% (Birmingham-wide) between 2014 and 2016 with patronage reducing by 4% in response. These delays are amplified at peak times with buses 13% slower in the morning peak and 10% slower in the evening peak.

The time that passengers spend on the bus impacts the likelihood of passengers using the bus in the future. An increase of in-vehicle time of 10% will result in a 5% reduction in journeys made. Reducing in-vehicle time will have the opposite effect, with additional passengers drawn to the route. This demonstrates the importance of journey times in determining whether a passenger chooses to make a journey by bus and the sensitivity associated with changes in journey time.

The increases in road congestion are a major cause of the increase journey times. To an extent, without significant infrastructure spending or a marked decrease in car usage, this is out of the direct control of the bus operators. However it is prudent to look at how services are routed to ensure that passengers are getting where they need to be expediently and without unnecessary delay. One element of delay is the amount of times a service stops along its route. The time it takes for a bus to slow to a stop and return to normal running speed is approximately 30 seconds. This is present despite the number of people that board a vehicle and a reduction in the number of times a vehicle stops can quickly decrease the in-vehicle time for passengers.

The locations of stops have evolved overtime with stops being relocated for new developments or road layouts meaning they are now in close proximity to other stops. In addition, some stop location result in buses being delayed when crossing junctions.

By removing stops along a route, bus operators can reduce journey times, however this does need to be considered in conjunction with the increase in walking time for passengers.

National Express West Midlands is part of the West Midlands Bus Alliance, consisting of representatives from the region's bus operators, the West Midlands Combined Authority, council highways and transportation departments, Local Enterprise Partnerships, the Safer Travel Partnership, councillors and Transport Focus.

The Alliance Board Members are responsible for identifying what the region's buses need to deliver and then putting policies and funding streams in place for this to be achieved. In March 2016, the board identified seven key actions which it will work together to deliver by 2020, as outlined in Figure 1.

Technical note

Figure 1. Key Targets for West Midlands Bus Alliance



The potential impacts on these key targets are considered later in this technical note, with specific focus on punctuality (aiming to reduce delay minutes).

This technical note sets out the results from Atkins' analysis of Route 6. The results of the assessments of other routes are outlined in subsequent technical notes.

Route 6 is linear, with outbound services travelling from Birmingham City Centre to Solihull Railway Station and inbound services travelling from Solihull Railway Station to Birmingham City Centre. The route serves South-East Birmingham and West Solihull and interchanges with several key corridors including the circular 11A and 11C routes. The daytime frequency is approximately 10 buses per hour (BPH), with buses taking approximately 39 to 67 minutes to complete the route. Timetabled journey times vary considerably through the day, reflecting both congestion in the city and differing dwell times in response to demand.

Following this introduction, the technical note outlines the:

- Data Sources (**Section Two**);
- Methodology (**Section Three**);
- Key Findings (**Section Four**); and
- Summary (**Section Five**).

Technical note

2. Data Sources

Table 1 outlines the data that has been used to inform this commission. The data has been provided by a combination of Transport for West Midlands (TfWM), the Department for Transport (DfT) and National Express West Midlands. Atkins has combined the data from all three sources to derive a database of information for each route, which includes information around the provision of infrastructure at each stop, levels of usage and the distance between stops.

With regard to usage, there are two key sources of data, both provided by National Express West Midlands:

- Proportion of buses calling at stops: The data shows indicative percentages of the proportion of buses stopping at each bus stop. At a high level, this helps to determine which are the most heavily used stops on the route, but the obvious shortcoming is that it is not possible to determine from this data how many boarders / alighters there are when a vehicle does stop; and
- Boarders by fare stage: The data shows the numbers of boarders by fare stage, which Atkins has used in combination with the proportion of buses calling to build up an understanding of the relative level of usage.

Table 1. Summary of Data and Sources

Data Type	Transport for West Midlands (TfWM)	Department for Transport (DfT)	National Express West Midlands
Stop name	✓		
ATCO (unique code)	✓		
Infrastructure type (whether the stop has a shelter or flag pole)	✓		
RTPI (Y / N)	✓		
Timing point (Y / N)	✓		
Services calling	✓		
Easting / northing		✓	
Distance between adjacent stops			✓
Proportion of buses calling			✓
Boarders by fare stage			✓

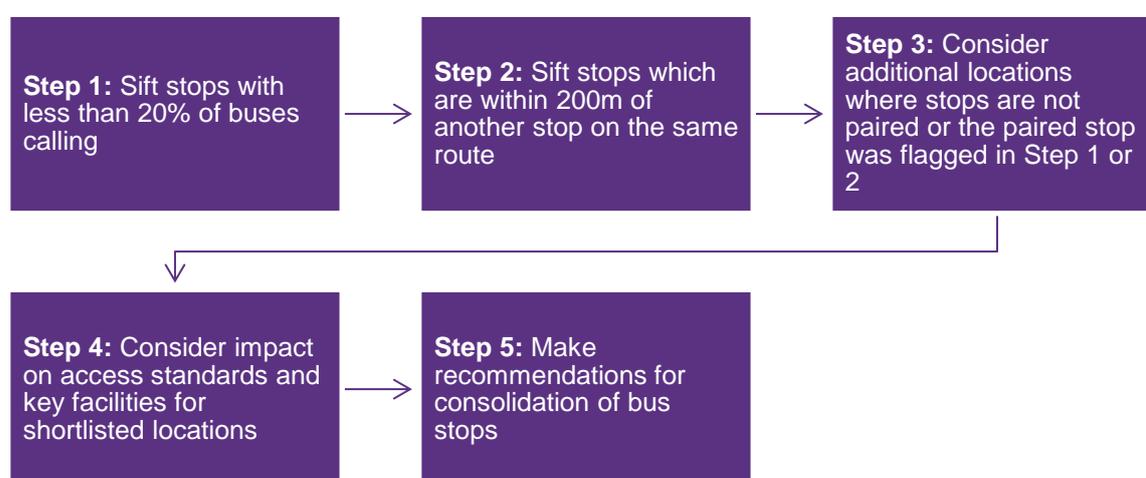
Technical note

3. Methodology

Atkins has undertaken a sifting process based on the information outlined in the database. There are several credible approaches which could be taken to determine the optimum stops for removal, but through discussion with National Express West Midlands and TfWM, Atkins has agreed a five-step process. Further details on these steps are now provided. A summary is provided in Figure 2.

Steps 1 and 2 are first applied to the route in one direction, with the same steps then repeated for stops in the opposite direction. Step 3 then considers instances where the stop was flagged in one direction but not the other and issues around an imbalance of stops between the two directions.

Figure 2. Summary of Methodology



Step 1: Sift stops with less than 20% of buses calling

Atkins has first sifted out the stops where less than 20% of buses are calling (Step 1a). This level of usage indicates that the stop is lightly used and hence should be considered as part of any future rationalisation process. A high level sift (Step 1b) of the shortlisted locations has then been carried out to determine whether there are any clear reasons why it may not be appropriate to remove the stop. This takes account of the spacing between stops, the routes served (whether served by the 6 only or the 6 and other routes) and location relative to any local facilities or transport interchanges such as railway stations. This also takes account of any operational need for the stop to remain.

Step 2: Sift stops which are within 200m of another stop on the same route

The second sift entails identifying those stops which are within 200m of another stop on the same route (in the same direction). The figure of 200m has been chosen as, in broad terms, closer spacing suggests there may be some duplication of coverage in terms of the West Midlands Combined Authority Bus Service Access Standards (see **Appendix A**), which state that for residential areas, the maximum desirable walking distance to bus services in continuously built-up areas is 400m during the hours of 07:00 to 19:00 on Monday to Saturday and 700m at other times. Step 2a relates to this first sift.

The output of Step 2a is a list of bus stops that are within 200m of another stop on the same route in the same direction. An assessment has then been made (Step 2b), considering the same factors as per Step 1b, to determine which of the two stops would be more suitable for removal. In some instances, there may be three or more consecutive stops with distances of less than 200m, and in these situations, Atkins has considered how the stops could best be rationalised to provide more even spacing.

Technical note

Step 3: Consider additional locations where stops are not paired or where the paired stop was identified in Step 1 or Step 2

In some cases, there may be an imbalance of stops in one direction relative to the other, which may be a function of the highway layout (for example, a one-way system or proximity to a major junction) or a function of the specific location relative to key attractors. Step 3a in the technical process has entailed Atkins considering any locations not flagged by either Step 1 or Step 2 where some rationalisation of stops may be appropriate because of the imbalance of stops in one direction relative to the other.

Finally, as Step 3b, there may be some instances where the gap between stops in one direction is slightly below 200m whilst it is slightly above 200m in the opposite direction. In this instance, it would be prudent to consider the opportunity to rationalise the stops in both directions rather than suggesting rationalisation in one direction but not the other. Another such instance relates to the proportion of buses calling. The level of usage may be below the 20% threshold in one direction (and hence would be flagged up in Step 1) but above 20% in the above direction. Again, in this instance, it is prudent to consider the pair of stops for rationalisation.

Note that the methodology assumes that a bus stop needs to be flagged in either Step 1, Step 2 or Step 3 to be considered for removal in Step 4. A bus stop therefore does not need to satisfy all criterion.

Step 4: Consider impact on access standards and key facilities for shortlisted locations

Having used Steps 1-3 to derive a shortlist of locations for potential rationalisation, Atkins has then considered the impact on both the West Midlands Combined Authority Bus Service Access Standards and the accessibility to key facilities, focussing on education and health facilities.

Step 5: Make recommendations for consolidation of bus stops

Finally, taking on board the outcomes of Steps 1 to 4, Atkins has made recommendations to National Express West Midlands around the locations where consolidation may be appropriate.

Technical note

4. Key Findings

The findings for Route 6 are now outlined.

Mapping Outputs

To support the sifting process, elements of the database have been developed into mapping outputs. These maps have been placed in **Appendix B**. For Route 6, the maps are as follows:

- **Map A:** Showing the proportion of buses calling. Red shading of a stop denotes less than 20% of buses calling. These maps have been used to inform Step 1 of the process;
- **Map B:** Showing distances (metres) between stops. Stops that are within 230m (see notes below re- use of 230m rather than 200m) of another stop in the same direction are shown in red, with all other stops shown in green. These maps have been used to inform Step 2 of the process;
- **Map C:** Showing the infrastructure type (whether a pole or a shelter is provided);
- **Map D:** Showing whether the stop is a timing point; and
- **Map E:** Showing the location of bus stops relative to schools¹, GP surgeries² and hospitals³. Note that this has been based upon data provided by the DfT.

Tabulated Outputs

Tabulated outputs are now provided to show how the database has been used to derive a shortlist of locations for consolidation.

Step 1: Sift stops with less than 20% of buses calling

Table 2 outlines the stops on the 6 route that have been shortlisted based on less than 20% of buses calling.

The sift (Step 1a) gives rise to five stops outbound and four stops inbound. Having undertaken further analysis on these locations (Step 1b), Atkins has recommended that four stops (two in each direction) are considered later in the process, as there are reasons why the remainder of the stops should be retained. These reasons are outlined in Table 2.

Step 2: Sift stops which are within 230m of another stop on the same route

For Route 6, it was decided that 230m was a more appropriate distance to judge distance between stops, rather than the originally suggested 200m. This is due to the high number of stops falling into the 200-230m category which are just outside the 200m sifting threshold.

Table 3 outlines the stops on Route 6 that have been shortlisted based on a bus stop being within 230m of another stop on the same route in the same direction (Step 2a).

Note that Table 3 lists all the stops based on this criterion and hence it includes the stops either side of the 230m distance threshold. For example, if Stop B is 230m downstream of Stop A, then the table lists both Stop A and Stop B. In some cases, there are more than two consecutive stops. Solid black lines in Table 3 have been used to highlight the consecutive stops.

¹ Schools in England dataset, Department for Education, last updated 9 March 2017 (downloaded May 2017)

² Details of GPs, GP Practices, Nurses and Pharmacies dataset from Organisation Data Services, published by NHS Digital, available from data.gov.uk (downloaded May 2017)

³ Hospitals dataset, published by NHS Choices, available from data.gov.uk (downloaded May 2017)

Technical note

In order to provide a shortlist of locations for detailed assessment under Step 4, a column in Table 3 identifies the suggested stop(s) for removal. This is based on a range of factors, but typically centres on the spacing that remains if a given stop is removed. In some cases, Stop A may be served by Route 6 only whereas Stop B is served by multiple routes. In such instances, the decision has been made, unless specific operational reasons are known, to suggest that Stop A is removed. The specific reasons for choosing one stop over another are outlined in the right-most column of Table 3.

Step 3: Consider additional locations where stops are not paired or where the paired stop was identified in Step 1 or Step 2

Finally, Atkins has undertaken a process to identify any additional locations. The results are outlined in Table 4, with the right-most column providing justification. The table shows that of the nine stops, the majority were identified as a result of the stop in the opposite direction being shortlisted in either Step 1 or Step 2.

Table 2. <20% of buses calling (Step 1)

Stop Name (Yellow = Outbound, Blue = Inbound)	ATCO	Proceed to Step 4?	Suggested Removal?
STRATFORD RD, Brandon Rd	43000430101	Yes	Subject to mapping against the access standards and further interrogation of facilities
STRATFORD RD, Hall Green School	43000430901	No	Interchange with 6A and X20/A. If the stop was removed, the distance between adjacent stops would be 400m. In addition, the stop serves Hall Green Infant and Nursery School and Hall Green Junior School
BLOSSOMFIELD RD, Charles Road	43000149201	No	Interchange with several other routes at both stops. If the Charles Road stop was removed, the distance between adjacent stops would be 820m. If the Dingle Lane stop was removed, the distance between adjacent stops would be 950m in an area where there are several educational establishments. Suggest keeping both stops as the distance between stops would be too large if one was removed or they were consolidated
BLOSSOMFIELD RD, Dingle Lane	43000154302	No	
BLOSSOMFIELD RD, Alderbrook Rd	43000156101	Yes	Subject to mapping against the access standards and further interrogation of facilities
BLOSSOMFIELD RD, Alderpark Road	43000154501	Yes	Subject to mapping against the access standards and further interrogation of facilities
BLOSSOMFIELD RD, Charles Road	43000149202	No	Interchange with several other routes. If the stop was removed, the distance between adjacent stops would be 900m
STRATFORD RD, Hall Green School	43000430902	No	Interchange with 6A/E and X20. If the stop was removed, the distance between adjacent stops would be 410m. In addition, the stop serves Hall Green Infant and Nursery School and Hall Green Junior School
STRATFORD RD, Brandon Rd	43000430102	Yes	Subject to mapping against the access standards and further interrogation of facilities

Table 3. Stops within 230m of another stop (Step 2)

Stop Name (Yellow = Outbound, Blue = Inbound)	ATCO	Proceed to Step 4?	Suggested Removal?
DERITEND HIGH STREET, Gibb Street	43000211402	Yes	Remove ATCO xx402 given large spacing to the stops and after (Trinity Terrace and Bordesley Middleway). Also ATCO xx501 used for operational reasons
DERITEND HIGH STREET, Adderley Street	43000211501	No	
STRATFORD RD, Poplar Road/Sparkhill	43000220903	No	Remove ATCO xx802 given higher usage of ATCO xx903 and its proximity to Highgate Road / Walford Road for interchange onto the 8A / 8C routes
STRATFORD RD, Wilton Road	43000221802	Yes	
STRATFORD RD, Avondale Rd/Sparkhill	43000222202	No	Stops have been grouped as they are consecutive. Keep ATCO xx202 given its proximity to two schools. Keep ATCO xx501 given its proximity to a school. Suggest relocating ATCO xx501 closer to the junction with Springfield Road. Keep ATCO xx601 given proximity to Shaftmoor Lane where passengers can interchange with other routes
STRATFORD RD, Formans Road	43000225102	Yes	
STRATFORD RD, Grove Rd	43000225403	Yes	
STRATFORD RD, Solihull Rd	43002102501	No	
STRATFORD RD, The College Arms	43000225601	No	
STRATFORD RD, Brandon Rd	43000430101	Yes	
STRATFORD RD, Hall Green Rail Station	43000430301	No	
STRATFORD RD, South and City College	43000430703	No	
STRATFORD RD, Petersfield Rd	43000430802	Yes	
STRATFORD RD, Hall Green School	43000430901	No	
STRATFORD RD, Highfield Rd	43000433101	Yes	
STRATFORD RD, Robin Hood Island Southside	43000434302	No	
STRATFORD RD, Green Hill Way	43000434401	Yes	Remove ATCO xx401 given spacing between three consecutive stops
STRATFORD RD, Sandy Hill Road	43000145102	No	
STRATFORD RD, Union Road	43000146502	Yes	
STRATFORD RD, Bishopton Close	43000147101	No	Remove ATCO xx502 given proximity of ATCO xx101 to a school and its higher usage
MARSHALL LAKE RD, Stratford Rd/Dallas	43000141801	No	
STRATFORD RD, Marshall Lake Rd	43000147404	Yes	
STRATFORD RD, Sainsbury's	43000147301	No	Remove ATCO xx801 given proximity of ATCO xx902 to a school (see Table 2 above for justification) and ATCO xx704 to a College
STRATFORD RD, Hall Green School	43000430902	No	
STRATFORD RD, Petersfield Rd	43000430801	Yes	
STRATFORD RD, South and City College	43000430704	No	
STRATFORD RD, Ladypool Rd/Sparkbrook	43000221102	No	Both stops to remain given their proximity to a number of trip attracting land uses. Consolidation unlikely to be appropriate at this location
STRATFORD RD, Main Street	43000220202	No	
DERITEND HIGH STREET, Adderley Street	43000211504	No	Remove ATCO xx401 given large spacing to the stops and after. Also ATCO xx401 used for operational reasons
DERITEND HIGH STREET, Gibb Street	43000211401	Yes	

Table 4. Additional locations (Step 3)

Stop Name (Yellow = Outbound, Blue = Inbound)	ATCO	Proceed to Step 4?	Supporting Comment
BORDESLEY, adj Trinity Place	43000215901	Yes	Imbalance of stops
SHIRLEY, before Longmore Road	43001460001	No	Imbalance of stops. Keep stop given proximity to supermarket and Solihull Road where passengers can access other bus services
SPARKBROOK, Palmerston Road	43000221403	Yes	Imbalance of stops
STRATFORD RD, Wilton Road	43000221801	Yes	Shortlisted in opposite direction in Step 2
STRATFORD RD, Formans Road	43000225103	Yes	Shortlisted in opposite direction in Step 2
STRATFORD RD, Grove Rd	43000225402	No	Shortlisted in opposite direction in Step 2. Keep stop given previous rationalisation and consider new pairing with Springfield Road outbound stop
STRATFORD RD, Highfield Rd	43000433102	Yes	Shortlisted in opposite direction in Step 2
STRATFORD RD, Green Hill Way	43000434402	Yes	Shortlisted in opposite direction in Step 2
STRATFORD RD, School Road	43000147203	Yes	Shortlisted in opposite direction in Step 2 (Union Road)

Technical note

Step 4: Consider impact on access standards and key facilities for shortlisted locations

The shortlisted locations from Steps 1, 2 and 3 are outlined in Table 5.

For each location, Atkins has then undertaken a process of considering whether removing the stop will have an impact on the West Midlands Combined Authority Bus Access Standards. Through agreement with National Express West Midlands and TfWM, Atkins has mapped the impact of removing the bus stop using ArcGIS software. Note that this analysis is based on the highway network only⁴ and hence in a situation where the access standard (by highway) is no longer being met, it is necessary to consider whether footways may mean that the access standard is in fact being met. The results of the analysis are outlined in Figure 6 onwards.

Note that rather than considering each stop in isolation, Atkins has mapped the entirety of the impact of all stops in Table 5 being removed. Figures 6 onwards show that in virtually all cases, there has been very little impact on the access standards, with the density of bus stops on other routes meaning that even once a Route 6 stop is removed, adjacent residential areas are still within 400m of another bus stop, which means that the access standard is still being met. There are a few exceptions to this where it appears that the access standard is no longer being met, as identified in Figures 7 and 8. Figure 7, Map 002, shows that with the removal of the two Petersfield Road stops, parts of Petersfield Road, Staplehurst Road and Ferndale Road no longer meet the access standard, which means that they are no longer within 400m by highway of another bus stop. However, further interrogation of the layout of Staplehurst Road and Ferndale Road shows that there is a footpath (see Figure 3) which provides access to School Road which is served by the 11A and 11C bus services. For this reason, it is reasonable to conclude that the changes outlined in Table 5 do not have any adverse impact in regard to the access standards for Staplehurst Road and Ferndale Road.

Figure 3. Ferndale Road – footway access to School Road



Copyright @ Google 2017

⁴ <https://www.ordnancesurvey.co.uk/business-and-government/products/meridian2.html>

Technical note

For the area of Petersfield Road that is no longer within 400m of a bus stop (see Figure 7), further investigation has found that there are no additional footways that can reduce the distance to the nearest bus stop. However, as it such a small area of the road that is affected, it is reasonable to conclude that the changes outlined in Table 5 will have a minimal impact in regard to the access standard.

Figure 8, Map 003, shows that with the removal of the two Green Hill Way stops, parts of Green Hill Way will no longer meet the access standard, which means that it is no longer within 400m by highway of another bus stop. However, further interrogation of the layout of Green Hill Way shows that there is a footpath (see Figure 4) which provides access to The Bridle Path from which pedestrians can access Streetsbrook Road which is served by Route 31. For this reason, it is reasonable to conclude that the changes outlined in Table 5 do not have any adverse impact in regard to the access standards for Green Hill Way.

Figure 4. Green Hill Way (footway access to The Bridle Path / Streetsbrook Road)



Copyright @ Google 2017

In addition, Figure 8 shows that with the removal of the Alderbrook Road stop (outbound), parts of Alderbrook Road, Arley Road, and Rollswood Drive no longer meet the access standard, which means that they are no longer within 400m by highway of another bus stop. Further investigation has found that there are no additional footways that can reduce the distance to the nearest bus stop. However, as it such a small area that is affected, it is reasonable to conclude that the changes outlined in Table 5 will have a minimal impact in regard to the access standard. In addition, this area is located close to a key rail interchange, Solihull Railway Station, which provides good access for local residents.

Finally, for the shortlisted locations outlined in Table 5, Atkins has made an assessment to determine whether removal of the stop will have an implication in regard to access to key facilities, focussing on schools, hospitals and GP surgeries. This assessment uses Map E in **Appendix A**.

The assessment has shown that the proposed stops for removal are not adversely impacting accessibility to key facilities. Even with removal of some stops, the spacing of stops remains relatively dense and therefore key facilities are still adequately served. An overview map of the proposed consolidation, alongside the key facilities, is shown in Figure 9.

Technical note

Step 5: Make recommendations for consolidation of bus stops

On the basis of the analysis presented to date, Atkins recommends that the full list of stops in Table 5 is considered by National Express West Midlands for rationalisation.

A reasonable working assumption⁵ is that removal of one stop can save in the order of 30 seconds, given the need for the bus to decelerate / accelerate and the dwell time associated with passengers boarding and alighting. Clearly the exact extent of the saving will be dependent upon local conditions, including the ability for the bus to merge back into general traffic. We have used the 30 saving in conjunction with the information around proportion of buses calling to determine how much time could practically be saved per stop. For example, if only 30% of buses call at the stop, then it is reasonable to assume that 30% of 30 seconds will be saved at that stop, rather than the full 30 seconds. If 100% of buses stop, then the full 30 seconds saving would be appropriate.

When considering the usage of the 22 stops suggested for removal, it is reasonable to assume that approximately 2 minutes could bus saved per bus outbound on Route 6. Inbound, it is reasonable to assume that approximately 2 minutes, 10 seconds could bus saved per bus on the route. This journey time saving may enable a reduction in the peak vehicle requirement (PVR) for National Express West Midlands. Reducing the number of stops is also expected to lead to an increase in punctuality, which was one of the stated targets of the West Midlands Bus Alliance.

⁵ Working assumption for National Express West Midlands

Technical note

Table 5. List of Locations for Assessment in Step 4

Stop Name	ATCO	Identified in:	Access Standard Met based on proposal?	Access to Key Facilities Maintained?
DERITEND HIGH STREET, Gibb Street	43000211402	Step 2	✓ (Figure 6)	✓ (See Figure 9 for all)
BORDESLEY, adj Trinity Place	43000215901	Step 3	✓ (Figure 6)	✓
STRATFORD RD, Wilton Road	43000221802	Step 2	✓ (Figure 6)	✓
STRATFORD RD, Formans Road	43000225102	Step 2	✓ (Figure 7)	✓
STRATFORD RD, Grove Rd	43000225403	Step 2	✓ (Figure 7)	✓
STRATFORD RD, Brandon Rd	43000430101	Step 1	✓ (Figure 7)	✓
STRATFORD RD, Petersfield Rd	43000430802	Step 2	x (Figure 7)	✓
STRATFORD RD, Highfield Rd	43000433101	Step 2	✓ (Figure 7)	✓
STRATFORD RD, Green Hill Way	43000434401	Step 2	✓ (Figure 8)	✓
STRATFORD RD, Union Road	43000146502	Step 2	✓ (Figure 8)	✓
ROSSOMFIELD RD, Alderbrook Rd	43000156101	Step 1	x (Figure 8)	✓
ROSSOMFIELD RD, Alderpark Road	43000154501	Step 1	✓ (Figure 8)	✓
STRATFORD RD, Marshall Lake Rd	43000147404	Step 2	✓ (Figure 8)	✓
STRATFORD RD, School Road	43000147203	Step 3	✓ (Figure 8)	✓
STRATFORD RD, Green Hill Way	43000434402	Step 3	✓ (Figure 8)	✓
STRATFORD RD, Highfield Rd	43000433102	Step 3	✓ (Figure 7)	✓
STRATFORD RD, Petersfield Rd	43000430801	Step 2	x (Figure 7)	✓
STRATFORD RD, Brandon Rd	43000430102	Step 1	✓ (Figure 7)	✓
STRATFORD RD, Formans Road	43000225103	Step 3	✓ (Figure 7)	✓
STRATFORD RD, Wilton Road	43000221801	Step 3	✓ (Figure 6)	✓
SPARKBROOK, Palmerston Road	43000221403	Step 3	✓ (Figure 6)	✓
DERITEND HIGH STREET, Gibb Street	43000211401	Step 2	✓ (Figure 6)	✓

Figure 5. Proposed Rationalisation (Overview)

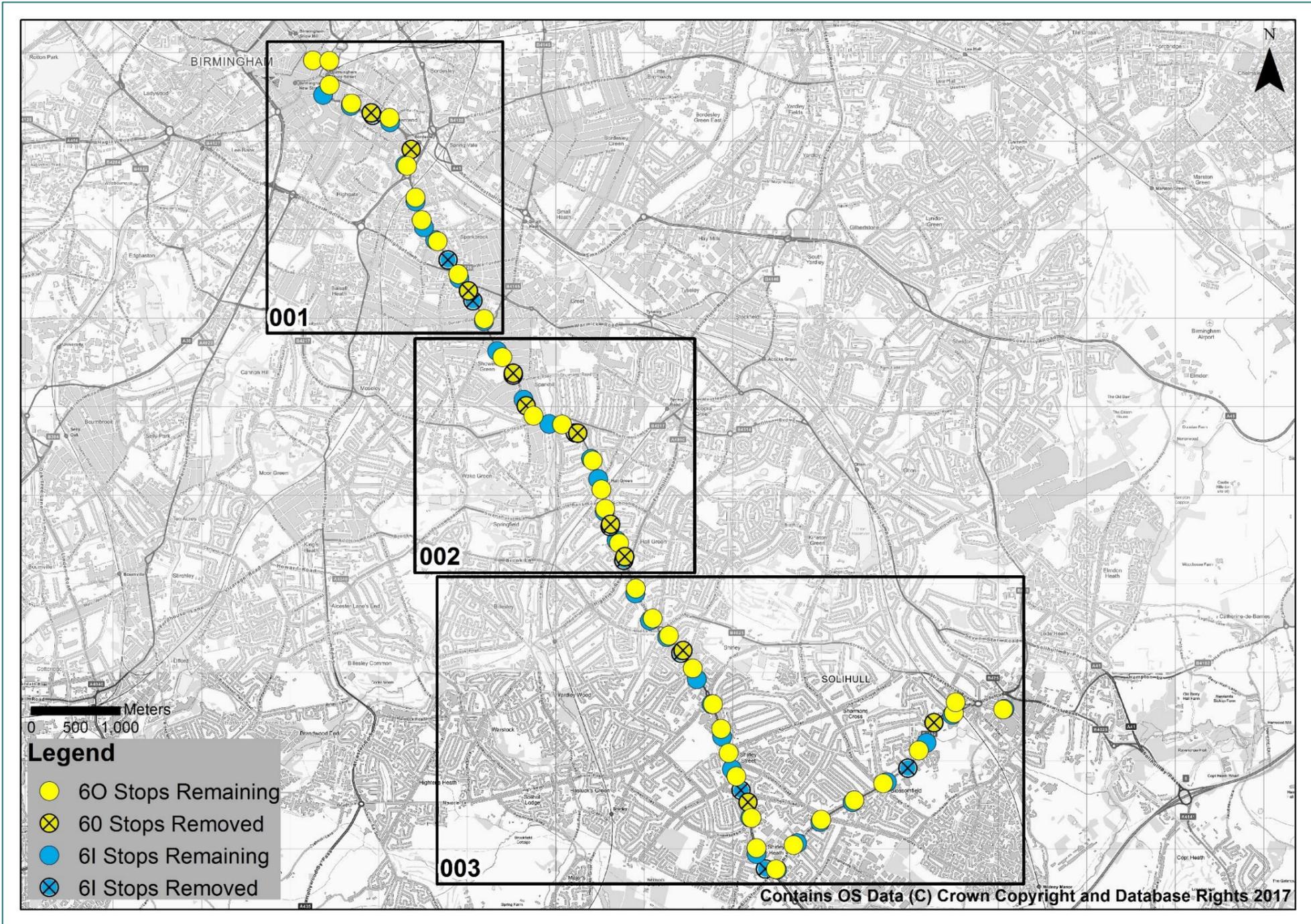


Figure 6. Supporting Map - 001

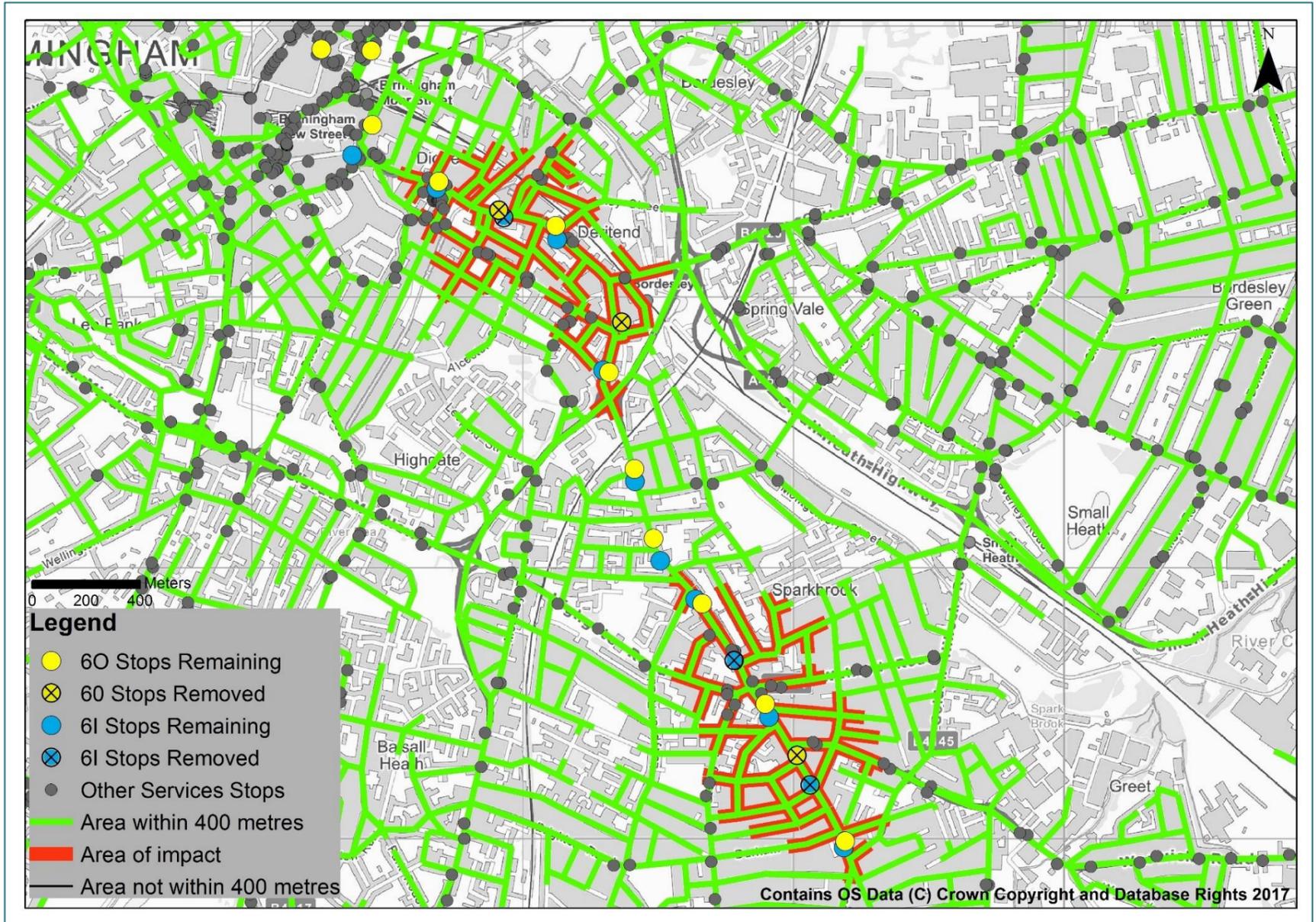


Figure 7. Supporting Map - 002

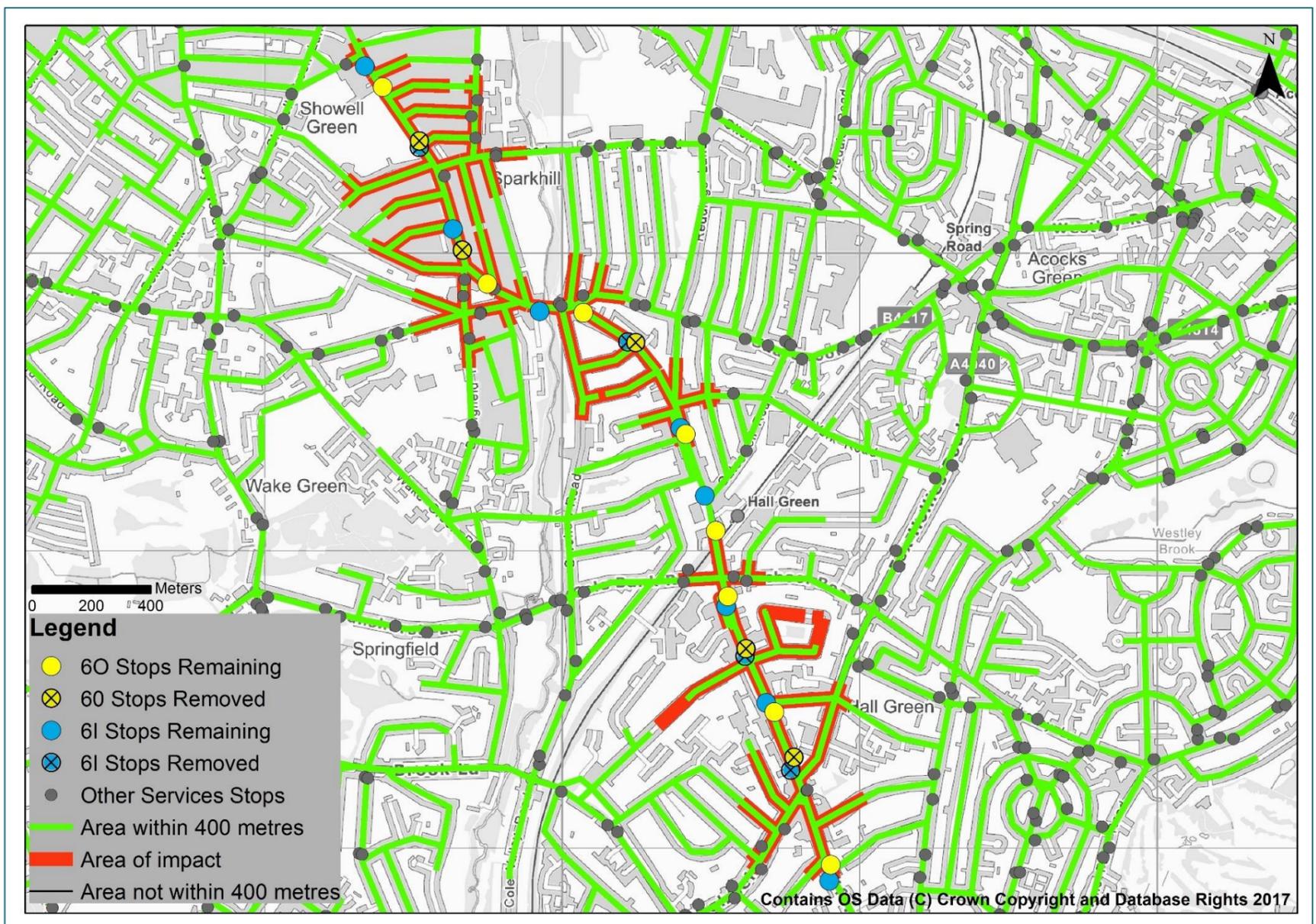


Figure 8. Supporting Map - 003

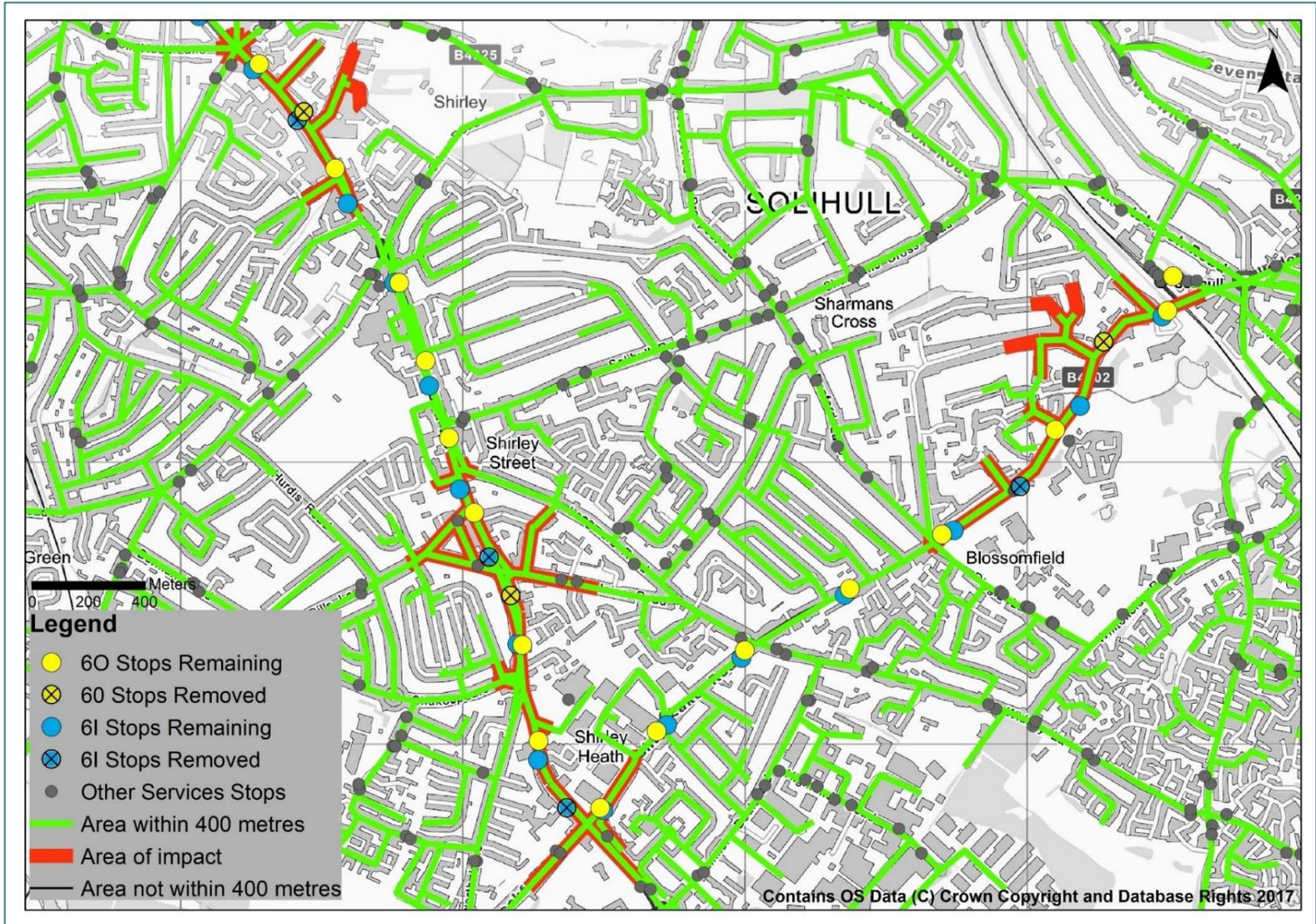
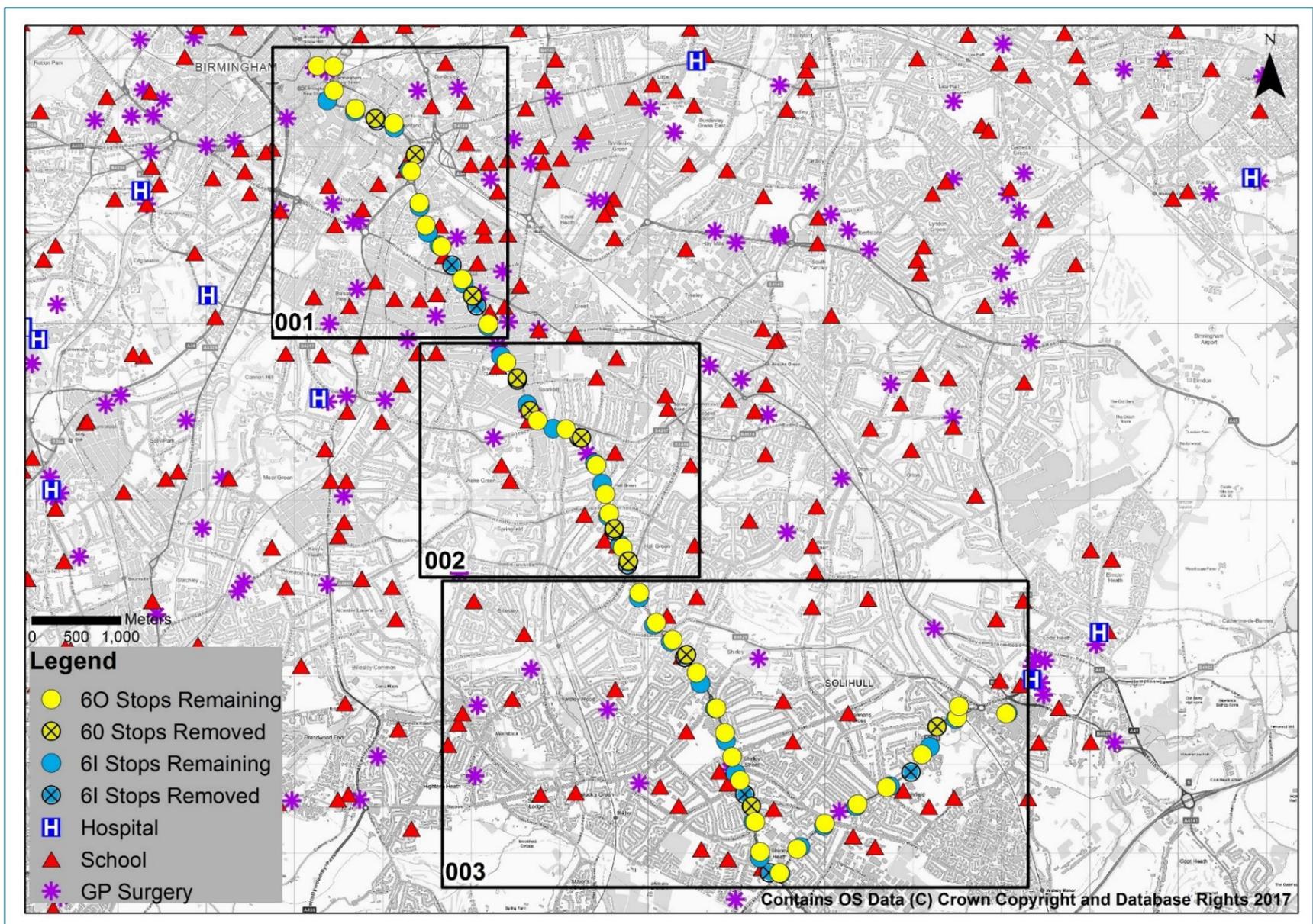


Figure 9. Proposed Rationalisation alongside Key Facilities



Technical note

5. Summary

Atkins was commissioned by National Express West Midlands to undertake a study investigating the scope for bus stops on several routes in Birmingham to be rationalised. This was in response to growing concern from National Express West Midlands and TfWM regarding increasingly long and unreliable bus journeys in the West Midlands.

There are several credible approaches which could be taken to determine the optimum stops for removal, but through discussion with National Express West Midlands and TfWM, Atkins has agreed a five-step process. This process has been informed by data provided by a combination of TfWM, the DfT, and National Express West Midlands.

The focus of this commission has been on Route 6 which is a linear route, with outbound services travelling from Birmingham City Centre to Solihull Railway Station and inbound services travelling from Solihull Railway Station to Birmingham City Centre. The route serves South-East Birmingham and West Solihull and interchanges with several key corridors including the circular 11A and 11C routes. The daytime frequency is approximately 10 buses per hour (BPH), with buses taking approximately 39 to 67 minutes to complete the route. Timetabled journey times vary considerably through the day, reflecting both congestion in the city and differing dwell times in response to demand.

Having undertaken the five-step process, Atkins has recommended a list of stops (11 in each direction) which could be removed / relocated in the future. A reasonable working assumption is that removal of one stop can save of the order of 30 seconds, given the need for the bus to decelerate / accelerate and the dwell time associated with passengers boarding and alighting. When considering the usage of the 22 stops suggested for removal in conjunction with the 30 second saving, it is reasonable to assume that approximately 2 minutes could bus saved per bus outbound on Route 6. Inbound, it is reasonable to assume that approximately 2 minutes, 10 seconds could bus saved per bus on the route. This journey time saving may enable a reduction in the peak vehicle requirement (PVR) for National Express West Midlands. Reducing the number of stops is also expected to lead to an increase in punctuality, which was one of the stated targets of the West Midlands Bus Alliance.

Technical note

Appendix A. West Midlands Combined Authority Bus Service Access Standards

Technical note

West Midlands Combined Authority Bus Service Access Standards

Accessibility to the bus network

- 1.1 Residential Areas – The maximum desirable walking distance to bus services in continuously built-up areas is 400 metres during the hours of 07.00 to 19.00 on Monday to Saturday and 700 metres at other times. Wherever possible the services should provide links to local centres (post office, shops, services etc) and to interchanges with the public transport network.
- 1.2 The above distances are reduced in areas of severe gradients or where a high proportion of elderly people or people with mobility difficulties reside.
- 1.3 In lower density built-up areas the maximum desirable walking distance at all times is 700 metres, and in rural areas 1.5km.
- 1.4 Hospitals – minimum standards of service calculated according to total trips per annum using all modes of transport, to individual sites.
- 1.5 Major Urban Centres – bus access arrangements should be equivalent to or better than those provided for car users.
- 1.6 Suburban District Shopping Centres – to be served as closely as road layout will allow during main shop opening periods.
- 1.7 Places of Entertainment and Recreation – attractions be within 400/700 metres of a bus service during the hours of opening. Where this is not met, a special service with partnership funding will be considered.
- 1.8 Normal bus access standards will apply in Midland Metro and Bus Rapid Transit corridors unless adapted to reflect agreed local circumstances in relation to the provision of these rapid transit modes.

Frequency

- 2.1 Mondays to Saturdays - Minimum standard frequency for:
 - (a) Continuously built up areas: between 07.00 and 19.00 is two journeys per hour.
 - (b) Low density residential areas: between 07.00 and 19.00 is one journey per hour.
 - (c) Rural areas: between 07.00 and 19.00 is one journey per hour.

Technical note

- 2.2 Sundays – One journey per hour in continuously built up areas between noon and 19.00 hours, and subject to demand at other times, and elsewhere. As funding allows, this will be increased to a half hour frequency in continuously built-up areas between 10.00 and 18.00 hours.
- 2.3 Bank Holidays – As Sunday Services, excluding Christmas Day and Boxing Day. Special arrangements will apply for Boxing Day and New Year's Day.

Value for money requirements

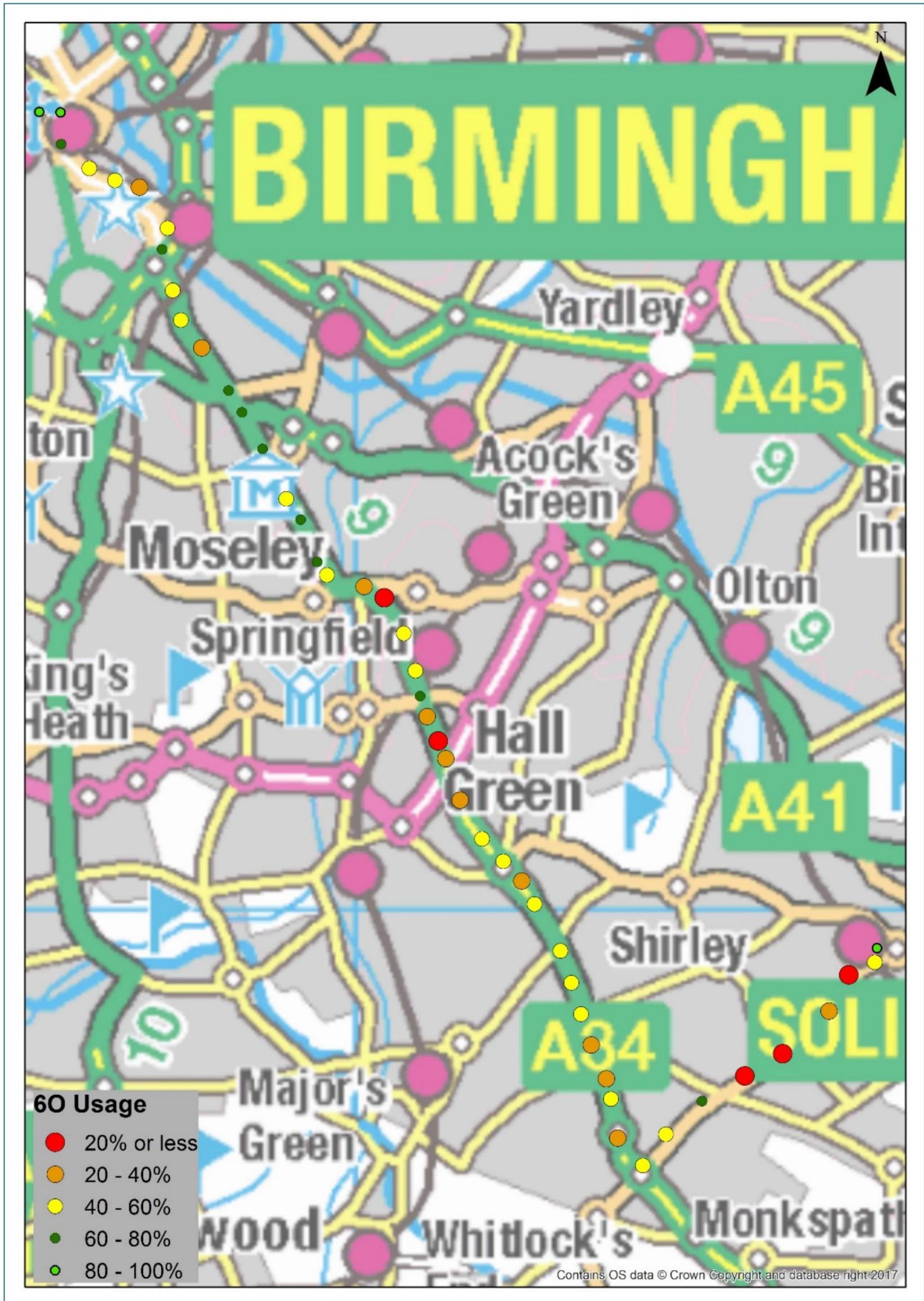
- 3.1 Research will identify demand for services which are deemed to be socially necessary.
- 3.2 Services are categorised in the following order of priority, to be provided subject to available finance.
 - 1. Journeys to work
 - 2. Shopping and medical journeys
 - 3. Sundays and Bank Holidays
 - 4. Evenings
 - 5. Town and City Centre distributor services
 - 6. Night Services
- 3.3 Specific Journey Requirements – per trip
 - (a) 8 people or less: no service
 - (b) 8 – 10 people: feeder facility considered
 - (c) more than 10 people: through facility considered
- 3.4 Regular Journey Requirements – per hour
 - (d) 8 people or less: no service
 - (e) 8 – 10 people: feeder facility considered
 - (f) more than 10 people: minimum hourly service

Technical note

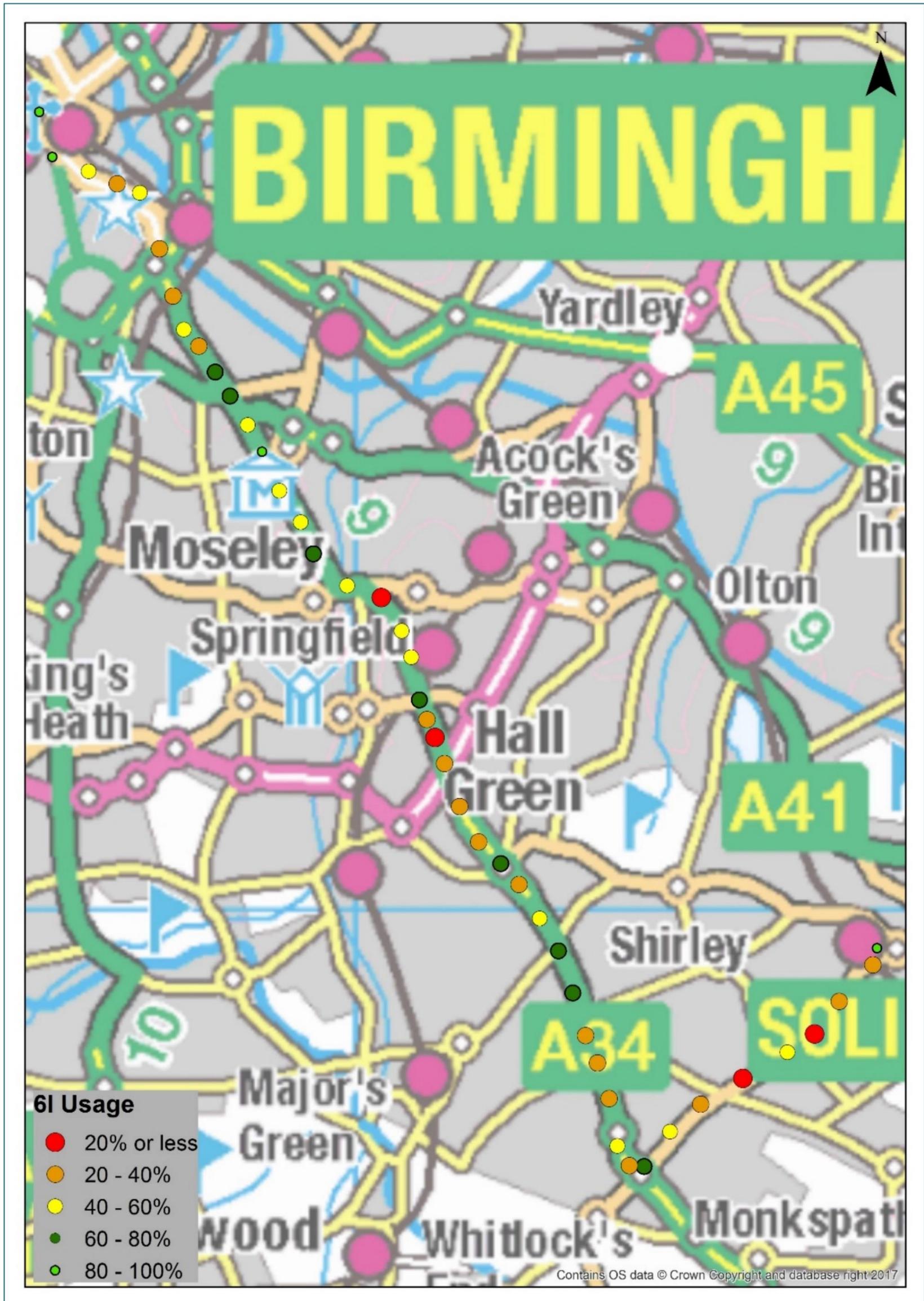
Appendix B. Supporting Mapping for Route 6

- **Map A:** Showing the proportion of buses calling. Red shading of a stop denotes less than 20% of buses calling. These maps have been used to inform Step 1 of the process;
- **Map B:** Showing distances (metres) between stops. Stops that are within 230m of another stop in the same direction are shown in red, with all other stops shown in green. These maps have been used to inform Step 2 of the process;
- **Map C:** Showing the infrastructure type (whether a pole or a shelter is provided);
- **Map D:** Showing whether the stop is a timing point;
- **Map E:** Showing the location of bus stops relative to schools, GP surgeries and hospitals. Note that this has been based upon the DfT layer.

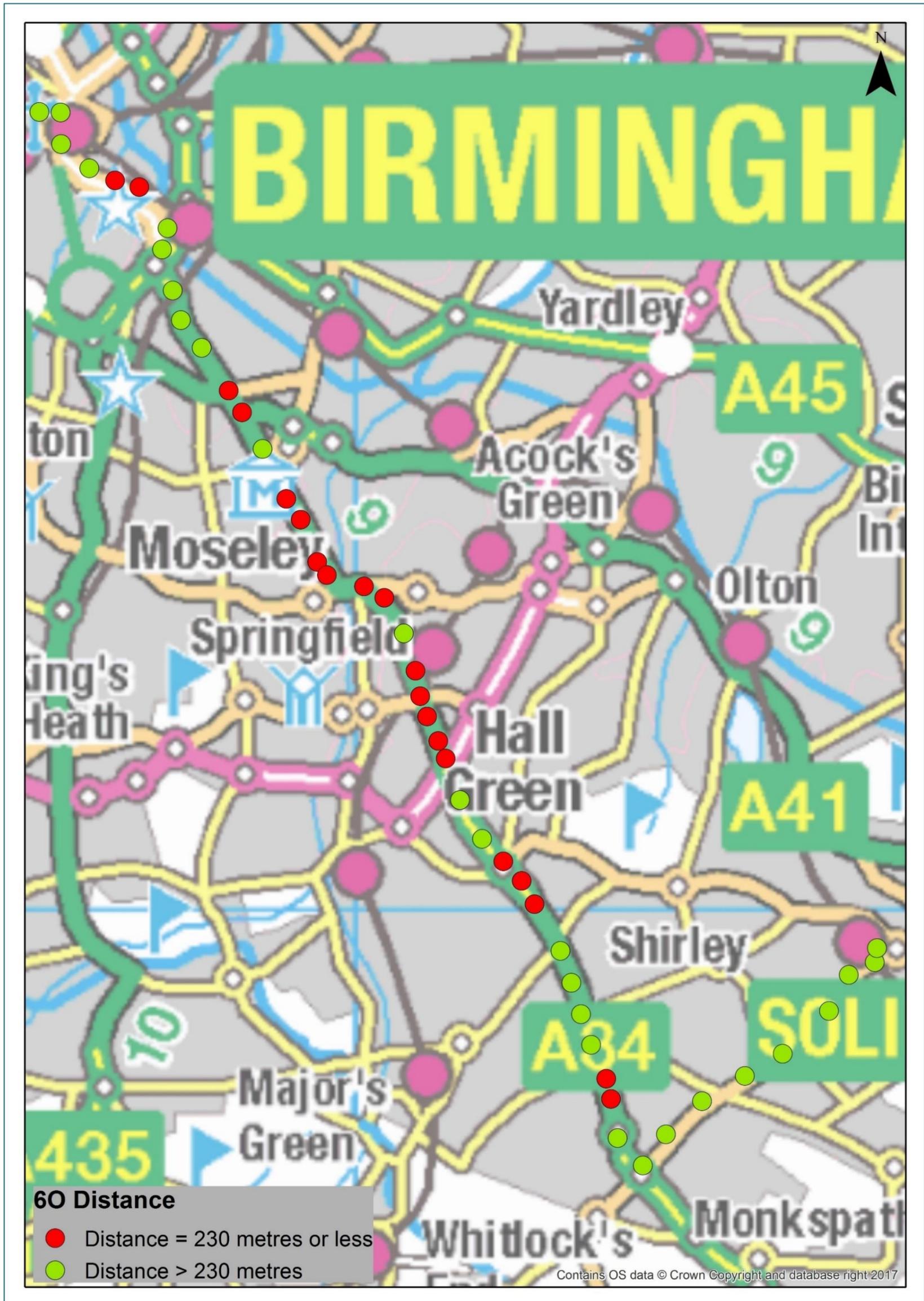
Map A (Proportion of Buses Calling) – 6 Outbound



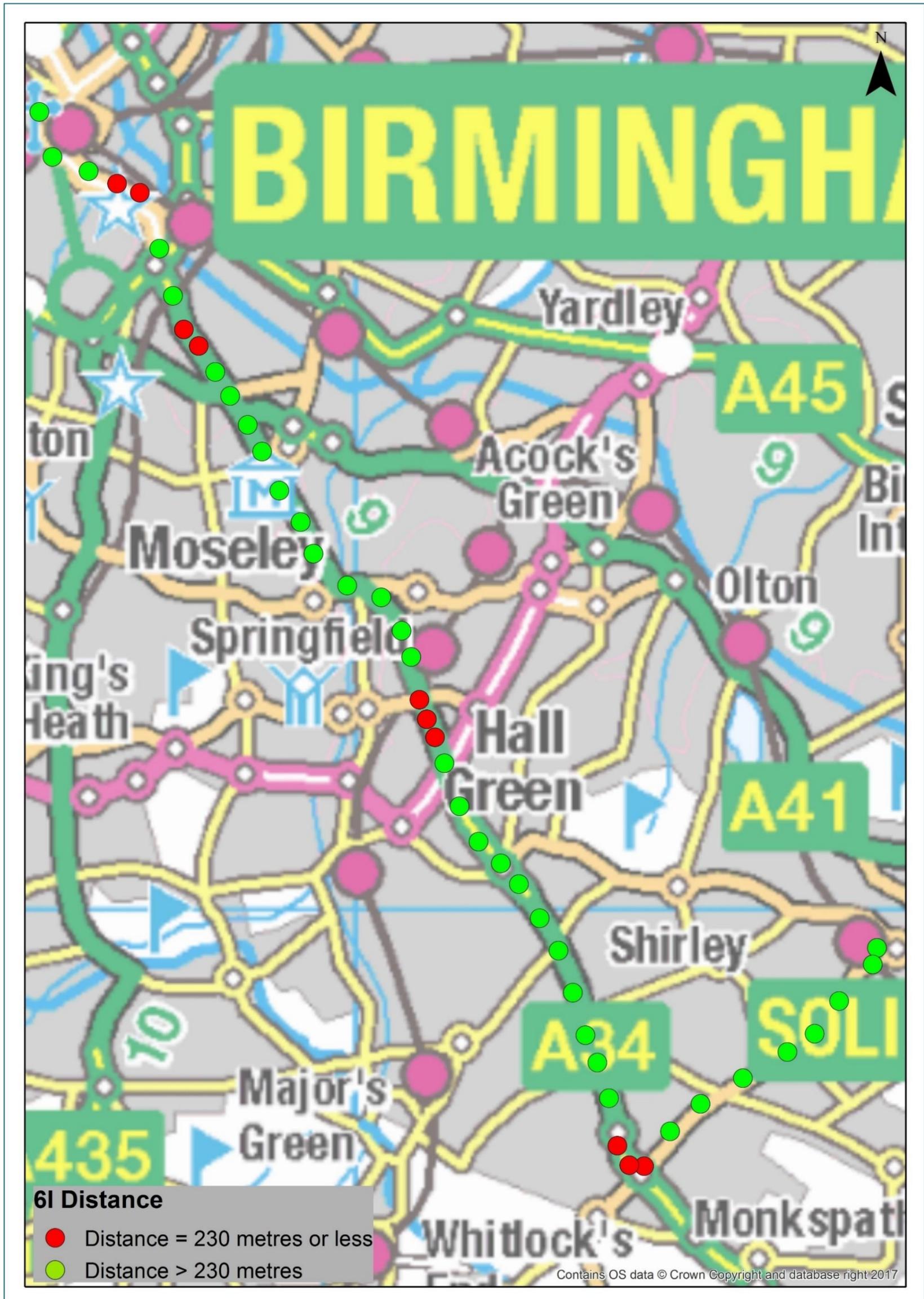
Map A (Proportion of Buses Calling) – 6 Inbound



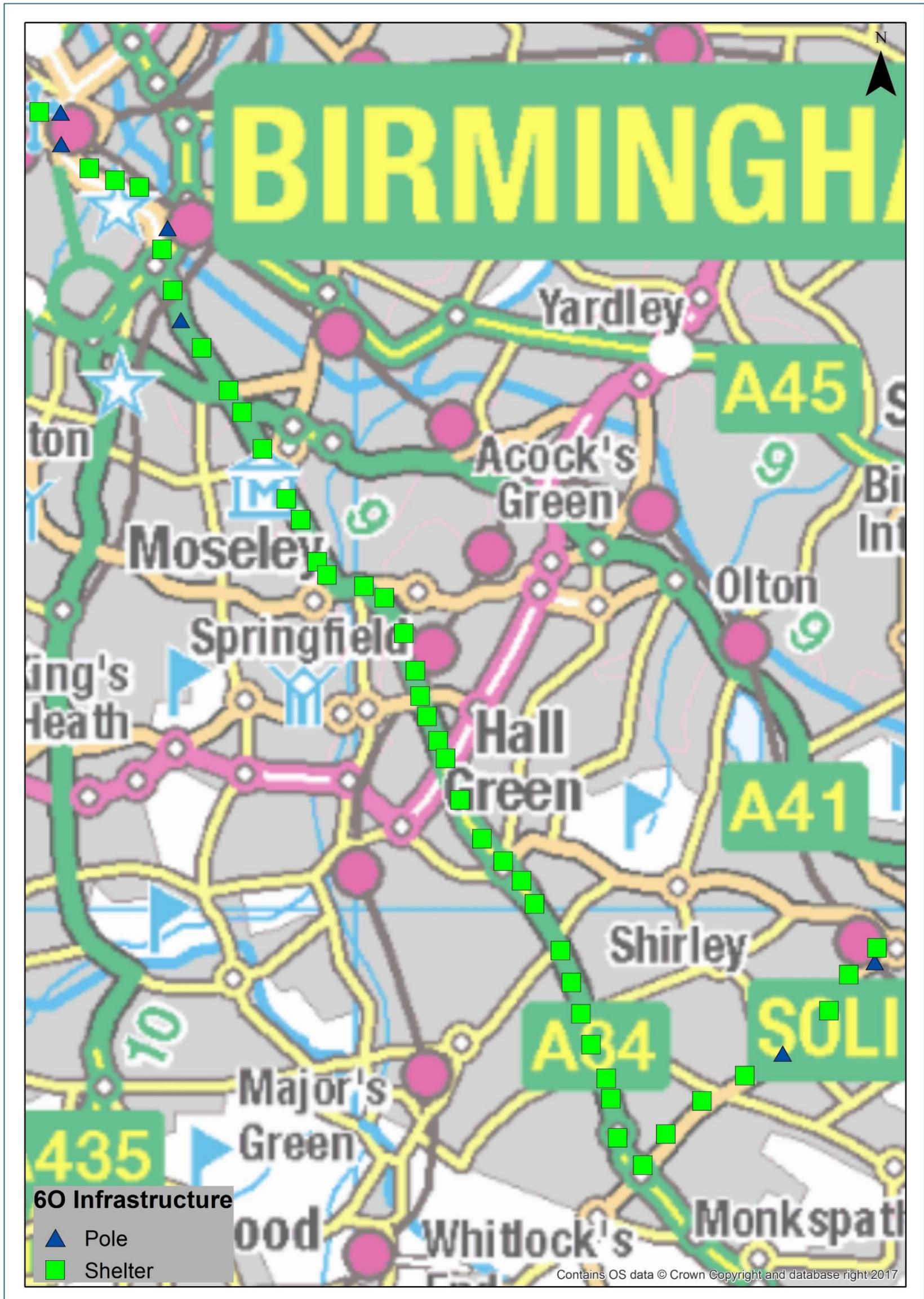
Map B (Distances between Stops) – 6 Outbound



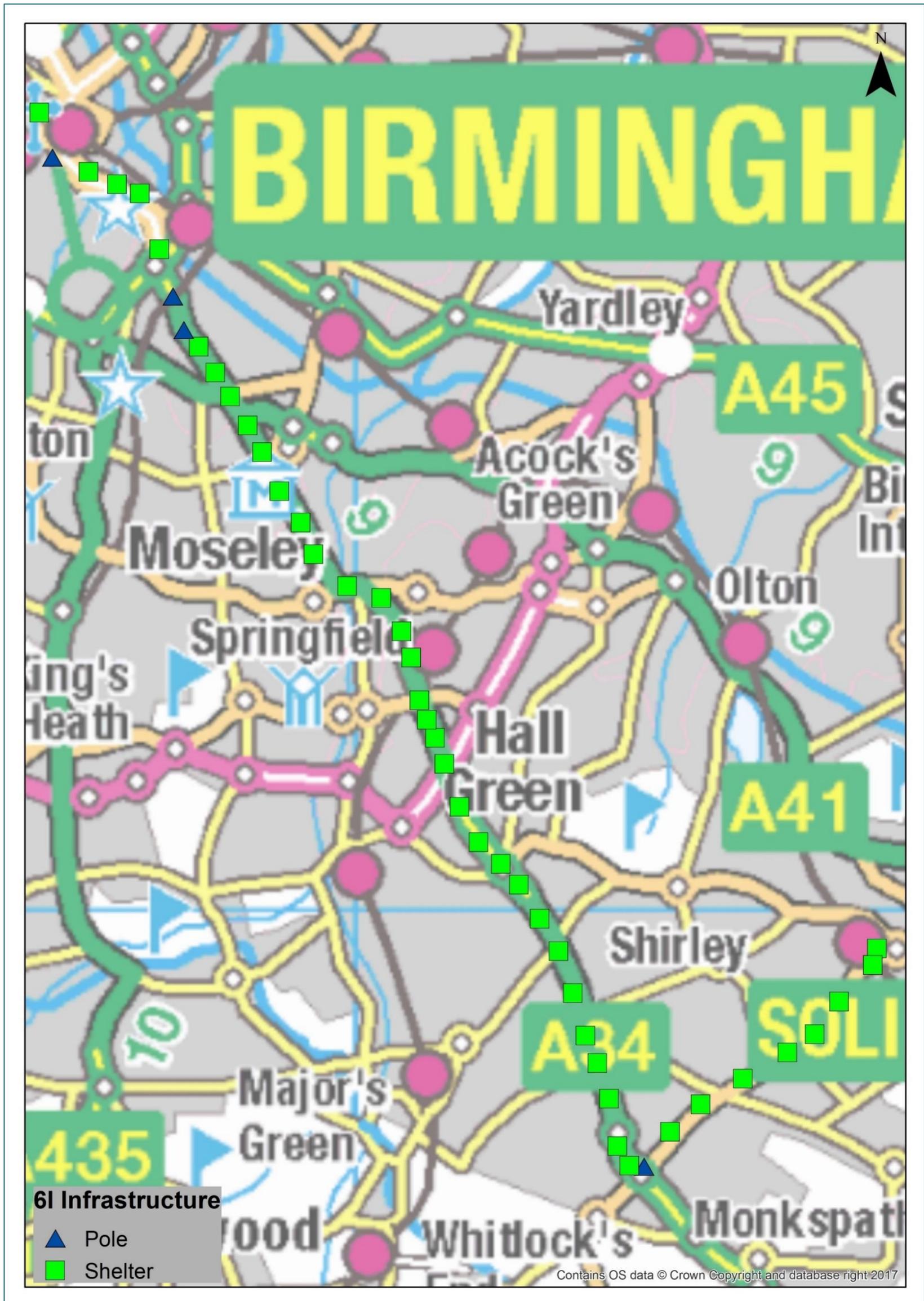
Map B (Distances between Stops) – 6 Inbound



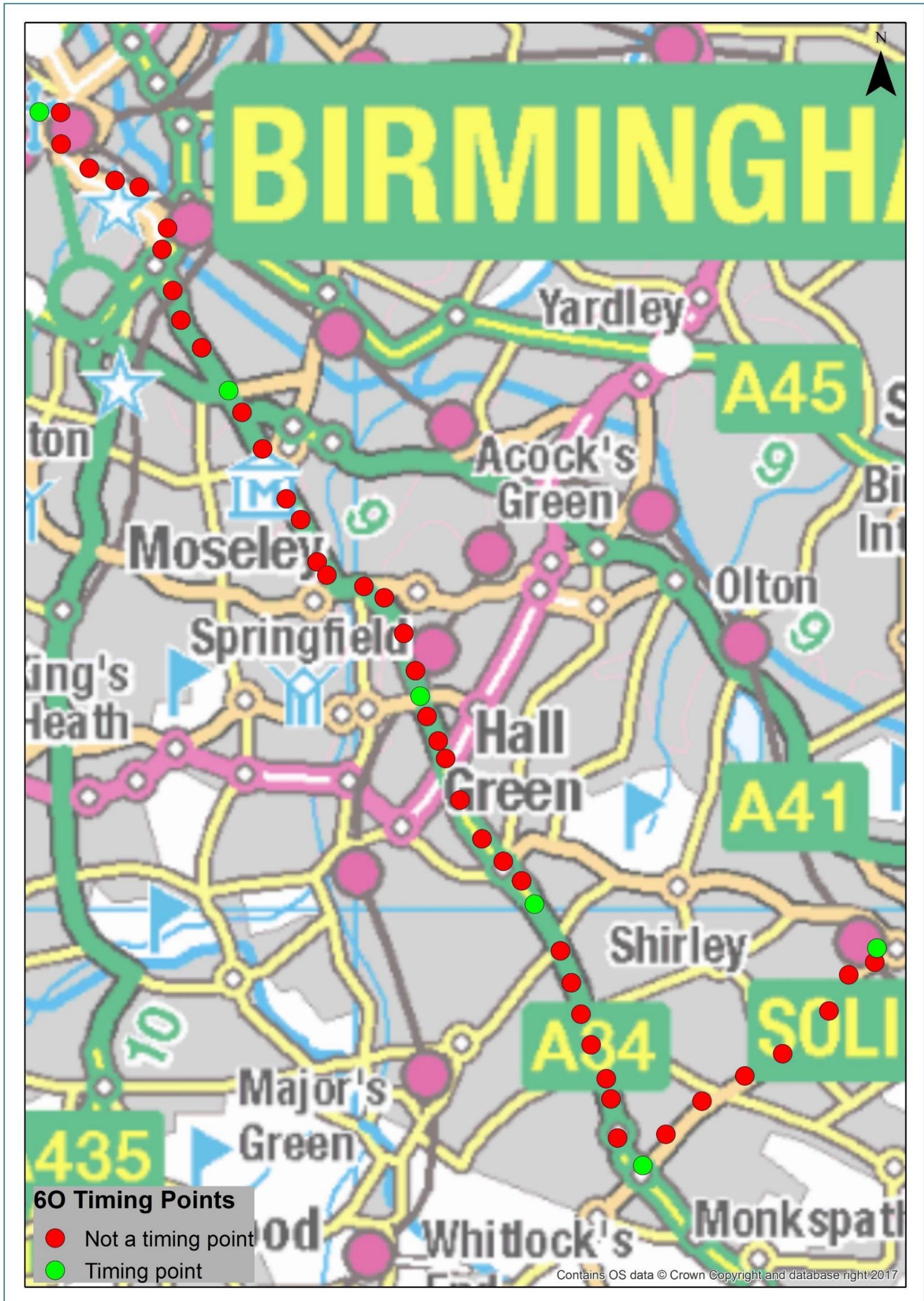
Map C (Infrastructure Type) – 6 Outbound

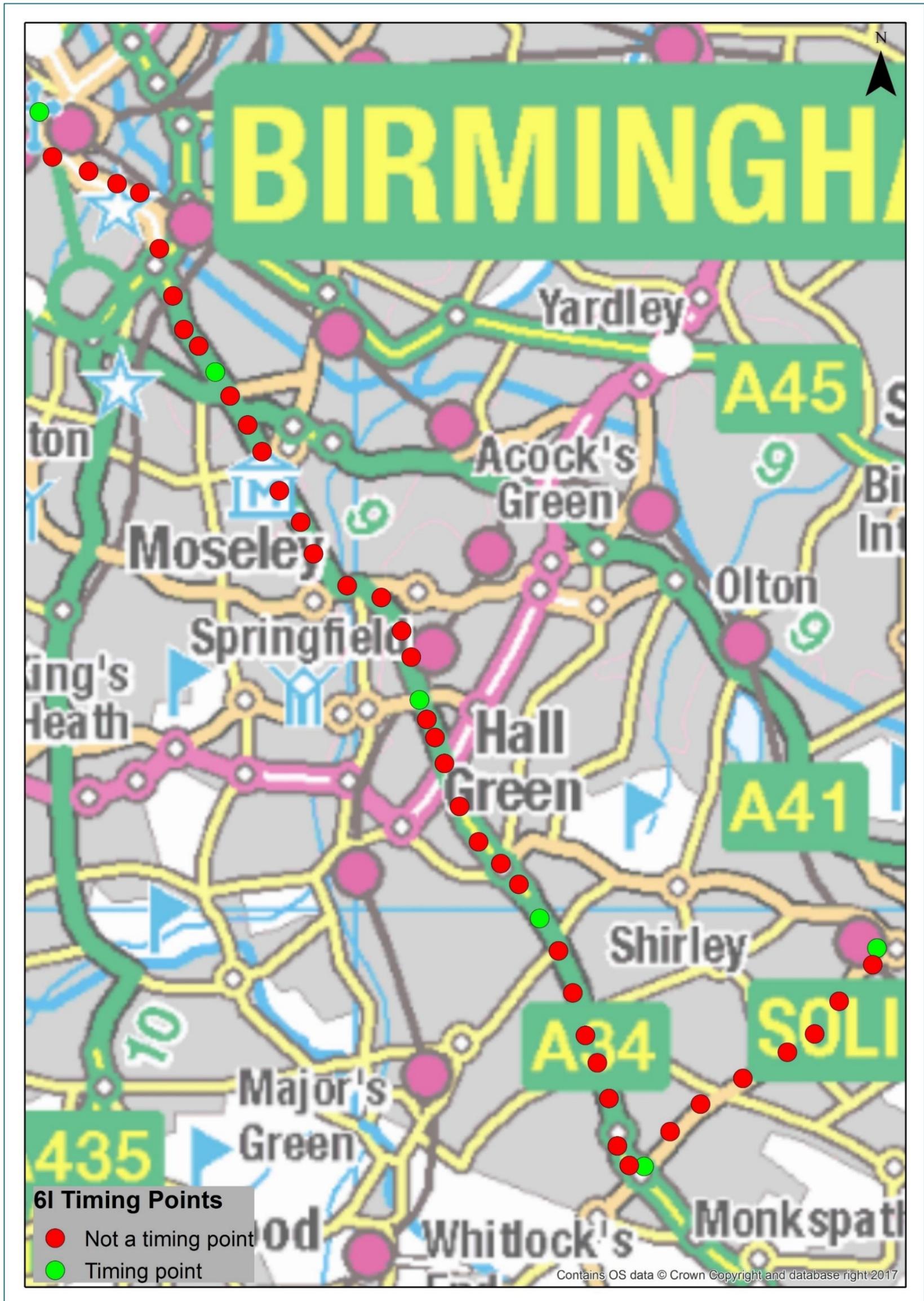


Map C (Infrastructure Type) – 6 Inbound

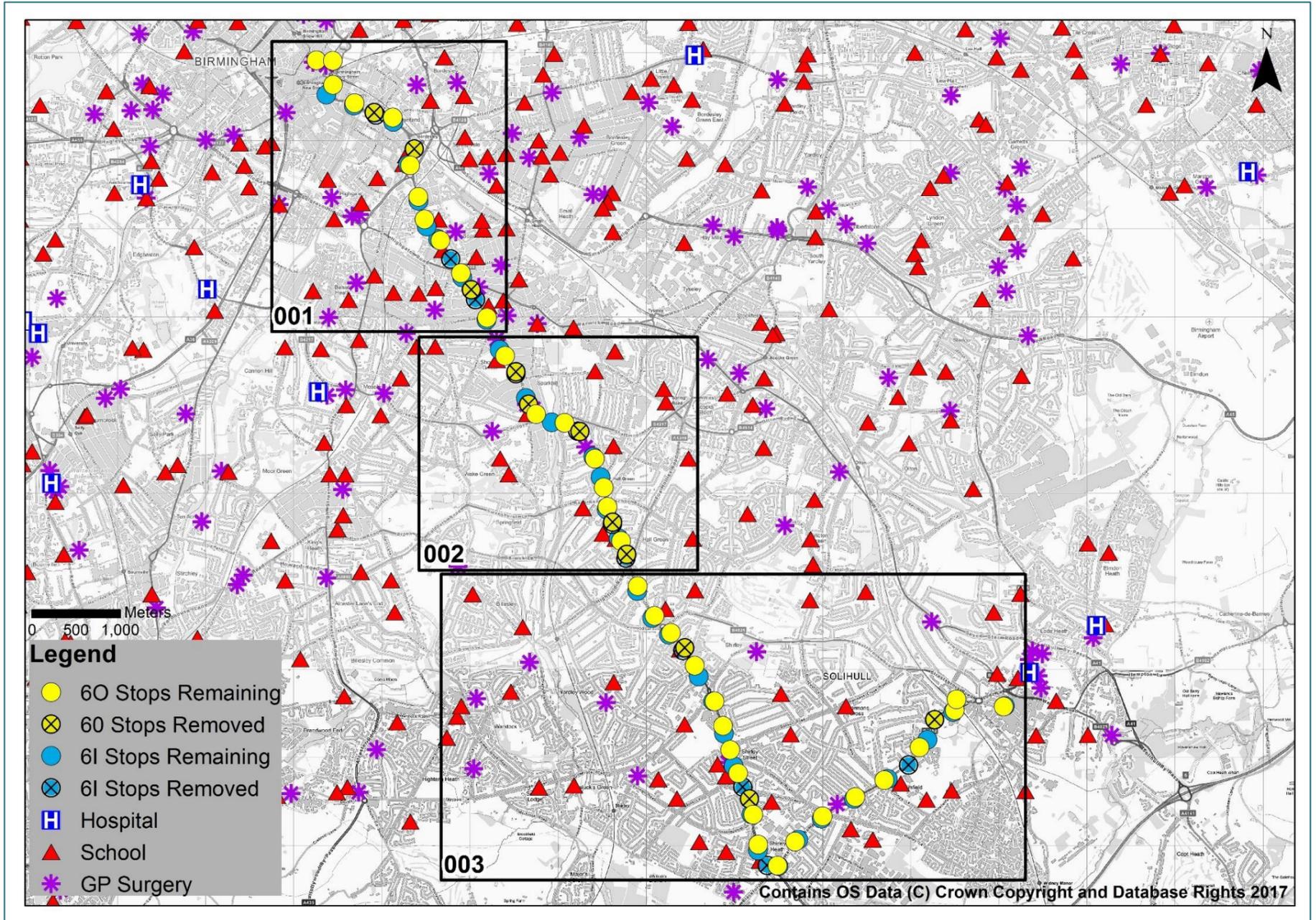


Map D (Timing Points) – 6 Outbound





Map E (Key Facilities) – Route 6



This page is intentionally left blank

Technical note

Project:	Birmingham Bus Stop Consolidation	To:	Matthew Till / Danny Gouveia
Subject:	50 Draft Report	From:	Andy Clark / Anna Little / Tim Colles
Date:	21 st July 2017	cc:	Adrian Taylor

1. Introduction

Atkins has been commissioned by National Express West Midlands to undertake a study investigating the scope for bus stops on several routes in Birmingham to be rationalised. This is in response to growing concern from National Express West Midlands and Transport for West Midlands (TfWM) regarding increasingly long and unreliable bus journeys in the West Midlands.

Bus patronage is dropping sharply as congestion increases. The average speed of buses has reduced by 3% (Birmingham-wide) between 2014 and 2016 with patronage reducing by 4% in response. These delays are amplified at peak times with buses 13% slower in the morning peak and 10% slower in the evening peak.

The time that passengers spend on the bus impacts the likelihood of passengers using the bus in the future. An increase of in-vehicle time of 10% will result in a 5% reduction in journeys made. Reducing in-vehicle time will have the opposite effect, with additional passengers drawn to the route. This demonstrates the importance of journey times in determining whether a passenger chooses to make a journey by bus and the sensitivity associated with changes in journey time.

The increases in road congestion are a major cause of the increase journey times. To an extent, without significant infrastructure spending or a marked decrease in car usage, this is out of the direct control of the bus operators. However, it is prudent to look at how services are routed to ensure that passengers are getting where they need to be expediently and without unnecessary delay. One element of delay is the amount of times a service stops along its route. The time it takes for a bus to slow to a stop and return to normal running speed is approximately 30 seconds. This is present despite the number of people that board a vehicle and a reduction in the number of times a vehicle stops can quickly decrease the in-vehicle time for passengers.

The locations of stops have evolved overtime with stops being relocated for new developments or road layouts meaning they are now in close proximity to other stops. In addition, some stop location result in buses being delayed when crossing junctions.

By removing stops along a route, bus operators can reduce journey times, however this does need to be considered in conjunction with the increase in walking time for passengers.

National Express West Midlands is part of the West Midlands Bus Alliance, consisting of representatives from the region's bus operators, the West Midlands Combined Authority, council highways and transportation departments, Local Enterprise Partnerships, the Safer Travel Partnership, councillors and Transport Focus.

The Alliance Board Members are responsible for identifying what the region's buses need to deliver and then putting policies and funding streams in place for this to be achieved. In March 2016, the board identified seven key actions which it will work together to deliver by 2020, as outlined in Figure 1.

Technical note

Figure 1. Key Targets for West Midlands Bus Alliance



The potential impacts on these key targets are considered later in this technical note, with specific focus on punctuality (aiming to reduce delay minutes).

This technical note sets out the results from Atkins' analysis of Route 50. The results of the assessments of other routes are outlined in subsequent technical notes.

Route 50 is linear, with outbound services travelling from Birmingham City Centre to Druids Heath and inbound services from Druids Heath to Birmingham City Centre. The route serves South Birmingham including Balsall Heath, Moseley and Kings Heath, and interchanges with several key corridors including the circular 11A and 11C routes. The daytime frequency¹ is approximately 13 buses per hour (BPH), with buses taking approximately 28-48 minutes to complete the route. Timetabled journey times vary considerably through the day, reflecting both congestion in the city and differing dwell times in response to demand.

Following this introduction, the technical note outlines the:

- Data Sources (**Section Two**);
- Methodology (**Section Three**);
- Key Findings (**Section Four**); and
- Summary (**Section Five**).

¹ Refers to National Express services. Diamond Buses also serve the corridor.

Technical note

2. Data Sources

Table 1 outlines the data that has been used to inform this commission. The data has been provided by a combination of Transport for West Midlands (TfWM), the Department for Transport (DfT) and National Express West Midlands. Atkins has combined the data from all three sources to derive a database of information for each route, which includes information around the provision of infrastructure at each stop, levels of usage and the distance between stops.

With regards to usage, there are two key sources of data, both provided by National Express West Midlands:

- Proportion of buses calling at stops: The data shows indicative percentages of the proportion of buses stopping at each bus stop. At a high level, this helps to determine which are the most heavily used stops on the route, but the obvious shortcoming is that it is not possible to determine from this data how many boarders / alighters there are when a vehicle does stop; and
- Boarders by fare stage: The data shows the numbers of boarders by fare stage, which Atkins has used in combination with the proportion of buses calling to build up an understanding of the relative level of usage.

Table 1. Summary of Data and Sources

Data Type	Transport for West Midlands (TfWM)	Department for Transport (DfT)	National Express West Midlands
Stop name	✓		
ATCO (unique code)	✓		
Infrastructure type (whether the stop has a shelter or flag pole)	✓		
RTPI (Y / N)	✓		
Timing point (Y / N)	✓		
Services calling	✓		
Easting / northing		✓	
Distance between adjacent stops			✓
Proportion of buses calling			✓
Boarders by fare stage			✓

Please note, some of the information provided by National Express West Midlands was inconsistent with other data sources. The information was therefore validated against Traveline data and Google Maps to ensure that the correct information was used for this report.

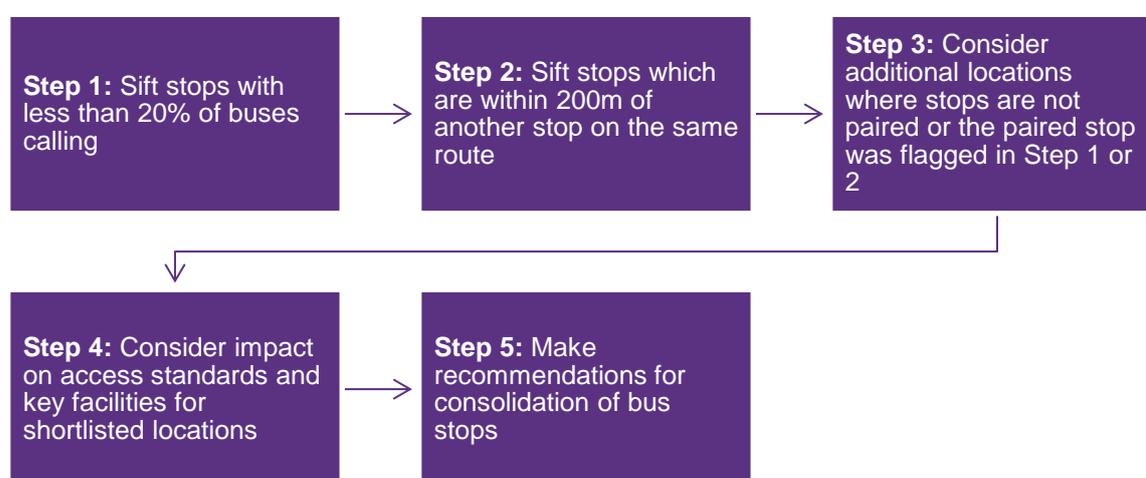
Technical note

3. Methodology

Atkins has undertaken a sifting process based on the information outlined in the database. There are several credible approaches which could be taken to determine the optimum stops for removal, but through discussion with National Express West Midlands and TfWM, Atkins has agreed a five-step process. Further details on these steps are now provided. A summary is provided in Figure 2.

Steps 1 and 2 are first applied to the route in one direction, with the same steps then repeated for stops in the opposite direction. Step 3 then considers instances where the stop was flagged in one direction but not the other and issues around an imbalance of stops between the two directions.

Figure 2. Summary of Methodology



Step 1: Sift stops with less than 20% of buses calling

Atkins has first sifted out the stops where less than 20% of buses are calling (Step 1a). This level of usage indicates that the stop is lightly used and hence should be considered as part of any future rationalisation process. A high level sift (Step 1b) of the shortlisted locations has then been carried out to determine whether there are any clear reasons why it may not be appropriate to remove the stop. This takes account of the spacing between stops, the routes served (whether served by the 50 only or the 50 and other routes) and location relative to any local facilities or transport interchanges such as railway stations. This also takes account of any operational need for the stop to remain.

Step 2: Sift stops which are within 200m of another stop on the same route

The second sift entails identifying those stops which are within 200m of another stop on the same route (in the same direction). The figure of 200m has been chosen as, in broad terms, closer spacing suggests there may be some duplication of coverage in terms of the West Midlands Combined Authority Bus Service Access Standards (see **Appendix A**), which state that for residential areas, the maximum desirable walking distance to bus services in continuously built-up areas is 400m during the hours of 07:00 to 19:00 on Monday to Saturday and 700m at other times. Step 2a relates to this first sift.

The output of Step 2a is a list of bus stops that are within 200m of another stop on the same route in the same direction. An assessment has then been made (Step 2b), considering the same factors as per Step 1b, to determine which of the two stops would be more suitable for removal. In some instances, there may be three or more consecutive stops with distances of less than 200m, and in these situations, Atkins has considered how the stops could best be rationalised to provide more even spacing.

Technical note

Step 3: Consider additional locations where stops are not paired or where the paired stop was identified in Step 1 or Step 2

In some cases, there may be an imbalance of stops in one direction relative to the other, which may be a function of the highway layout (for example, a one-way system or proximity to a major junction) or a function of the specific location relative to key attractors. Step 3a in the technical process has entailed Atkins considering any locations not flagged by either Step 1 or Step 2 where some rationalisation of stops may be appropriate because of the imbalance of stops in one direction relative to the other.

Finally, as Step 3b, there may be some instances where the gap between stops in one direction is slightly below 200m whilst it is slightly above 200m in the opposite direction. In this instance, it would be prudent to consider the opportunity to rationalise the stops in both directions rather than suggesting rationalisation in one direction but not the other. Another such instance relates to the proportion of buses calling. The level of usage may be below the 20% threshold in one direction (and hence would be flagged up in Step 1) but above 20% in the above direction. Again, in this instance, it is prudent to consider the pair of stops for rationalisation.

Note that the methodology assumes that a bus stop needs to be flagged in either Step 1, Step 2 or Step 3 to be considered for removal in Step 4. A bus stop therefore does not need to satisfy all criterion.

Step 4: Consider impact on access standards and key facilities for shortlisted locations

Having used Steps 1-3 to derive a shortlist of locations for potential rationalisation, Atkins has then considered the impact on both the West Midlands Combined Authority Bus Service Access Standards and the accessibility to key facilities, focussing on education and health facilities.

Step 5: Make recommendations for consolidation of bus stops

Finally, taking on board the outcomes of Steps 1 to 4, Atkins has made recommendations to National Express West Midlands around the locations where consolidation may be appropriate.

Technical note

4. Key Findings

The findings for Route 50 are now outlined.

Mapping Outputs

To support the sifting process, elements of the database have been developed into mapping outputs. These maps have been placed in **Appendix B**. For Route 50, the maps are as follows:

- **Map A:** Showing the proportion of buses calling. Red shading of a stop denotes less than 20% of buses calling. These maps have been used to inform Step 1 of the process;
- **Map B:** Showing distances (metres) between stops. Stops that are within 200m of another stop in the same direction are shown in red, with all other stops shown in green. These maps have been used to inform Step 2 of the process;
- **Map C:** Showing the infrastructure type (whether a pole or a shelter is provided);
- **Map D:** Showing whether the stop is a timing point; and
- **Map E:** Showing the location of bus stops relative to schools², GP surgeries³ and hospitals⁴. Note that this has been based upon data provided by the DfT.

Tabulated Outputs

Tabulated outputs are now provided to show how the database has been used to derive a shortlist of locations for consolidation.

Step 1: Sift stops with less than 20% of buses calling

Table 2 outlines the stops on Route 50 that have been shortlisted based on less than 20% of buses calling.

The sift (Step 1a) gave rise to six stops in the outbound direction and three stops in the inbound direction. Having undertaken further analysis on these locations (Step 1b), Atkins has recommended that two stops in the outbound direction and one stop in the inbound direction are considered later in the process, as there are reasons why the remainder of the stops should be retained. These reasons are outlined in Table 2.

Step 2: Sift stops which are within 200m of another stop on the same route

Table 3 outlines the stops on the 50 route that have been shortlisted based on a bus stop being within 200m of another stop on the same route in the same direction (Step 2a).

Note that Table 3 lists all the stops based on this criterion and hence it includes the stops either side of the 200m distance threshold. For example, if Stop B is 200m downstream of Stop A, then the table lists both Stop A and Stop B. In some cases, there are more than two consecutive stops. Solid black lines in Table 3 have been used to highlight the consecutive stops.

In order to provide a shortlist of locations for detailed assessment under Step 4, a column in Table 3 identifies the suggested stop(s) for removal. This is based on a range of factors, but typically centres on the spacing that remains if a given stop is removed. In some cases, Stop A may be served by Route 50 only whereas Stop B is served by multiple routes. In such instances, the decision has been made, unless specific

² Schools in England dataset, Department for Education, last updated 9 March 2017 (downloaded May 2017)

³ Details of GPs, GP Practices, Nurses and Pharmacies dataset from Organisation Data Services, published by NHS Digital, available from data.gov.uk (downloaded May 2017)

⁴ Hospitals dataset, published by NHS Choices, available from data.gov.uk (downloaded May 2017)

Technical note

operational reasons are known, to suggest that Stop A is removed. The specific reasons for choosing one stop over another are outlined in the right-most column of Table 3.

Step 3: Consider additional locations where stops are not paired or where the paired stop was identified in Step 1 or Step 2

Finally, Atkins has undertaken a process to identify any additional locations. The results are outlined in Table 4, with the right-most column providing justification. The table shows that of the seven stops, most were identified as a result of the stop in the opposite direction being shortlisted in Step 2.

Table 2. <20% of buses calling (Step 1)

Stop Name (Yellow = Outbound, Blue = Inbound)	ATCO	Proceed to Step 4?	Suggested Removal?
Moseley Street	43000217202	Yes	Subject to mapping against the access standards and further interrogation of key facilities.
Betton Road	43000414601	No	Interchange with Routes 50a and 150. If the stop was removed, the distance between adjacent stops would be approximately 810m, in an area where few other bus services operate.
Warstock Road	43000416101	Yes	Subject to mapping against the access standards and further interrogation of key facilities.
Manningford Rd	43000418302	No	Interchange with several other routes is provided at this stop. If the stop was removed, the distance between adjacent stops would be approximately 680m. In addition, the stop serves Cherry Lodge Care Home.
Baverstock School	43000418201	No	Interchange with several other routes is provided at this stop. If the stop was removed, the distance between adjacent stops would be approximately 750m. In addition, the stop serves The Baverstock Academy.
Brockworth Rd	43000417302	No	Interchange with several other routes is provided at this stop. If the stop was removed, the distance between adjacent stops would be approximately 620m, in an area where few other bus services operate.
Cocks Moors Woods	43000414701	No	Interchange with Routes 50a and 150. If the stop was removed, the distance between adjacent stops would be approximately 550m. In addition, the stop serves Cocks Moors Wood Leisure Centre.
Betton Road	43000414603	Yes	Subject to mapping against the access standards and further interrogation of key facilities.
Camp Hill Middleway	43000217301	No	Interchange with Routes 50a and 150. If the stop was removed, the distance between adjacent stops would be approximately 440m. In addition, the stop serves Calthorpe Academy.

Table 3. Stops within 200m of another stop (Step 2)

Stop Name (Yellow = Outbound, Blue = Inbound)	ATCO	Proceed to Step 4?	Suggested Removal?
Birchill Street	43000211803	Yes	Remove ATCO xx803 given more trip attracting land uses in proximity to ATCO xx902.
Alcester Street	43000211902	No	
Athole Street	43000217901	Yes	Remove ATCO xx901 given proximity to interchange route at ATCO xx701.
Highgate Fire Stn (Highgate Road)	43000217701	No	All stops to be retained given density of trip attracting land uses, including a hospital.
Woodbridge Road	43000219201	No	
Moseley Village (Saint Marys Row MB)	43000219503	No	
Moseley Hall Hospital	43000410102	No	
Moor Green Lane	43000410201	Yes	Remove ATCO xx201 given proximity of ATCO xx303 to two schools.
Queensbridge School	43000410303	No	Remove ATCO xx101 – see Table 2 above for information.
Cocks Moor SportsCt	43000414802	No	
Warstock Road	43000416101	Yes	Remove ATCO xx102 given proximity of ATCO xx201 to The Baverstock Academy.
Baverstock School	43000418201	No	
Kimpton Close	43000418102	Yes	Keep ATCO xx202 as the distance between the two adjacent stops for Route 49 (between Solihull and Northfield) would be too great if the stop was removed
Druids Heath Britis	43000417202	No	
Warstock Road	43000416102	Yes	Remove ATCO xx102 given proximity of ATCO xx801 to Cocks Moor Leisure Centre.
Cocks Moor SportsCt	43000414801	No	Remove ATCO xx603 – see Table 2 above for information.
Cocks Moors Woods	43000414701	No	
Betton Road	43000414603	Yes	
Saint Marys Row MD (Moseley Village)	43002200505	No	
Woodbridge Road	43000219202	Yes	Remove ATCO xx202 given spacing of three consecutive stops.
Park Hill	43000219101	No	
Louise Lorne Road	43000218402	Yes	Remove ATCO xx402 given density of leisure and employment land uses close to ATCO xx302.
Trafalgar Road	43000218302	No	
Athole Street	43000217902	No	Remove ATCO xx401 given spacing of three consecutive stops.
Upper Conybere St	43000217501	No	
Leopold Street	43000217401	Yes	
Camp Hill Middleway	43000217301	No	Remove ATCO xx201 given proximity of xx301 to the Calthorpe Academy and ATCO xx002 to a number of trip attracting land uses.
Moseley Street	43000217201	Yes	
Highgate Police Stn Cheapside	43002105002	No	

Table 4. Additional locations (Step 3)

Stop Name (Yellow = Outbound, Blue = Inbound)	ATCO	Proceed to Step 4?	Supporting Comment
Louise Lorne Road	43000218401	Yes	Shortlisted in opposite direction in Step 2.
Leopold Street	43002101002	No	Stop to be retained given rationalisation in Step 2.
Maypole, adj Manningford Road	43000418301	No	Imbalance of stops. Suggest removing ATCO xx101.
Maypole, opp Amwell Grove	43004100101	Yes	
Birchill Street	43000211801	Yes	Shortlisted in opposite direction in Step 2.
Moor Green Lane	43000410202	Yes	Shortlisted in opposite direction in Step 2.
Kimpton Close	43000418101	No	Stop to be retained given rationalisation in Step 2.

Technical note

Step 4: Consider impact on access standards and key facilities for shortlisted locations

The shortlisted locations from Steps 1, 2 and 3 are outlined in Table 5.

For each location, Atkins has then undertaken a process of considering whether removing the stop will have an impact on the West Midlands Combined Authority Bus Access Standards. Through agreement with National Express West Midlands and TfWM, Atkins has mapped the impact of removing the bus stop using ArcGIS software. Note that this analysis is based on the highway network only⁵ and hence in a situation where the access standard (by highway) is no longer being met, it is necessary to consider whether footways may mean that the access standard is in fact being met. The results of the analysis are outlined in Figure 5 onwards.

Note that rather than considering each stop in isolation, Atkins has mapped the entirety of the impact of all stops in Table 5 being removed. Figures 5 onwards show that in virtually all cases, there has been very little impact on the access standards, with the density of bus stops on other routes meaning that even once a Route 50 stop is removed, adjacent residential areas are still within 400m of another bus stop, which means that the access standard is still being met.

There are a few exceptions to this where it appears that the access standard is no longer being met, as identified in Figures 6 and 8.

- Figure 6, Map 002, shows that with the removal of the two Louise Lorne Road stops, parts of Trafalgar Road and Park Road no longer meet the access standard, which means that they are no longer within 400m by highway of another bus stop. Further investigation has found that there are no additional footways that can reduce the distance to the nearest bus stop from these two areas. However, as it such a small area of the road that is affected, it is reasonable to conclude that the changes outlined in Table 5 will have a minimal impact in regard to the access standard;
- Figure 6 also shows that the removal of the Woodbridge Road stop (inbound) will result in part of Chantry Road no longer having its access standard met. Further investigation has found that there are no additional footways that can reduce the distance to the nearest bus stop from this area. However, as it such a small area of the road that is affected, it is again reasonable to conclude that the changes outlined in Table 5 will have minimal impact in regard to the access standard;
- Figure 6 also shows that the removal of the two Moor Green Lane stops will result in part of Moor Green Lane no longer being with 400m by highway of another bus stop. Further investigation has found that there are no additional footways that can reduce the distance to the nearest bus stop from this area. However, as it such a small area of the road that is affected, it is reasonable to conclude that the changes outlined in Table 5 will have minimal impact in regard to the access standard;
- Figure 8, Map 004, shows that with the removal of the two Warstock Road stops, parts of Warstock Road and Limekiln Lane will no longer meet the access standard. Further investigation has found that there are no additional footways that can reduce the distance to the nearest bus stop from this area. However, as it such a small area of the road that is affected, it is reasonable to conclude that the changes outlined in Table 5 will have minimal impact in regard to the access standard; and
- Finally, Figure 8 also shows that the removal of the Amwell Grove stop (inbound) will result in parts of Sladepool Farm Road and Henlow Road no longer meeting the access standard. However, further interrogation of the layout of Sladepool Farm Road shows that there is a footpath (see Figure 3) which provides access to Littlecroft Road, leading to Glenavon Road which is served by the 27 and 802 bus services. The footpath is close the junction between Sladepool Farm Road and Henlow Road and can therefore be accessed by residents on both roads. For this reason, it is reasonable to conclude that the changes outlined in Table 5 do not have any adverse impact in regard to the access standards for Sladepool Farm Road and Henlow Road.

⁵ <https://www.ordnancesurvey.co.uk/business-and-government/products/meridian2.html>

Technical note

Figure 3. Sladepool Farm Road – footway access to Littlecroft Road / Glenavon Road



Copyright @ Google 2017

Finally, for the shortlisted locations outlined in Table 5, Atkins has made an assessment to determine whether removal of the stop will have an implication in regard to access to key facilities, focussing on schools, hospitals and GP surgeries. This assessment uses Map E in **Appendix A**.

The assessment has shown that the proposed stops for removal are not adversely impacting accessibility to key facilities. Even with removal of some stops, the spacing of stops remains relatively dense and therefore key facilities are still adequately served. An overview map of the proposed consolidation, alongside the key facilities, is shown in Figure 9.

Step 5: Make recommendations for consolidation of bus stops

On the basis of the analysis presented to date, Atkins recommends that the full list of stops in Table 5 is considered by National Express West Midlands for rationalisation.

A reasonable working assumption⁶ is that removal of one stop can save of the order of 30 seconds, given the need for the bus to decelerate / accelerate and the dwell time associated with passengers boarding and alighting. Clearly the exact extent of the saving will be dependent upon local conditions, including the ability for the bus to merge back into general traffic. We have used the 30 saving in conjunction with the information around proportion of buses calling to determine how much time could practically be saved per stop. For example, if only 30% of buses call at the stop, then it is reasonable to assume that 30% of 30 seconds will be saved at that stop, rather than the full 30 seconds. If 100% of buses stop, then the full 30 seconds saving would be appropriate.

When considering the usage of the 16 stops suggested for removal, it is reasonable to assume that approximately 1 minute could bus saved per bus outbound on Route 50. Inbound, it is reasonable to assume that approximately 1 minute, 20 seconds could bus saved per bus on the route. This journey time saving may enable a reduction in the peak vehicle requirement (PVR) for National Express West Midlands. Reducing the

⁶ Working assumption for National Express West Midlands

Technical note

number of stops is also expected to lead to an increase in punctuality, which was one of the stated targets of the West Midlands Bus Alliance.

Technical note

Table 5. List of Locations for Assessment in Step 4

Stop Name	ATCO	Identified in:	Access Standard Met based on proposal?	Access to Key Facilities Maintained?
Birchill Street	43000211803	Step 2	✓ (Figure 5)	✓ (see Figure 9 for all)
Moseley Street	43000217202	Step 1	✓ (Figure 5)	✓
Athole Street	43000217901	Step 2	✓ (Figure 5)	✓
Louise Lorne Road	43000218401	Step 3	x (Figure 6)	✓
Moor Green Lane	43000410201	Step 2	x (Figure 6)	✓
Warstock Road	43000416101	Step 1	x (Figure 8)	✓
Kimpton Close	43000418102	Step 2	✓ (Figure 8)	✓
Maypole, opp Amwell Grove	43004100101	Step 3	✓ (Figure 8)	✓
Warstock Road	43000416102	Step 2	x (Figure 8)	✓
Baton Road	43000414603	Step 1	✓ (Figure 7)	✓
Moor Green Lane	43000410202	Step 3	x (Figure 6)	✓
Woodbridge Road	43000219202	Step 2	x (Figure 6)	✓
Louise Lorne Road	43000218402	Step 2	x (Figure 6)	✓
Leopold Street	43000217401	Step 2	✓ (Figure 5)	✓
Moseley Street	43000217201	Step 2	✓ (Figure 5)	✓
Birchill Street	43000211801	Step 3	✓ (Figure 5)	✓

Figure 4. Proposed Rationalisation (Overview)

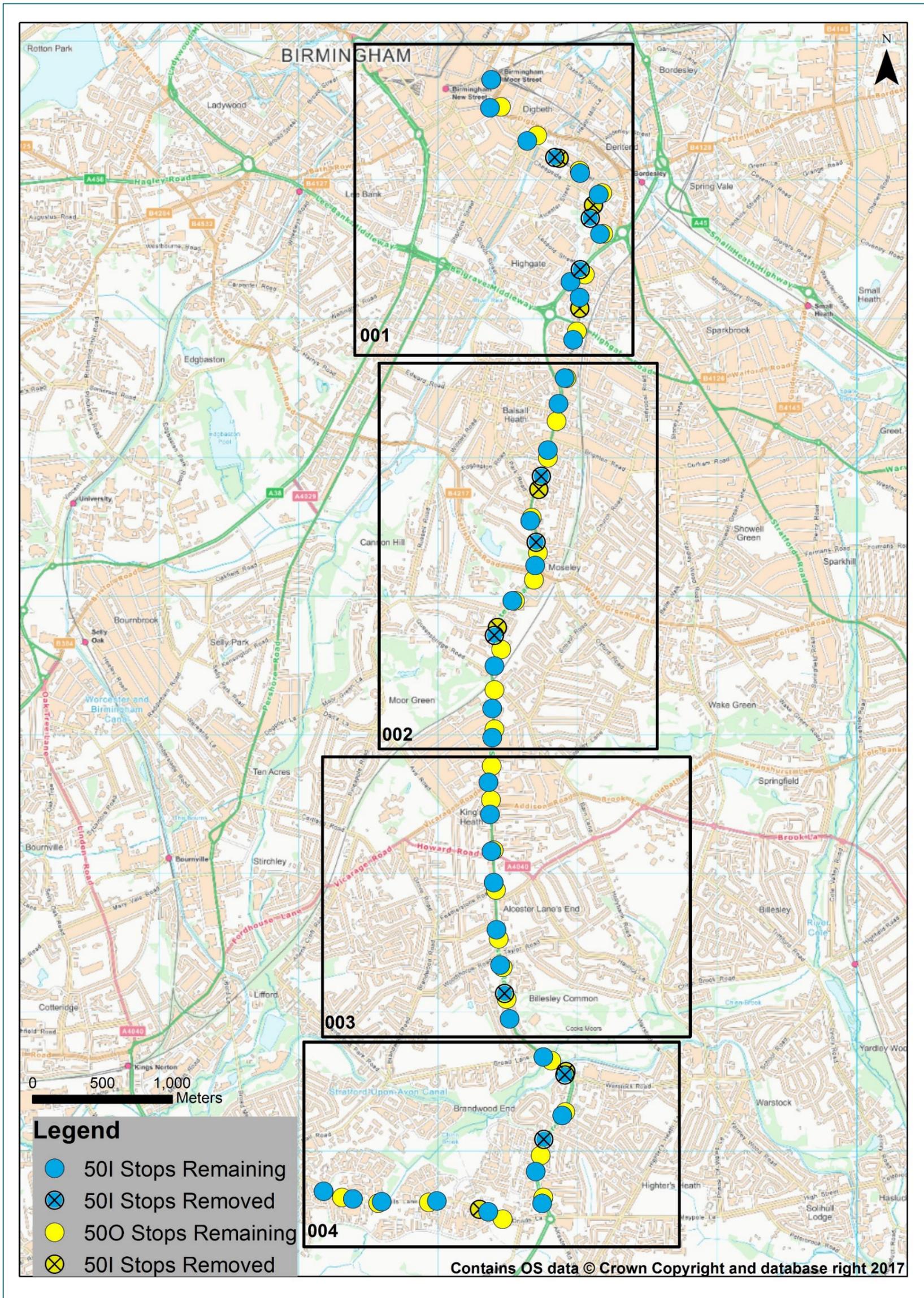


Figure 5. Supporting Map - 001

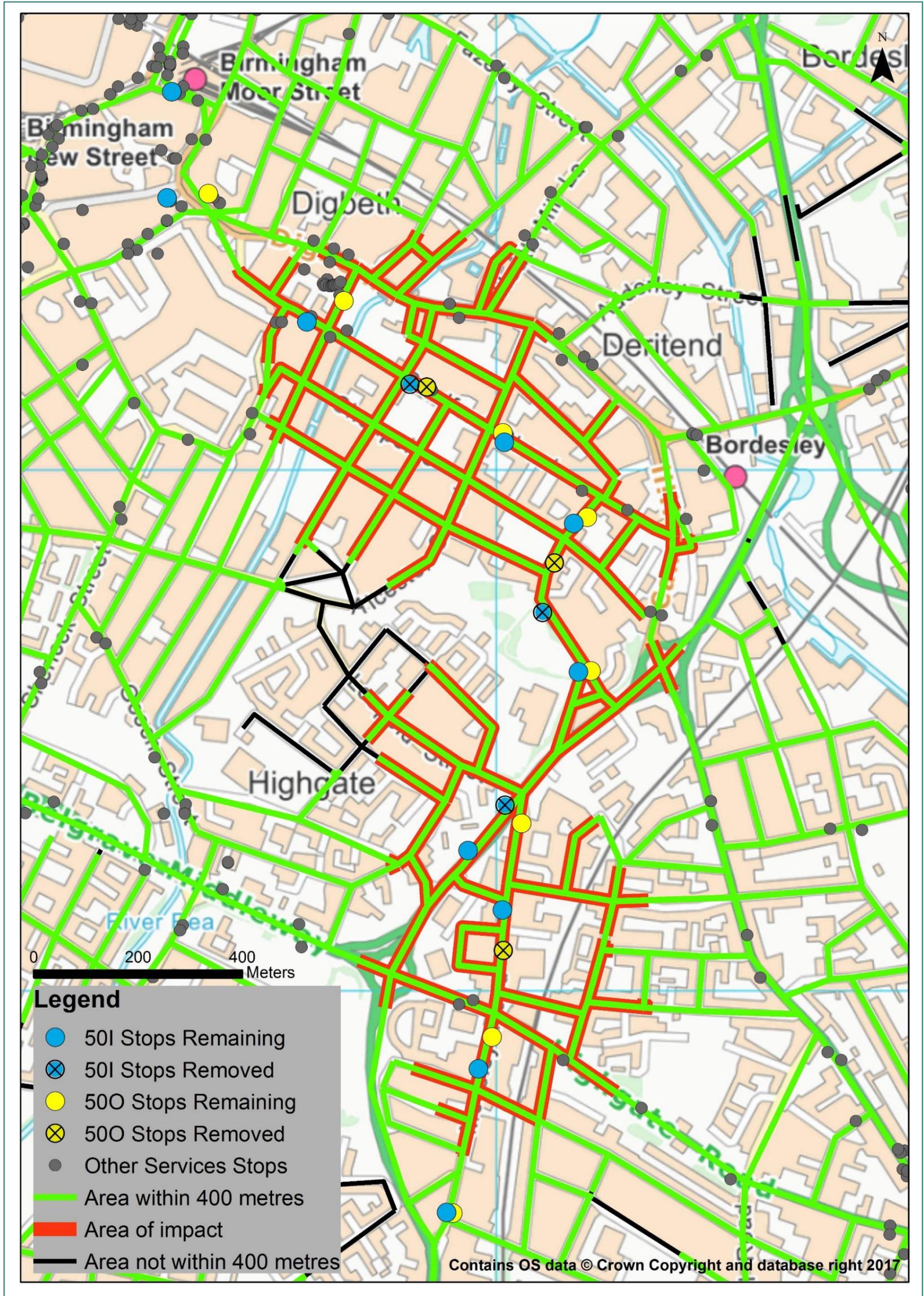


Figure 6. Supporting Map - 002

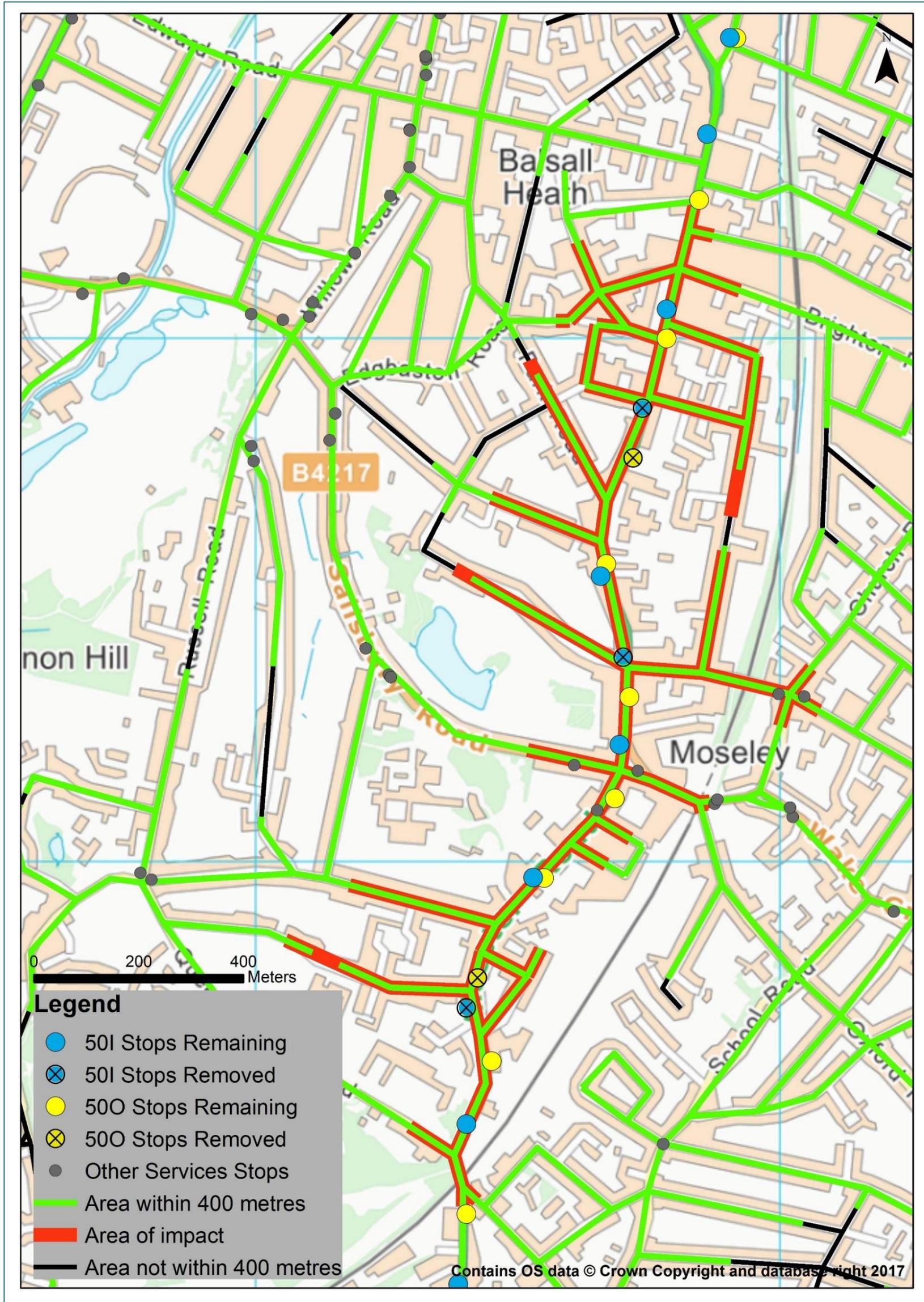


Figure 7. Supporting Map - 003

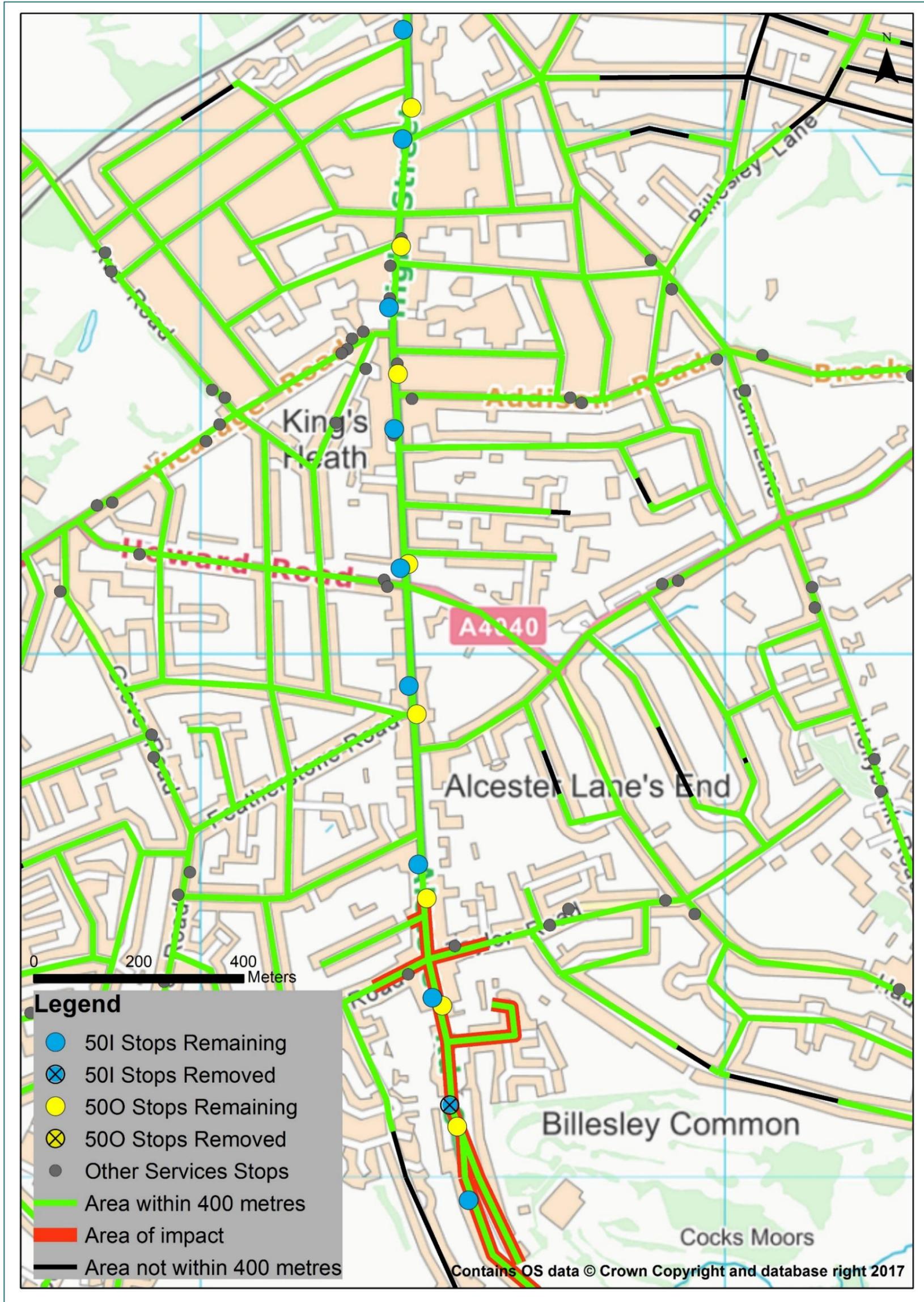


Figure 8. Supporting Map - 004

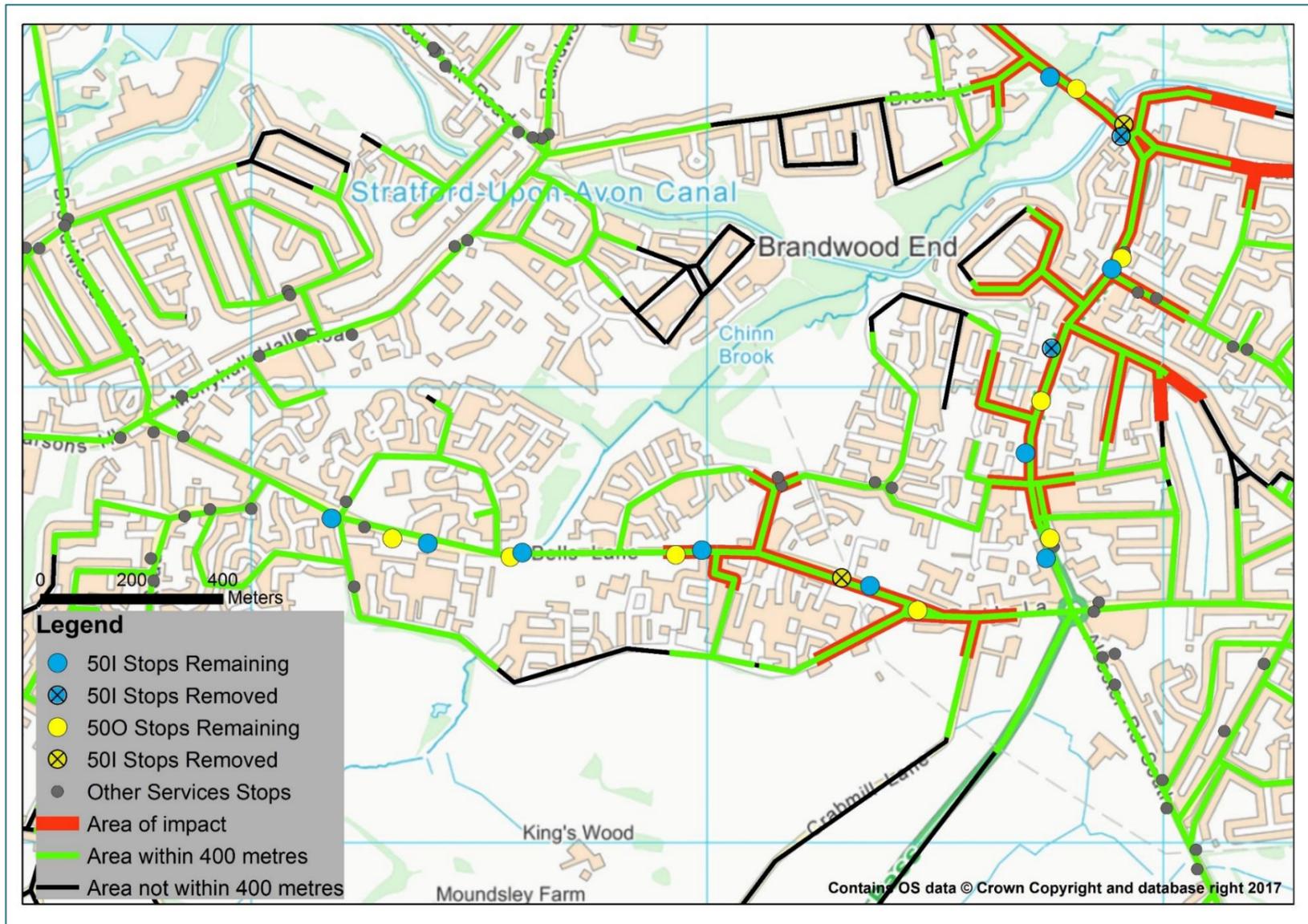
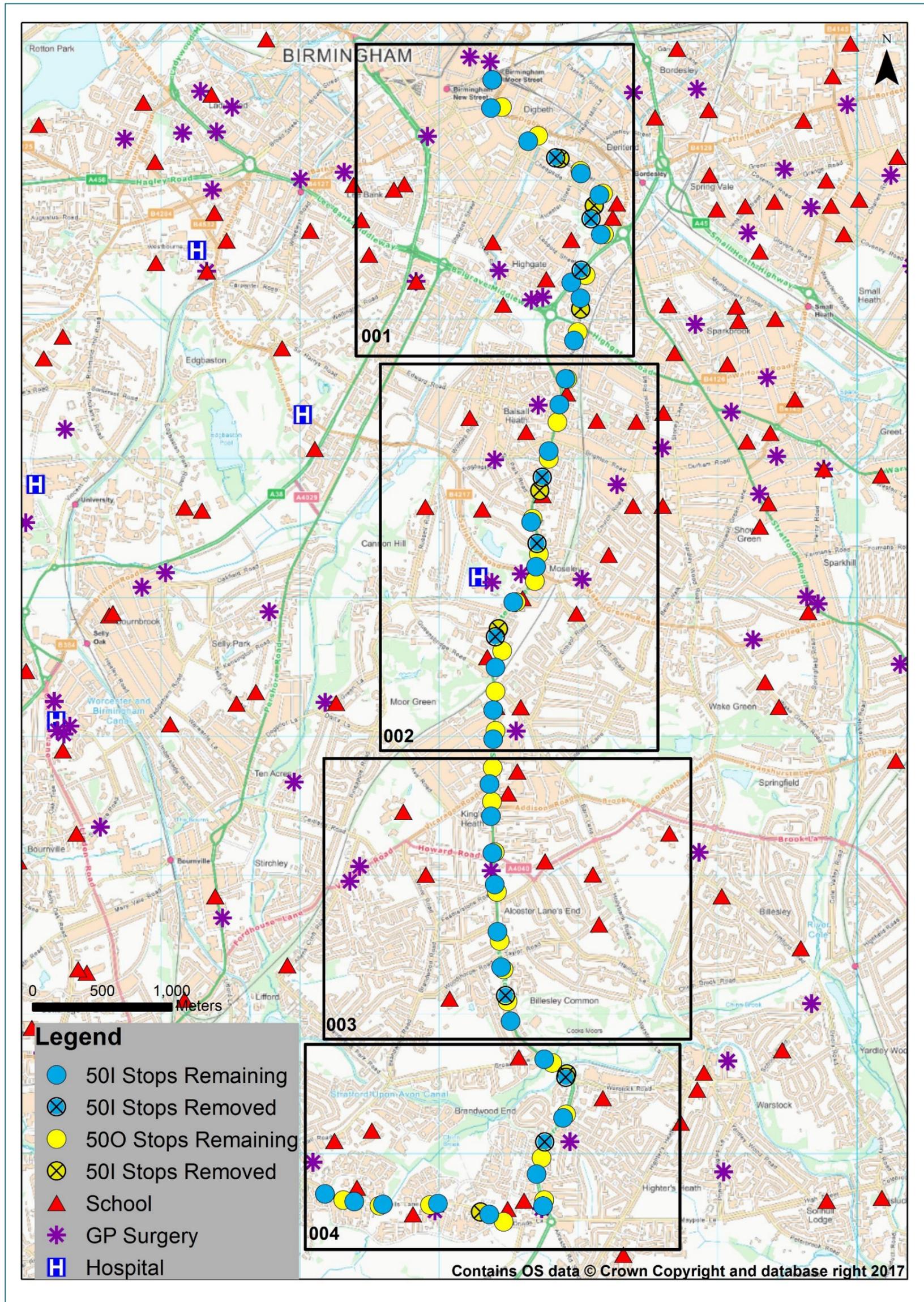


Figure 9. Proposed Rationalisation alongside Key Facilities



Technical note

5. Summary

Atkins was commissioned by National Express West Midlands to undertake a study investigating the scope for bus stops on several routes in Birmingham to be rationalised. This was in response to growing concern from National Express West Midlands and TfWM regarding increasingly long and unreliable bus journeys in the West Midlands.

There are several credible approaches which could be taken to determine the optimum stops for removal, but through discussion with National Express West Midlands and TfWM, Atkins has agreed a five-step process. This process has been informed by data provided by a combination of TfWM, the DfT and National Express West Midlands.

The focus of this commissions has been on Route 50 which is a linear route with outbound services travelling from Birmingham City Centre to Druids Heath and the inbound services from Druids Heath to Birmingham City Centre. The route serves South Birmingham including Balsall Heath, Moseley and Kings Heath, and interchanges with several key corridors including the circular 11A and 11C routes. The day time frequency is approximately 13 buses per hour (BPH), with buses taking approximately 28-48 minutes to complete the route. Timetabled journey times vary considerably through the day, reflecting both congestion in the city and differing dwell times in response to demand.

Having undertaken the five-step process, Atkins has recommended a list of stops (7-9 in each direction) which could be removed / relocated in the future. A reasonable working assumption is that removal of one stop can save of the order of 30 seconds, given the need for the bus to decelerate / accelerate and the dwell time associated with passengers boarding and alighting. When considering the usage of the 16 stops suggested for removal in conjunction with the 3 second saving, it is reasonable to assume that approximately 1 minute could bus saved per bus outbound on Route 50. Inbound, it is reasonable to assume that approximately 1 minute, 20 seconds could bus saved per bus on the route. This journey time saving may enable a reduction in the peak vehicle requirement (PVR) for National Express West Midlands. Reducing the number of stops is also expected to lead to an increase in punctuality, which was one of the stated targets of the West Midlands Bus Alliance.

Technical note

Appendix A. West Midlands Combined Authority Bus Service Access Standards

Technical note

West Midlands Combined Authority Bus Service Access Standards

Accessibility to the bus network

- 1.1 Residential Areas – The maximum desirable walking distance to bus services in continuously built-up areas is 400 metres during the hours of 07.00 to 19.00 on Monday to Saturday and 700 metres at other times. Wherever possible the services should provide links to local centres (post office, shops, services etc) and to interchanges with the public transport network.
- 1.2 The above distances are reduced in areas of severe gradients or where a high proportion of elderly people or people with mobility difficulties reside.
- 1.3 In lower density built-up areas the maximum desirable walking distance at all times is 700 metres, and in rural areas 1.5km.
- 1.4 Hospitals – minimum standards of service calculated according to total trips per annum using all modes of transport, to individual sites.
- 1.5 Major Urban Centres – bus access arrangements should be equivalent to or better than those provided for car users.
- 1.6 Suburban District Shopping Centres – to be served as closely as road layout will allow during main shop opening periods.
- 1.7 Places of Entertainment and Recreation – attractions be within 400/700 metres of a bus service during the hours of opening. Where this is not met, a special service with partnership funding will be considered.
- 1.8 Normal bus access standards will apply in Midland Metro and Bus Rapid Transit corridors unless adapted to reflect agreed local circumstances in relation to the provision of these rapid transit modes.

Frequency

- 2.1 Mondays to Saturdays - Minimum standard frequency for:
 - (a) Continuously built up areas: between 07.00 and 19.00 is two journeys per hour.
 - (b) Low density residential areas: between 07.00 and 19.00 is one journey per hour.
 - (c) Rural areas: between 07.00 and 19.00 is one journey per hour.

Page 1 of 2

Technical note

- 2.2 Sundays – One journey per hour in continuously built up areas between noon and 19.00 hours, and subject to demand at other times, and elsewhere. As funding allows, this will be increased to a half hour frequency in continuously built-up areas between 10.00 and 18.00 hours.
- 2.3 Bank Holidays – As Sunday Services, excluding Christmas Day and Boxing Day. Special arrangements will apply for Boxing Day and New Year's Day.

Value for money requirements

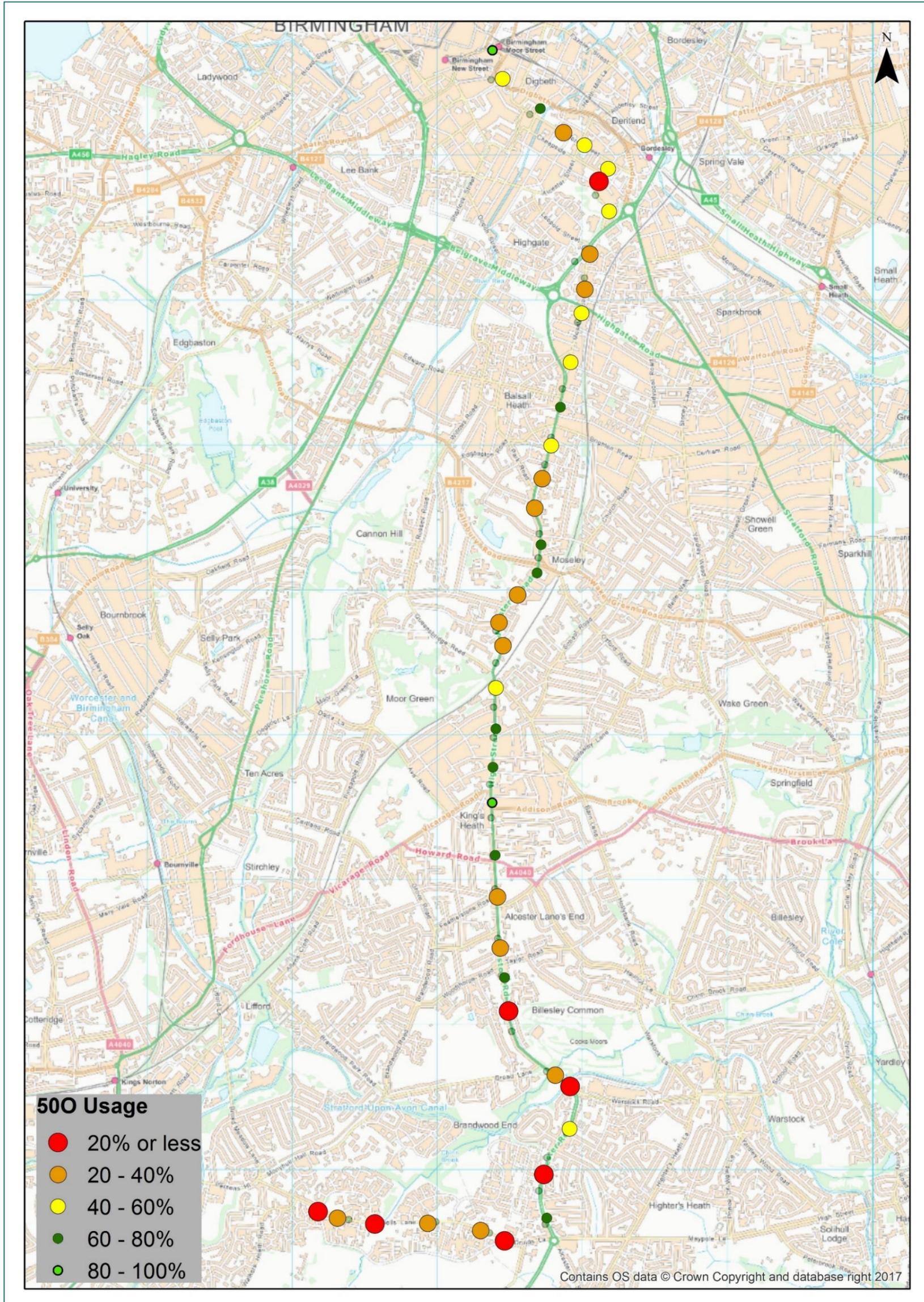
- 3.1 Research will identify demand for services which are deemed to be socially necessary.
- 3.2 Services are categorised in the following order of priority, to be provided subject to available finance.
 - 1. Journeys to work
 - 2. Shopping and medical journeys
 - 3. Sundays and Bank Holidays
 - 4. Evenings
 - 5. Town and City Centre distributor services
 - 6. Night Services
- 3.3 Specific Journey Requirements – per trip
 - (a) 8 people or less: no service
 - (b) 8 – 10 people: feeder facility considered
 - (c) more than 10 people: through facility considered
- 3.4 Regular Journey Requirements – per hour
 - (d) 8 people or less: no service
 - (e) 8 – 10 people: feeder facility considered
 - (f) more than 10 people: minimum hourly service

Technical note

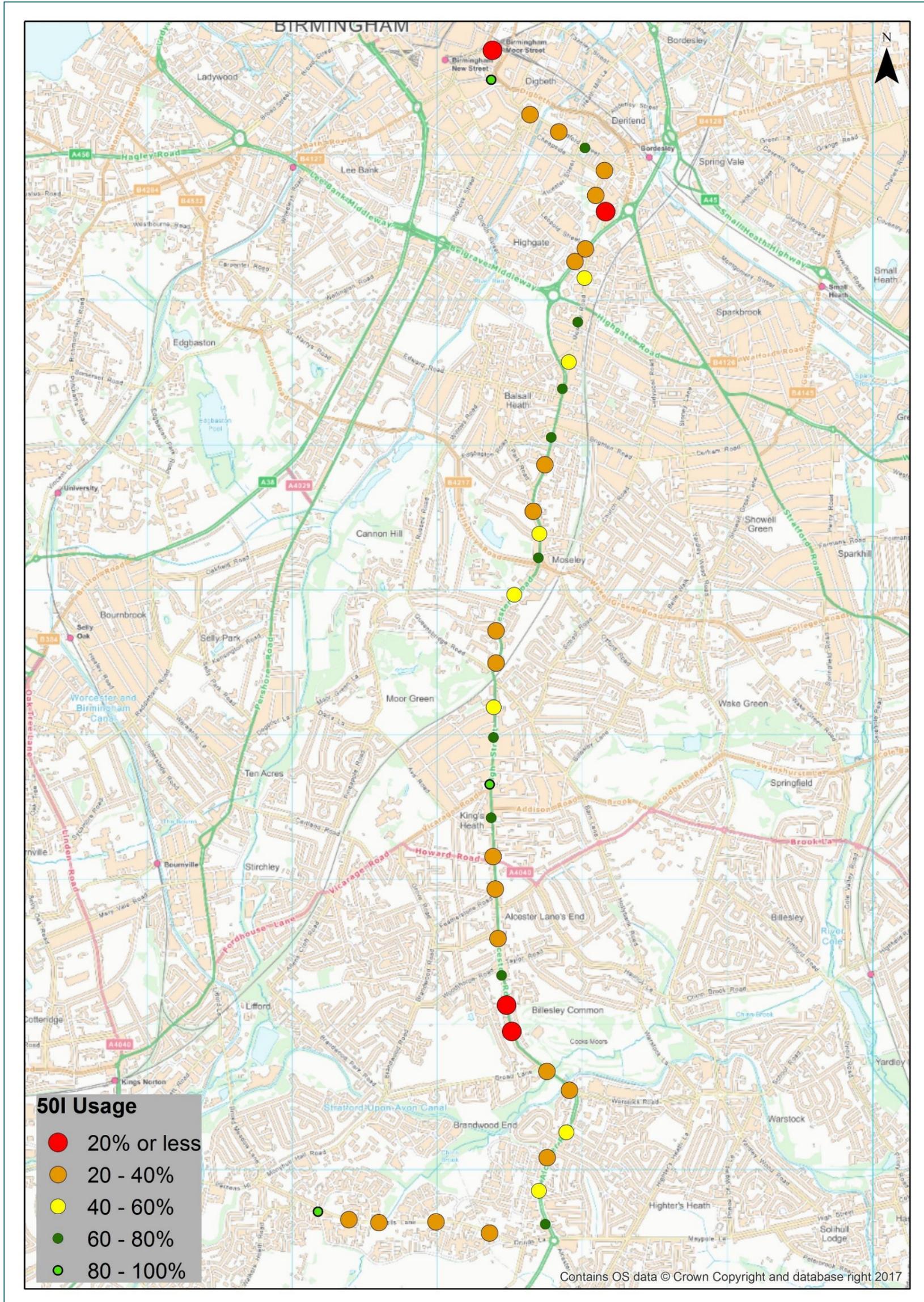
Appendix B. Supporting Mapping for Route 50

- **Map A:** Showing the proportion of buses calling. Red shading of a stop denotes less than 20% of buses calling. These maps have been used to inform Step 1 of the process;
- **Map B:** Showing distances (metres) between stops. Stops that are within 200m of another stop in the same direction are shown in red, with all other stops shown in green. These maps have been used to inform Step 2 of the process;
- **Map C:** Showing the infrastructure type (whether a pole or a shelter is provided);
- **Map D:** Showing whether the stop is a timing point;
- **Map E:** Showing the location of bus stops relative to schools, GP surgeries and hospitals. Note that this has been based upon the DfT layer.

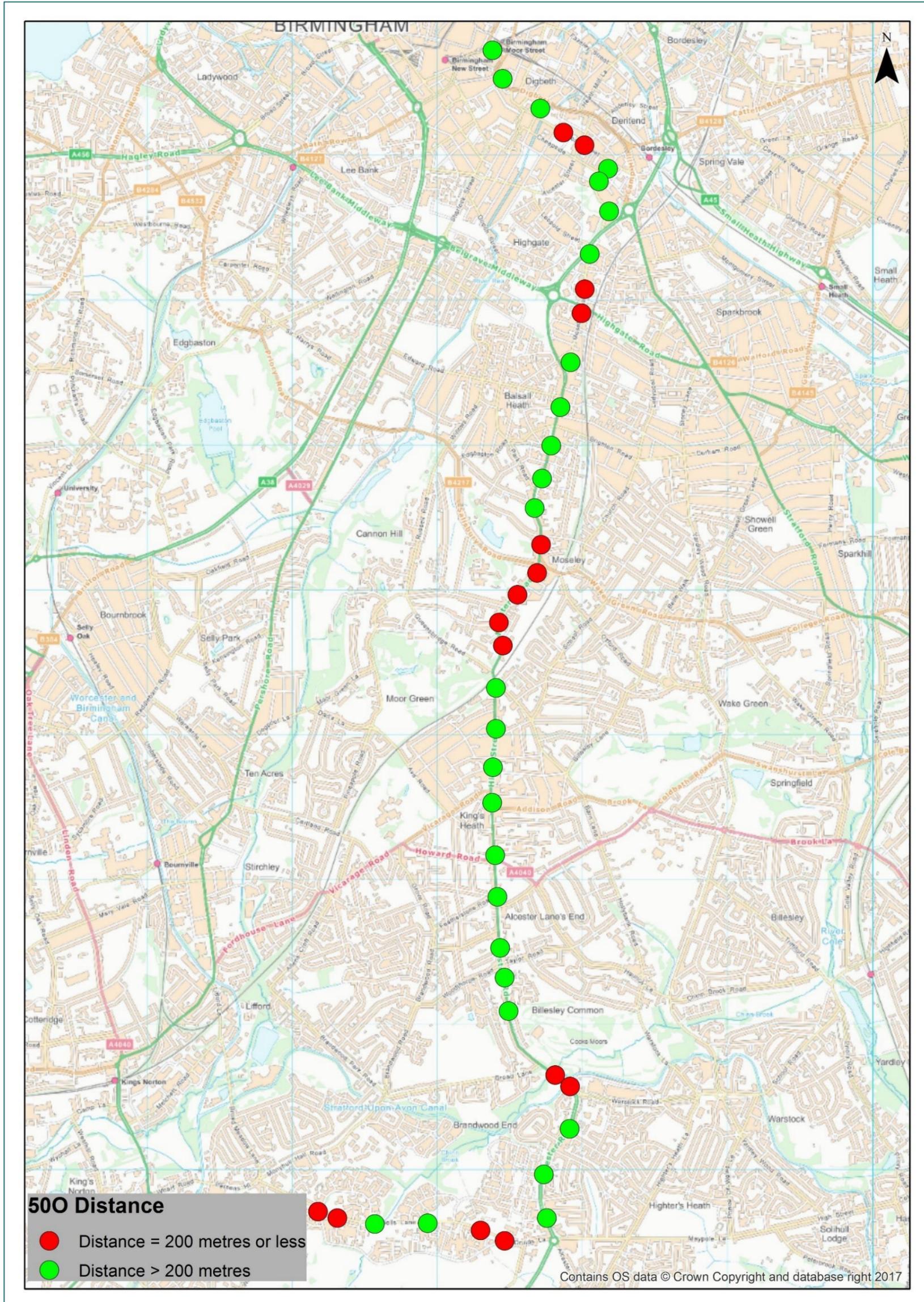
Map A (Proportion of Buses Calling) – 50 Outbound



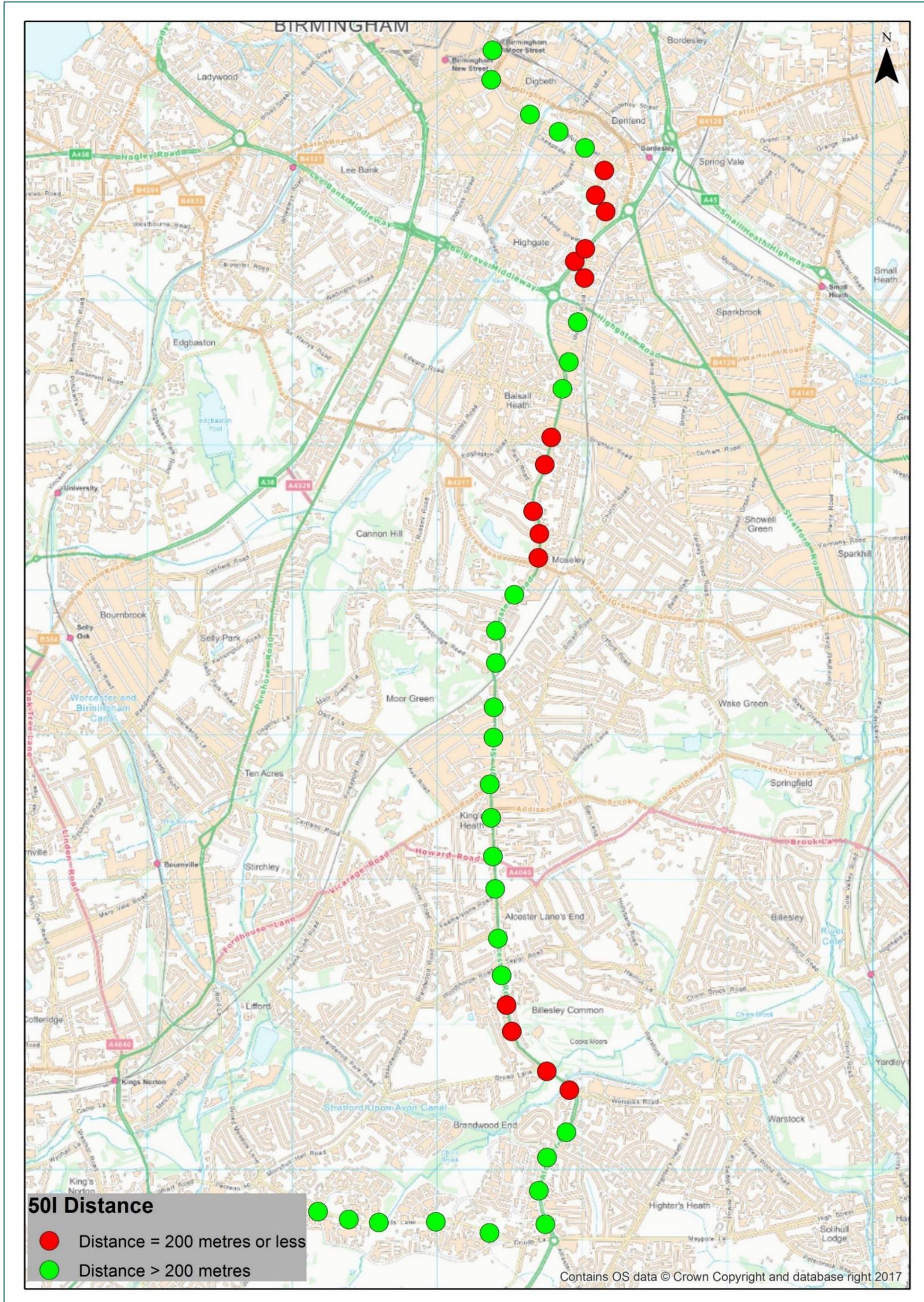
Map A (Proportion of Buses Calling) – 50 Inbound



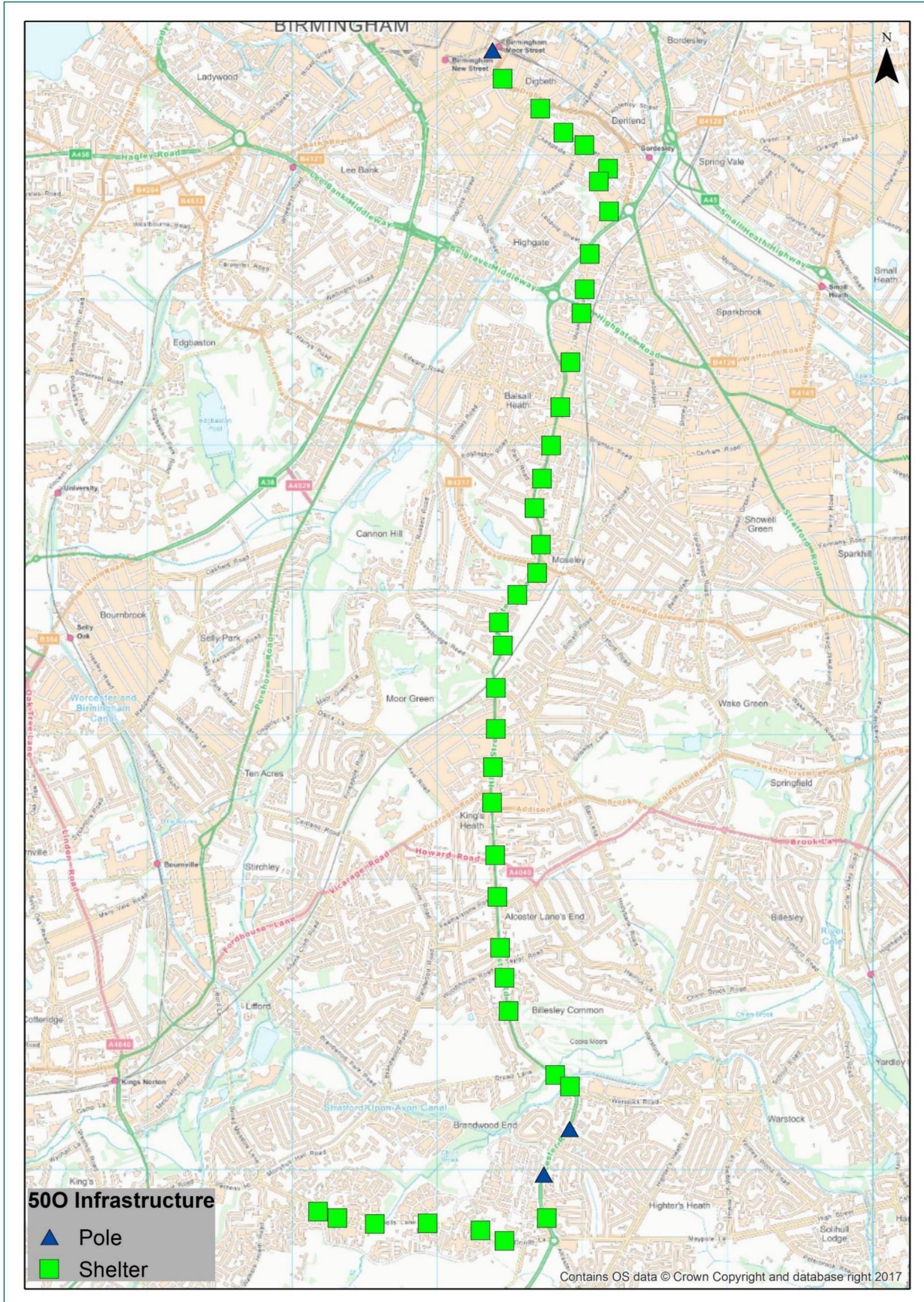
Map B (Distances between Stops) – 50 Outbound



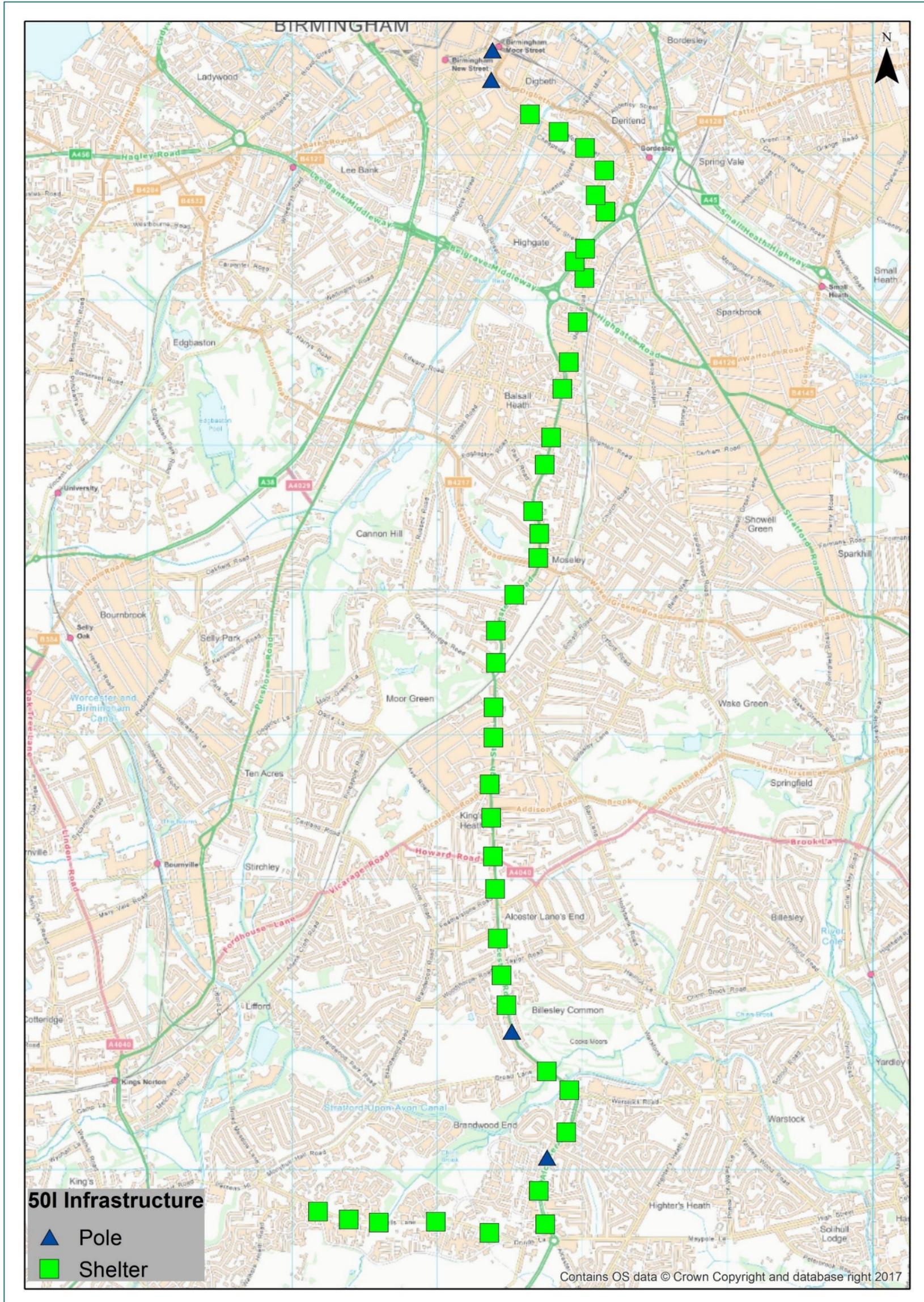
Map B (Distances between Stops) – 50 Inbound



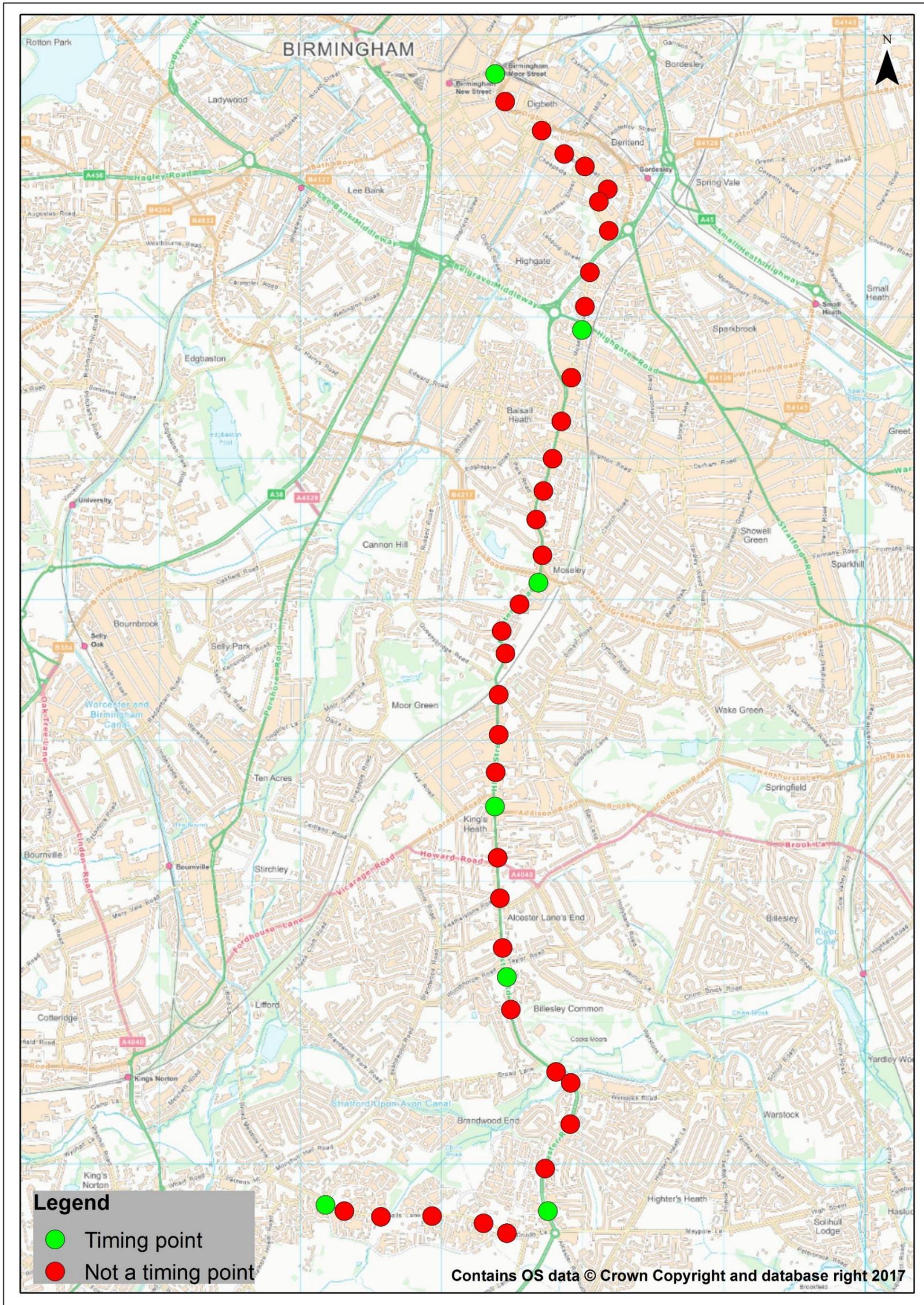
Map C (Infrastructure Type) – 50 Outbound



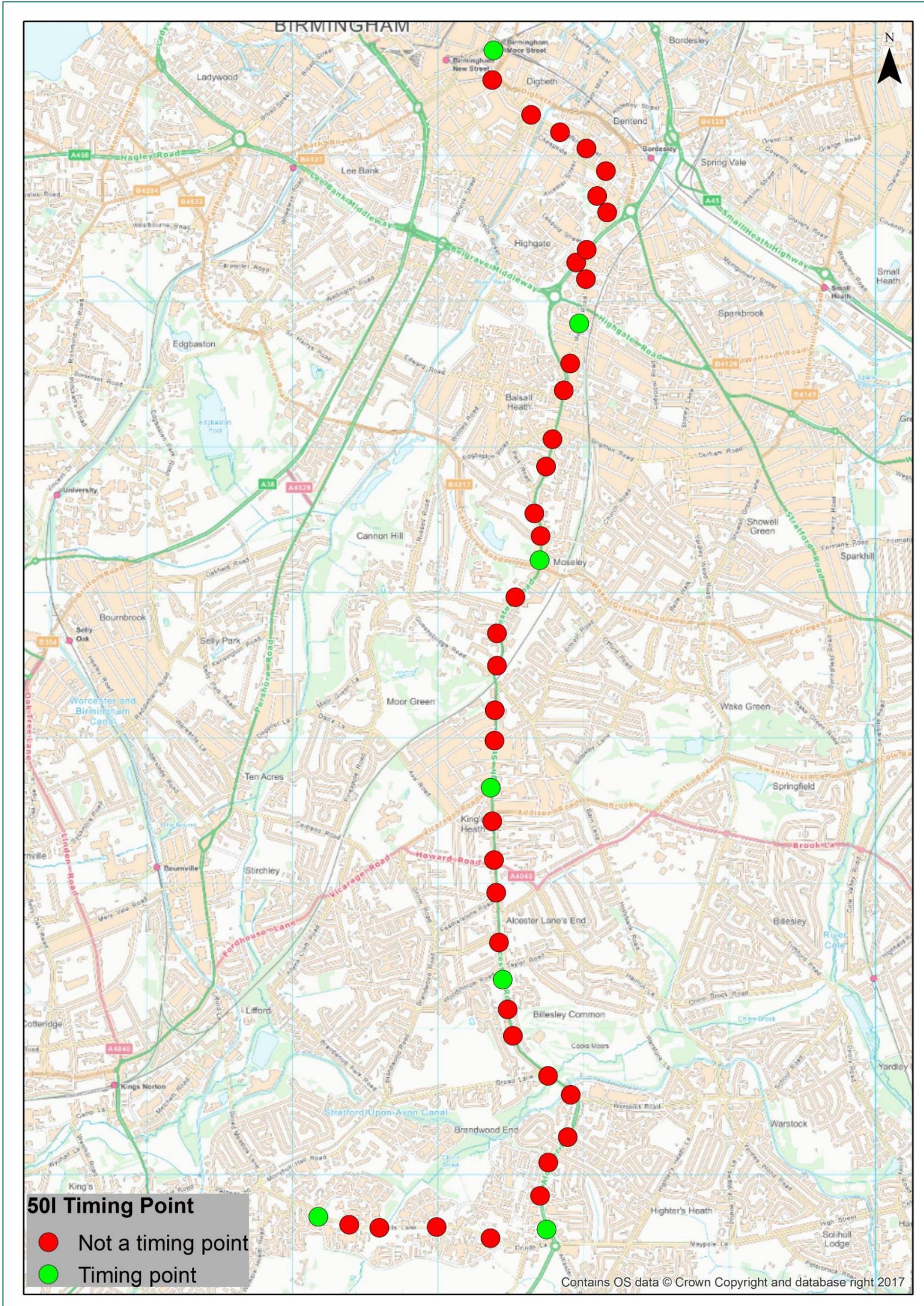
Map C (Infrastructure Type) – 50 Inbound



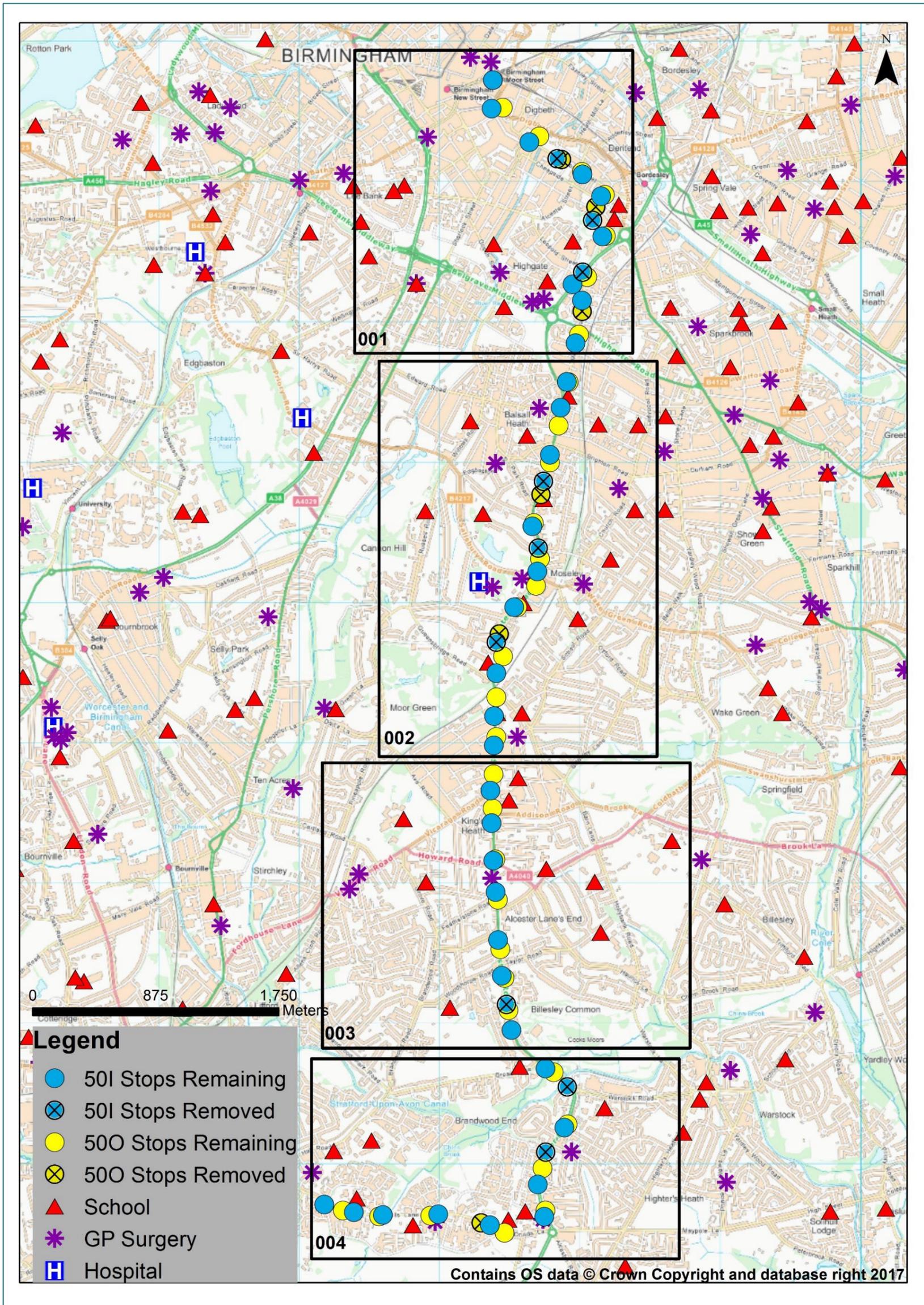
Map D (Timing Points) – 50 Outbound



Map D (Timing Points) – 50 Inbound



Map F (Key Facilities) – Route 50



Technical note

Project:	Birmingham Bus Stop Consolidation	To:	Matthew Till / Danny Gouveia
Subject:	8A / 8C Draft Report	From:	Andy Clark / Anna Little / Tim Colles
Date:	15 th June 2017	cc:	Adrian Taylor

1. Introduction

Atkins has been commissioned by National Express West Midlands to undertake a study investigating the scope for bus stops on several routes in Birmingham to be rationalised. This is in response to growing concern from National Express West Midlands and Transport for West Midlands (TfWM) regarding increasingly long and unreliable bus journeys in the West Midlands.

National Express West Midlands is part of the West Midlands Bus Alliance, consisting of representatives from the region’s bus operators, the West Midlands Combined Authority, council highways and transportation departments, Local Enterprise Partnerships, the Safer Travel Partnership, councillors and Transport Focus.

The Alliance Board Members are responsible for identifying what the region’s buses need to deliver and then putting policies and funding streams in place for this to be achieved. In March 2016, the board identified seven key actions which it will work together to deliver by 2020, as outlined in Figure 1.

Figure 1. Key Targets for West Midlands Bus Alliance



The potential impacts on these key targets are considered later in this technical note, with specific focus on punctuality (aiming to reduce delay minutes).

This technical note sets out the results from Atkins’ analysis of Routes 8A and 8C. The results of the assessments of other routes are outlined in subsequent technical notes.

The route is circular, with 8A denoting buses traversing the route in the anti-clockwise direction and 8C denoting buses in the clockwise direction. The route serves the inner suburbs of the city and provides interchange with the key Birmingham radial corridors. The daytime frequency is five buses per hour (BPH), with buses taking approximately 70-80 minutes to complete the route. Timetabled journey times vary considerably through the day, reflecting both congestion in the city and differing dwell times in response to demand.

Following this introduction, the technical note outlines the:

- Data Sources (**Section Two**);

Technical note

- Methodology (**Section Three**);
- Key Findings (**Section Four**); and
- Summary (**Section Five**).

Technical note

2. Data Sources

Table 1 outlines the data that has been used to inform this commission. The data has been provided by a combination of Transport for West Midlands (TfWM), the Department for Transport (DfT) and National Express West Midlands. Atkins has combined the data from all three sources to derive a database of information for each route, which includes information around the provision of infrastructure at each stop, levels of usage and the distance between stops.

With regard to usage, there are two key sources of data, both provided by National Express West Midlands:

- Proportion of buses calling at stops: The data shows indicative percentages of the proportion of buses stopping at each bus stop. At a high level, this helps to determine which are the most heavily used stops on the route, but the obvious shortcoming is that it is not possible to determine from this data how many boarders / alighters there are when a vehicle does stop; and
- Boarders by fare stage: The data shows the numbers of boarders by fare stage, which Atkins has used in combination with the proportion of buses calling to build up an understanding of the relative level of usage.

Table 1. Summary of Data and Sources

Data Type	Transport for West Midlands (TfWM)	Department for Transport (DfT)	National Express West Midlands
Stop name	✓		
ATCO (unique code)	✓		
Infrastructure type (whether the stop has a shelter or flag pole)	✓		
RTPI (Y / N)	✓		
Timing point (Y / N)	✓		
Services calling	✓		
Easting / northing		✓	
Distance between adjacent stops			✓
Proportion of buses calling			✓
Boarders by fare stage			✓

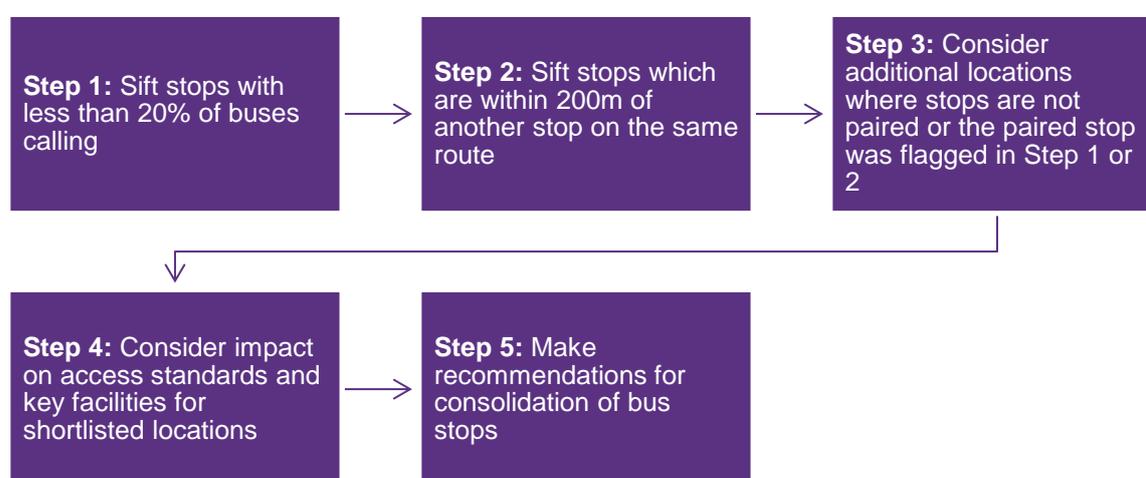
Technical note

3. Methodology

Atkins has undertaken a sifting process based on the information outlined in the database. There are several credible approaches which could be taken to determine the optimum stops for removal, but through discussion with National Express West Midlands and TfWM, Atkins has agreed a five-step process. Further details on these steps are now provided. A summary is provided in Figure 2.

Steps 1 and 2 are first applied to the route in one direction, with the same steps then repeated for stops in the opposite direction. Step 3 then considers instances where the stop was flagged in one direction but not the other and issues around an imbalance of stops between the two directions.

Figure 2. Summary of Methodology



Step 1: Sift stops with less than 20% of buses calling

Atkins has first sifted out the stops where less than 20% of buses are calling (Step 1a). This level of usage indicates that the stop is lightly used and hence should be considered as part of any future rationalisation process. A high level sift (Step 1b) of the shortlisted locations has then been carried out to determine whether there are any clear reasons why it may not be appropriate to remove the stop. This takes account of the spacing between stops, the routes served (whether served by the 8 only or the 8 and other routes) and location relative to any local facilities or transport interchanges such as railway stations. This also takes account of any operational need for the stop to remain. For example, on Route 8, through discussion with National Express West Midlands, it has been agreed that some stops in the Saltley area, while lightly used, are required to be retained because future HS2 works will lead to service diversions in the area.

Step 2: Sift stops which are within 200m of another stop on the same route

The second sift entails identifying those stops which are within 200m of another stop on the same route (in the same direction). The figure of 200m has been chosen as, in broad terms, closer spacing suggests there may be some duplication of coverage in terms of the West Midlands Combined Authority Bus Service Access Standards (**see Appendix A**), which state that for residential areas, the maximum desirable walking distance to bus services in continuously built-up areas is 400m during the hours of 07:00 to 19:00 on Monday to Saturday and 700m at other times. Step 2a relates to this first sift.

The output of Step 2a is a list of bus stops that are within 200m of another stop on the same route in the same direction. An assessment has then been made (Step 2b), considering the same factors as per Step 1b, to determine which of the two stops would be more suitable for removal. In some instances, there may be three or more consecutive stops with distances of less than 200m, and in these situations, Atkins has considered how the stops could best be rationalised to provide more even spacing.

Technical note

Step 3: Consider additional locations where stops are not paired or where the paired stop was identified in Step 1 or Step 2

In some cases, there may be an imbalance of stops in one direction relative to the other, which may be a function of the highway layout (for example, a one-way system or proximity to a major junction) or a function of the specific location relative to key attractors. Step 3a in the technical process has entailed Atkins considering any locations not flagged by either Step 1 or Step 2 where some rationalisation of stops may be appropriate because of the imbalance of stops in one direction relative to the other.

Finally, as Step 3b, there may be some instances where the gap between stops in one direction is slightly below 200m whilst it is slightly above 200m in the opposite direction. In this instance, it would be prudent to consider the opportunity to rationalise the stops in both directions rather than suggesting rationalisation in one direction but not the other. Another such instance relates to the proportion of buses calling. The level of usage may be below the 20% threshold in one direction (and hence would be flagged up in Step 1) but above 20% in the above direction. Again, in this instance, it is prudent to consider the pair of stops for rationalisation.

Note that the methodology assumes that a bus stop needs to be flagged in either Step 1, Step 2 or Step 3 to be considered for removal in Step 4. A bus stop therefore does not need to satisfy all criterion.

Step 4: Consider impact on access standards and key facilities for shortlisted locations

Having used Steps 1-3 to derive a shortlist of locations for potential rationalisation, Atkins has then considered the impact on both the West Midlands Combined Authority Bus Service Access Standards and the accessibility to key facilities, focussing on education and health facilities.

Step 5: Make recommendations for consolidation of bus stops

Finally, taking on board the outcomes of Steps 1 to 4, Atkins has made recommendations to National Express West Midlands around the locations where consolidation may be appropriate.

Technical note

4. Key Findings

The findings for Routes 8A and 8C are now outlined.

Mapping Outputs

To support the sifting process, elements of the database have been developed into mapping outputs. These maps have been placed in **Appendix B**. For Routes 8A and 8C, the maps are as follows:

- **Map A:** Showing the proportion of buses calling. Red shading of a stop denotes less than 20% of buses calling. These maps have been used to inform Step 1 of the process;
- **Map B:** Showing distances (metres) between stops. Stops that are within 200m of another stop in the same direction are shown in red, with all other stops shown in green. These maps have been used to inform Step 2 of the process;
- **Map C:** Showing the infrastructure type (whether a pole or a shelter is provided);
- **Map D:** Showing whether the stop is a timing point;
- **Map E:** Showing the services calling at the bus stop (whether the stop is served by the 8A / 8C only or additional services); and
- **Map F:** Showing the location of bus stops relative to schools¹, GP surgeries² and hospitals³. Note that this has been based upon data provided by the DfT.

Tabulated Outputs

Tabulated outputs are now provided to show how the database has been used to derive a shortlist of locations for consolidation.

Step 1: Sift stops with less than 20% of buses calling

Table 2 outlines the stops on the 8A and 8C that have been shortlisted based on less than 20% of buses calling.

The sift (Step 1a) gives rise to five stops on the 8A and two stops on the 8C. Having undertaken further analysis on these locations (Step 1b), Atkins has recommended that only one stop (Ladywood Middleway, Ledsam Street) is considered later in the process, as there are reasons why the remainder of the stops should be retained. These reasons are outlined in Table 2.

Step 2: Sift stops which are within 200m of another stop on the same route

Table 3 outlines the stops on the 8A and 8C that have been shortlisted based on a bus stop being within 200m of another stop on the same route in the same direction (Step 2a).

Note that Table 3 lists all the stops based on this criterion and hence it includes the stops either side of the 200m distance threshold. For example, if Stop B is 200m downstream of Stop A, then the table lists both Stop A and Stop B. In some cases, there are more than two consecutive stops. Solid black lines in Table 3 have been used to highlight the consecutive stops.

¹ Schools in England dataset, Department for Education, last updated 9 March 2017 (downloaded May 2017)

² Details of GPs, GP Practices, Nurses and Pharmacies dataset from Organisation Data Services, published by NHS Digital, available from data.gov.uk (downloaded May 2017)

³ Hospitals dataset, published by NHS Choices, available from data.gov.uk (downloaded May 2017)

Technical note

In order to provide a shortlist of locations for detailed assessment under Step 4, a column in Table 3 identifies the suggested stop(s) for removal. This is based on a range of factors, but typically centres on the spacing that remains if a given stop is removed. In some cases, Stop A may be served by Route 8 only whereas Stop B is served by multiple routes. In such instances, the decision has been made, unless specific operational reasons are known, to suggest that Stop A is removed. The specific reasons for choosing one stop over another are outlined in the right-most column of Table 3.

Step 3: Consider additional locations where stops are not paired or where the paired stop was identified in Step 1 or Step 2

Finally, Atkins has undertaken a process to identify any additional locations. The results are outlined in Table 4, with the right-most column providing justification. The table shows that of the eight stops, most were identified as a result of the stop in the opposite direction being flagged in either Step 1 or Step 2.

Table 2. <20% of buses calling (Step 1)

Stop Name (Yellow = 8A, Blue = 8C)	ATCO	Proceed to Step 4?	Suggested Removal?
SALTLEY ROAD, Heartlands Parkway/Nechells Place	43000243103	No	Interchange with several other routes is provided at this stop. The route west of this location has recently been rationalised with services no longer routing via Bloomsbury Street and Cromwell Street
GOODRICK WAY	43002500401	No	As above, the route is already being rationalised in this area with a shorter route now provided
ROCKY LANE, Cheston Rd/Aston/William Henry St	43000250202	No	If this stop were removed, the distance between adjacent stops would be approximately 700m, in an area where few other bus services operate
LEE BANK MIDDLEWAY, Lee Crescent	43000213702	No	If this stop were removed, the distance between adjacent stops would be approximately 700m. In addition, this stop serves the James Brindley School and the Park Central Residential Area. No other buses serve this area and hence removal is unlikely to be appropriate
BORDESLEY GREEN RD, Burbidge Rd	43000237602	No	Despite being lightly used, serves Adderley Park Railway Station and therefore provides useful interchange between different modes
GOLDEN HILLOCK RD, Small Heath Station	43000226302	No	Despite being lightly used, serves Small Heath Railway Station and therefore provides useful interchange between different modes
LADYWOOD MIDDLEWAY, Ledsam Street	43000288201	Yes	Subject to mapping against the access standards and further interrogation of key facilities

Table 3. Stops within 200m of another stop (Step 2)

Stop Name (Yellow = 8A, Blue = 8C)	ATCO	Proceed to Step 4?	Suggested Removal?
ADDERLEY RD, Saltley/The Gate	43000240401	No	Both stops to be retained given future HS2 construction works in this area
HIGH STREET, Saltley Trading Estate	43000243203	No	
CLIFFORD STREET, Lozells School	43000272102	Yes	Remove ATCO xx102 given interchange with other routes at ATCO xx103
WHEELER ST, Holte Sch/Gerrard St/Lozells	43000272203	No	
GERRARD STREET, Lozells Street	43000272302	No	Remove ATCO xx402 given spacing between three consecutive stops
NURSERY RD, Burbury Street	43000272402	Yes	
NURSERY RD, Church Street	43000272501	No	
WARSTONE LANE, Birmingham Mint/Carver	43000282902	No	Remove ATCO xx603
ICKNIELD ST, Spring Hill Island/Camden St	43000283603	Yes	
LADYWOOD MIDDLEWAY, Ladywood Social	43000288102	No	Remove ATCO xx001 given spacing between three consecutive stops and only Route 8 services at ATCO xx001
LADYWOOD MIDDLEWAY, Morville St	43000301001	Yes	
LADYWOOD MIDDLEWAY, Friston Avenue	43000300502	No	
HIGHGATE RD, Queen Street/Sparkbrook	43000221009	Yes	Remove ATCO xx009 given preference to remove stop prior to signals
WALFORD RD, Stratford Rd	43000221506	No	
GOLDEN HILLOCK RD, Coventry Rd/Muntz	43002303001	No	Remove ATCO xx505 given spacing between three consecutive stops
MUNTZ STREET, Coventry Rd/Small Heath	43002302505	Yes	
MUNTZ STREET, Baker Street	43000231502	No	
VICTORIA STREET, Bordesley Green	43002304004	Yes	Remove ATCO xx004 given preference to remove stop prior to signals
BORDESLEY GREEN RD, Bordesley Green	43002304501	No	
ADDERLEY RD, Saltley/The Gate	43000240402	No	Stop to be retained given future HS2 construction works in this area
ASH RD, Hall Rd	43000240202	No	Remove ATCO xx202 given spacing between two consecutive stops
ASH RD, Arden Rd	43002400502	No	
BORDESLEY GREEN RD, Burbidge Rd	43000237601	No	Remove ATCO xx601 (ATCO xx601 and xx501 currently 100m apart)
BORDESLEY GREEN RD, Ronald Road	43000237501	Yes	
BORDESLEY GREEN RD, Bordesley Green	43002304502	Yes	Remove ATCO xx502 given preference to remove stop prior to signals
VICTORIA STREET, Bordesley Green	43002304003	No	
MUNTZ STREET, Baker Street	43000231501	No	Remove ATCO xx504 and ATCO xx905 given spacing between consecutive stops
MUNTZ STREET, Coventry Rd/Small Heath	43002302504	Yes	
GOLDEN HILLOCK RD, Coventry Rd/Muntz	43002303002	No	
GOLDEN HILLOCK RD, Wordsworth Rd/Waverley	43000233905	Yes	
GOLDEN HILLOCK RD, Waverley Rd	43000231201	No	
BELGRAVE RD, Barrow Walk	43000212302	No	Remove ATCO xx501 given preference to remove stop prior to any signals
BELGRAVE RD, Pershore Road	43000213501	Yes	
NURSERY RD, Church Street	43000272502	No	Remove ATCO xx301 given spacing between consecutive stops
NURSERY RD, Burbury Street	43000272401	No	
GERRARD STREET, Lozells Street	43000272301	Yes	
GERRARD STREET, Holte Sch/Wheeler	43002720002	No	
HIGH STREET, Saltley Trading Estate	43000243204	No	Stop to be retained given future HS2 construction works in this area

Table 4. Additional locations (Step 3)

Stop Name (Yellow = 8A, Blue = 8C)	ATCO	Proceed to Step 4?	Supporting Comment
LADYWOOD MIDDLEWAY, Ledsam Street	43000288202	Yes	Stop in opposite direction flagged in Step 1
BELGRAVE RD, Pershore Road	43000213502	Yes	Stop in opposite direction flagged in Step 1
BORDESLEY GREEN RD, Ronald Road	43000237502	Yes*	Shortlisted in opposite direction in Step 2. *Consider combining two stops at this location
BORDESLEY GREEN RD, Burbidge Rd	43000237602	Yes*	
ADDERLEY RD, Crawford Street	43000238901	Yes	Additional location – served by 8C but not 8A
WALFORD RD, Stratford Rd	43000221505	Yes	Shortlisted in opposite direction in Step 2
ICKNIELD ST, Spring Hill Island/Camden St	43000283604	Yes	Shortlisted in opposite direction in Step 2
CLIFFORD STREET, Lozells School	43000272101	Yes	Shortlisted in opposite direction in Step 2

Technical note

Step 4: Consider impact on access standards and key facilities for shortlisted locations

The shortlisted locations from Steps 1, 2 and 3 are outlined in Table 5.

For each location, Atkins has then undertaken a process of considering whether removing the stop will have an impact on the West Midlands Combined Authority Bus Access Standards. Through agreement with National Express West Midlands and TfWM, Atkins has mapped the impact of removing the bus stop using ArcGIS software. Note that this analysis is based on the highway network only⁴ and hence in a situation where the access standard (by highway) is no longer being met, it is necessary to consider whether footways may mean that the access standard is in fact being met. The results of the analysis are outlined in Figure 5 onwards.

Note that rather than considering each stop in isolation, Atkins has mapped the entirety of the impact of all stops in Table 5 being removed. Figures 5 onwards show that in virtually all cases, there has been very little impact on the access standards, with the density of bus stops on other routes meaning that even once a Route 8A / 8C stop is removed, adjacent residential areas are still within 400m of another bus stop, which means that the access standard is still being met. The one exception to this, where it appears that the access standard is no longer being met, is highlighted in Map 009 (Figure 13). Figure 13 shows that with removal of two stops on Ladywood Middleway (Ledsam Street), a stretch of Rodney Close is no longer meeting the access standard, which means that it is no longer within 400m by highway of another bus stop. However, further interrogation of the layout in Rodney Close shows that a footpath (see Figure 3) provides access to the (retained) stops on Ladywood Middleway (Icknield Street). For this reason, it is reasonable to conclude that the changes outlined in Table 5 do not have any adverse impact in regard to the access standards.

Figure 3. Rodney Close – Footway Access to Ladywood Middleway (Icknield Street)



Copyright @ Google 2017

⁴ <https://www.ordnancesurvey.co.uk/business-and-government/products/meridian2.html>

Technical note

Finally, for the shortlisted locations outlined in Table 5, Atkins has made an assessment to determine whether removal of the stop will have an implication in regard to access to key facilities, focussing on schools, hospitals and GP surgeries. This assessment uses Map F in **Appendix A**.

The assessment has shown that the proposed stops for removal are not adversely impacting accessibility to key facilities. Even with removal of some stops, the spacing of stops remains relatively dense and therefore key facilities are still adequately served. An overview map of the proposed consolidation, alongside the key facilities, is shown in Figure 16.

Step 5: Make recommendations for consolidation of bus stops

On the basis of the analysis presented to date, Atkins recommends that the full list of stops in Table 5 is considered by National Express West Midlands for rationalisation.

A reasonable working assumption⁵ is that removal of one stop can save of the order of 30 seconds, given the need for the bus to decelerate / accelerate and the dwell time associated with passengers boarding and alighting. Clearly the exact extent of the saving will be dependent upon local conditions, including the ability for the bus to merge back into general traffic.

With 10-12 stops being removed in both directions, it is therefore reasonable to assume that approximately five minutes could be saved on the journey time in both directions, which may enable a reduction in the peak vehicle requirement (PVR) for National Express West Midlands. Reducing the number of stops is also expected to lead to an increase in punctuality, which was one of the stated targets of the West Midlands Bus Alliance.

⁵ Working assumption for National Express West Midlands

Technical note

Table 5. List of Locations for Assessment in Step 4

Stop Name	ATCO	Identified in:	Access Standard Met based on proposal?	Access to Key Facilities Maintained?
CLIFFORD STREET, Lozells School	43000272102	Step 2 (<200m spacing)	✓ (Figure 5)	✓ (See Figure 15 for all)
NURSERY RD, Burbury Street	43000272402	Step 2 (<200m spacing)	✓ (Figure 5)	✓
ICKNIELD ST, Spring Hill Island/Camden St	43000283603	Step 2 (<200m spacing)	✓ (Figure 14)	✓
LADYWOOD MIDDLEWAY, Ledsam Street	43000288202	Step 3 (additional)	✓ (Figure 13)	✓
LADYWOOD MIDDLEWAY, Morville St	43000301001	Step 2 (<200m spacing)	✓ (Figure 12)	✓
BELGRAVE RD, Pershore Road	43000213502	Step 3 (additional)	✓ (Figure 11)	✓
HIGHGATE RD, Queen Street/Sparkbrook	43000221009	Step 2 (<200m spacing)	✓ (Figure 10)	✓
MUNTZ STREET, Coventry Rd/Small Heath	43002302505	Step 2 (<200m spacing)	✓ (Figure 9)	✓
VICTORIA STREET, Bordesley Green	43002304004	Step 2 (<200m spacing)	✓ (Figure 8)	✓
BORDESLEY GREEN RD, Ronald Road	New	Step 2 (<200m spacing)	✓ (Figure 7)	✓
ADDERLEY RD, Crawford Street	43000238901	Step 3 (additional)	✓ (Figure 6)	✓
ASH RD, Hall Rd	43000240202	Step 2 (<200m spacing)	✓ (Figure 6)	✓
BORDESLEY GREEN RD, Ronald Road	43000237501	Step 2 (<200m spacing)	✓ (Figure 7)	✓
BORDESLEY GREEN RD, Bordesley Green	43002304502	Step 2 (<200m spacing)	✓ (Figure 8)	✓
MUNTZ STREET, Coventry Rd/Small Heath	43002302504	Step 2 (<200m spacing)	✓ (Figure 9)	✓
GOLDEN HILLOCK RD, Wordsworth Rd/Waverley	43000233905	Step 2 (<200m spacing)	✓ (Figure 9)	✓
WALFORD RD, Stratford Rd	43000221505	Step 3 (additional)	✓ (Figure 10)	✓
BELGRAVE RD, Pershore Road	43000213501	Step 2 (<200m spacing)	✓ (Figure 11)	✓
LADYWOOD MIDDLEWAY, Ledsam Street	43000288201	Step 1 (<20% usage)	✓ (Figure 13)	✓
ICKNIELD ST, Spring Hill Island/Camden St	43000283604	Step 3 (additional)	✓ (Figure 14)	✓
GERRARD STREET, Lozells Street	43000272301	Step 2 (<200m spacing)	✓ (Figure 5)	✓
CLIFFORD STREET, Lozells School	43000272101	Step 3 (additional)	✓ (Figure 5)	✓

Figure 4. Proposed Rationalisation (Overview)

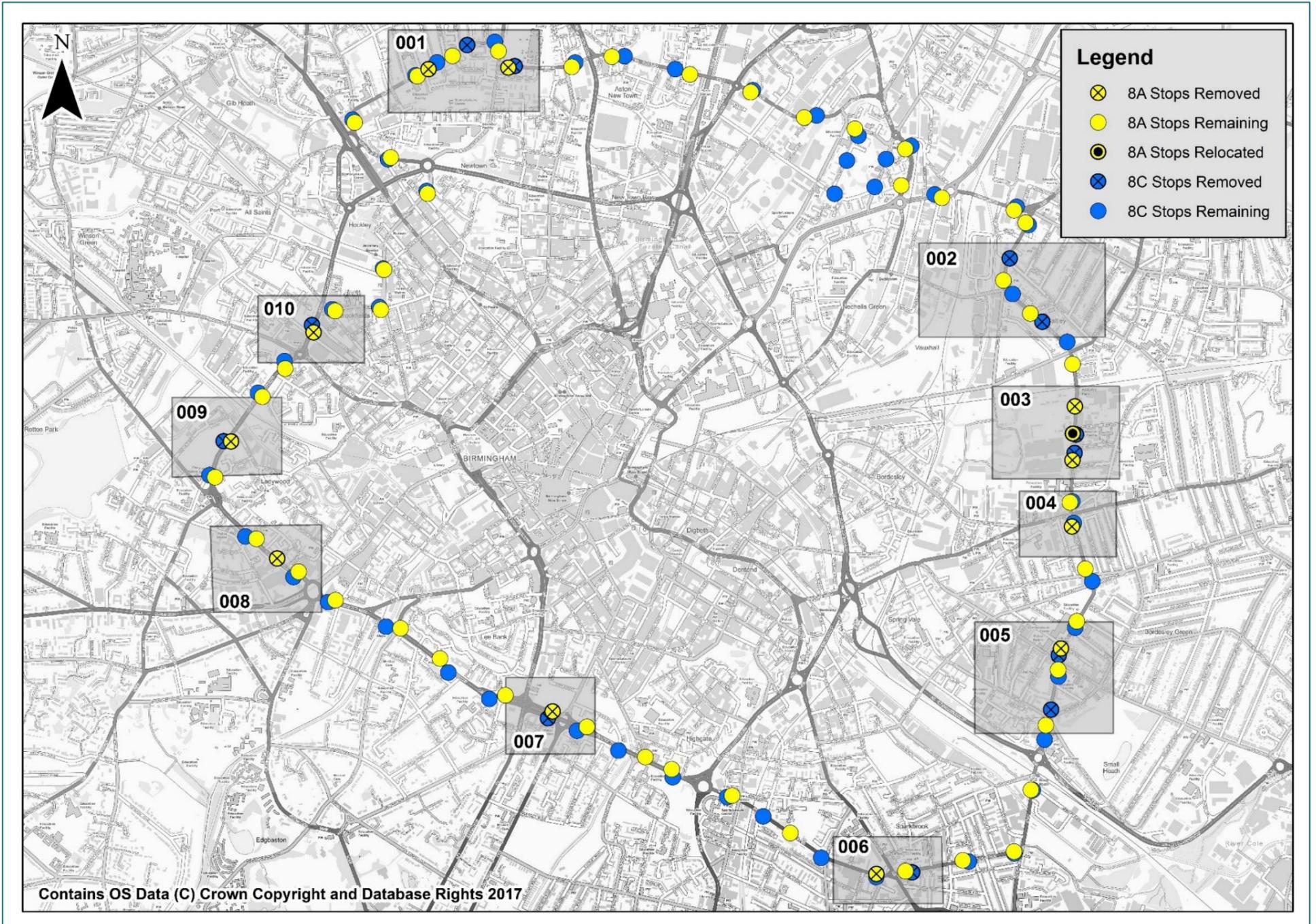


Figure 5. Supporting Map - 001

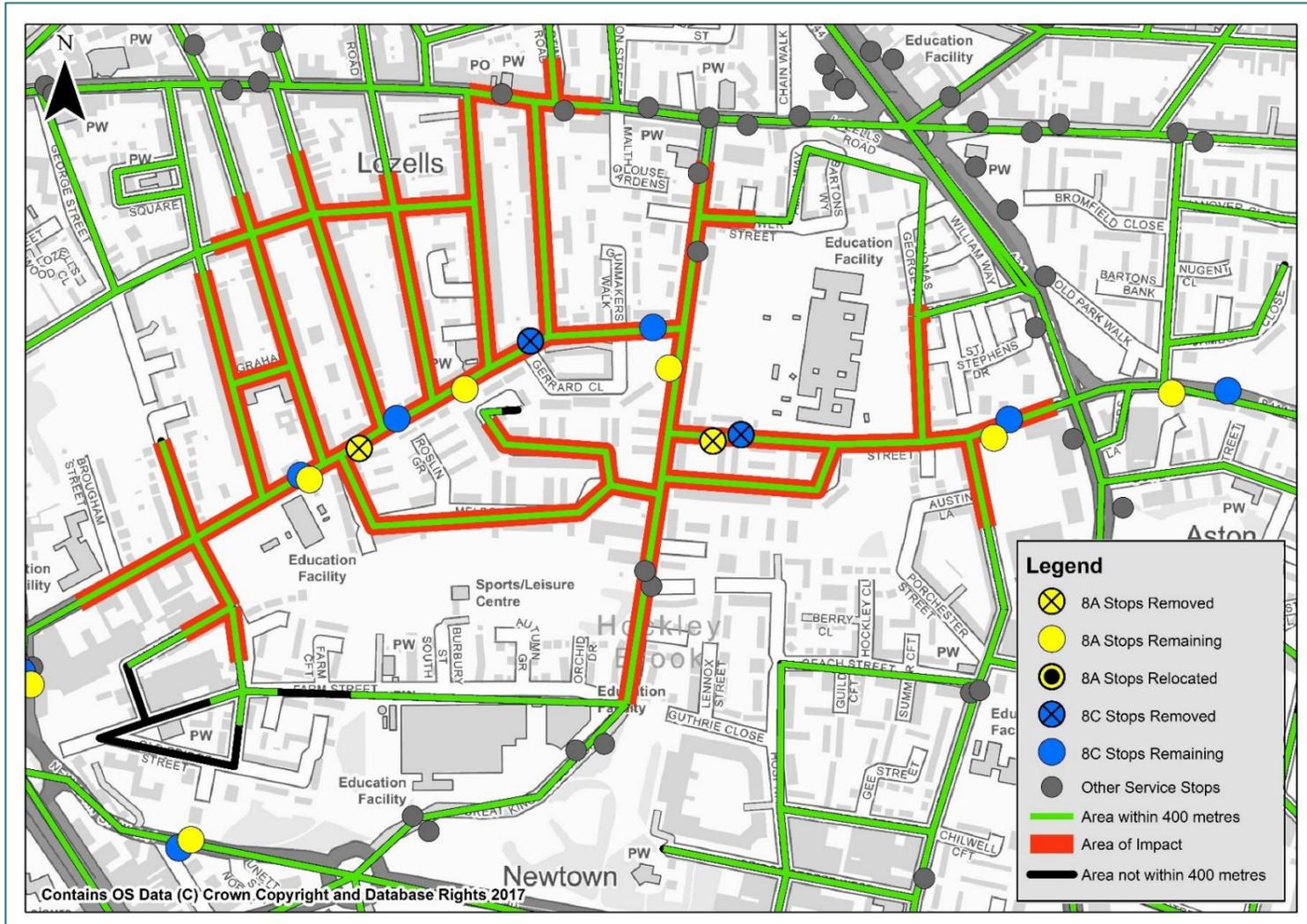


Figure 6. Supporting Map - 002

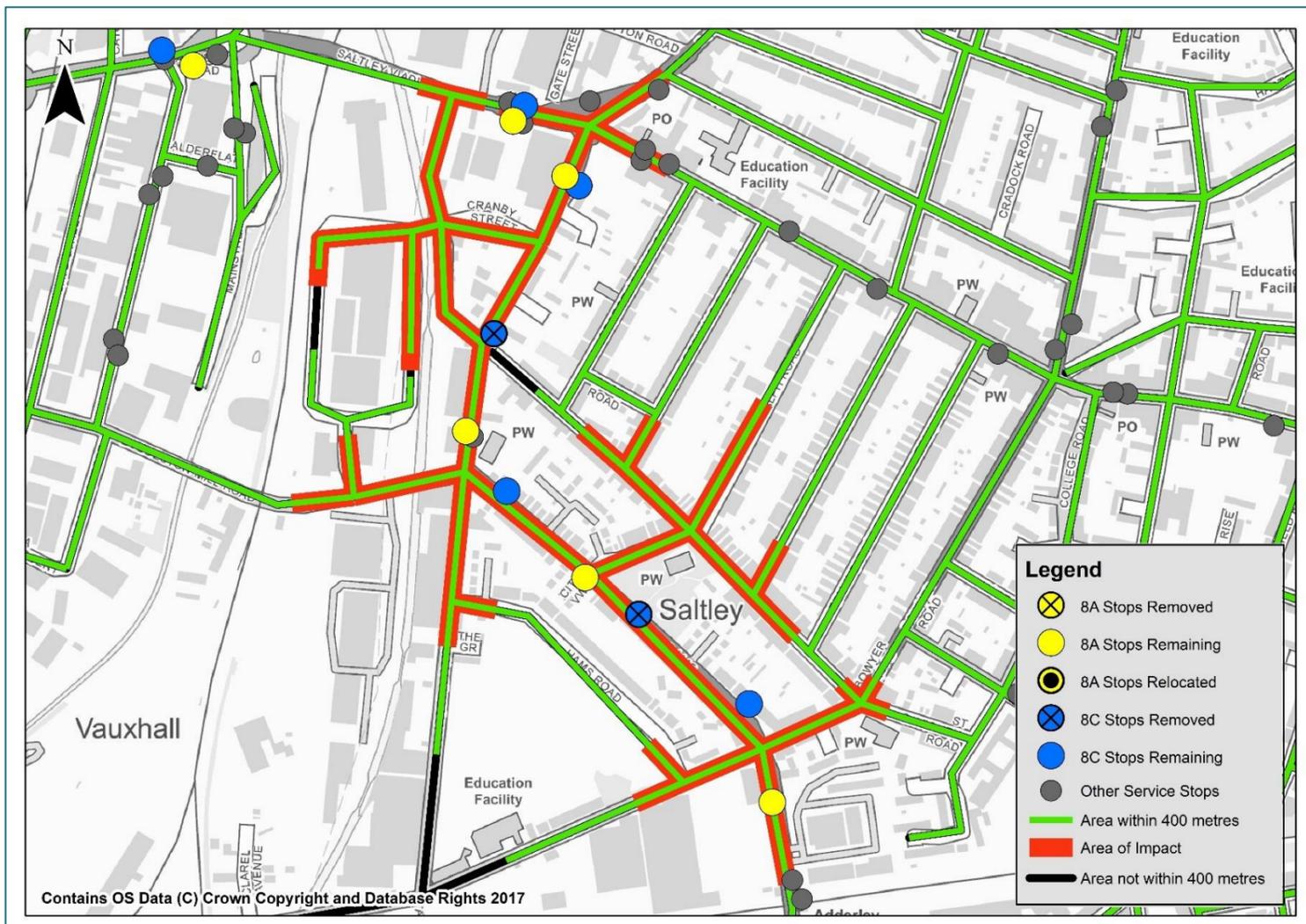


Figure 7. Supporting Map - 003

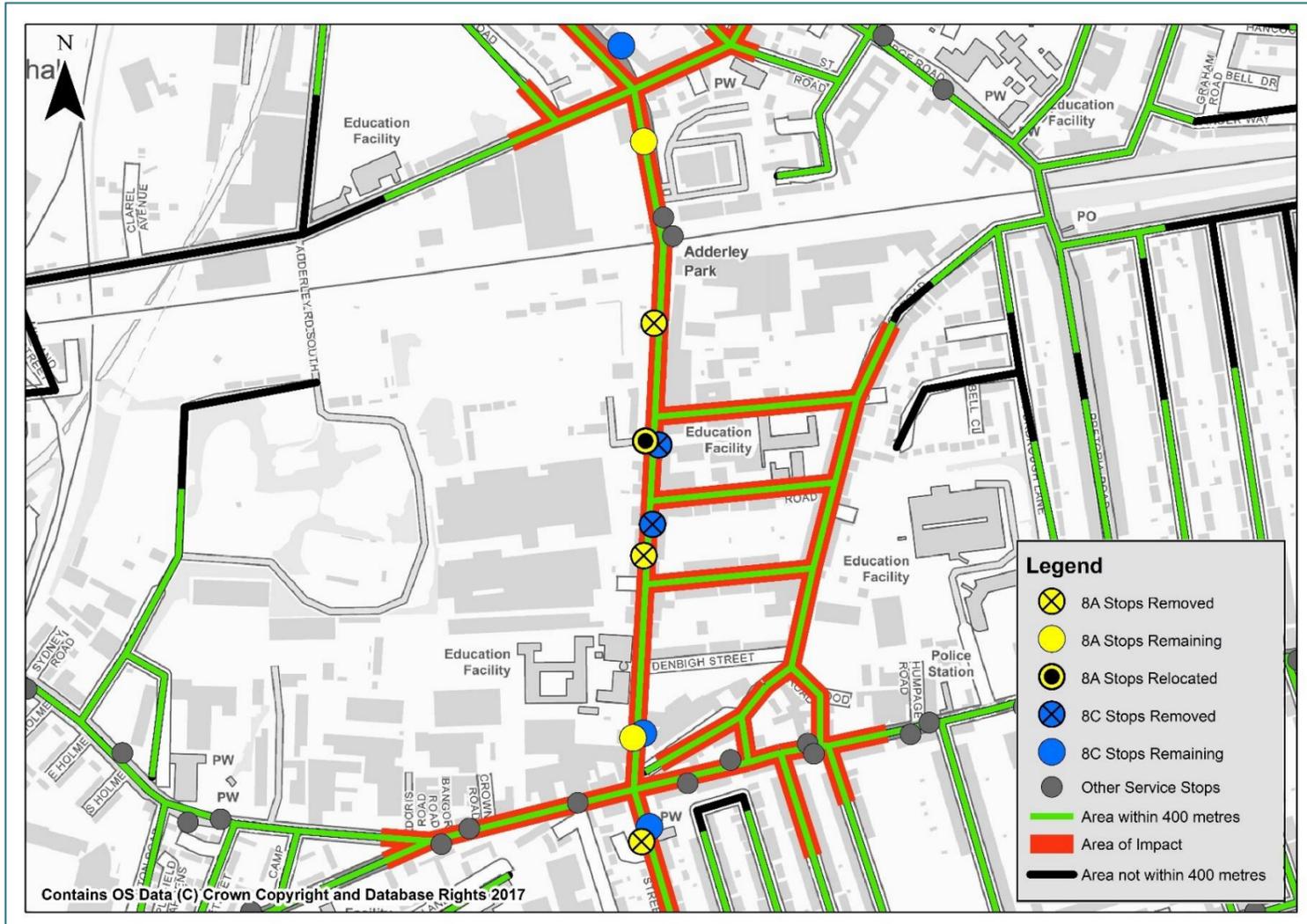


Figure 8. Supporting Map - 004

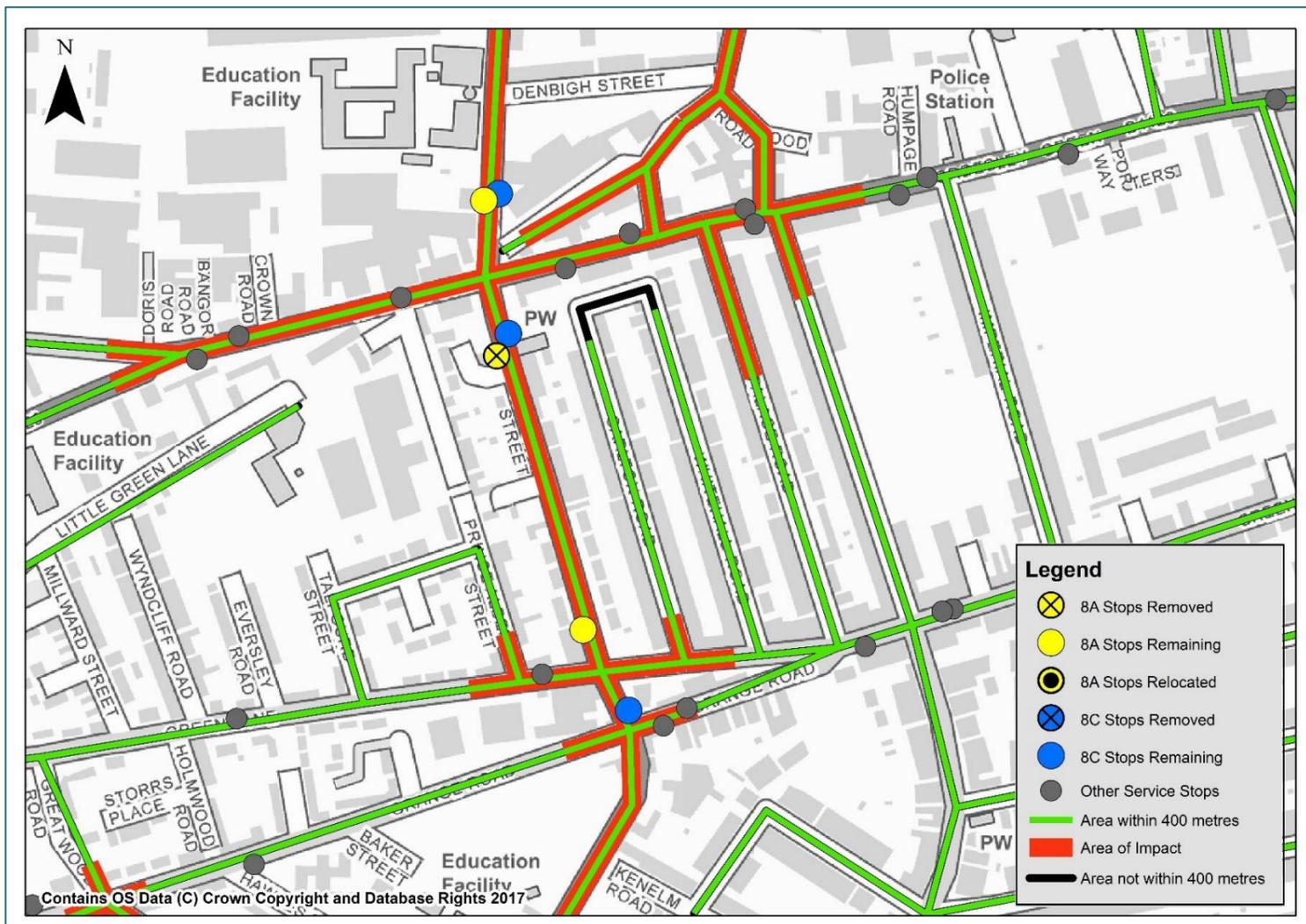


Figure 9. Supporting Map - 005

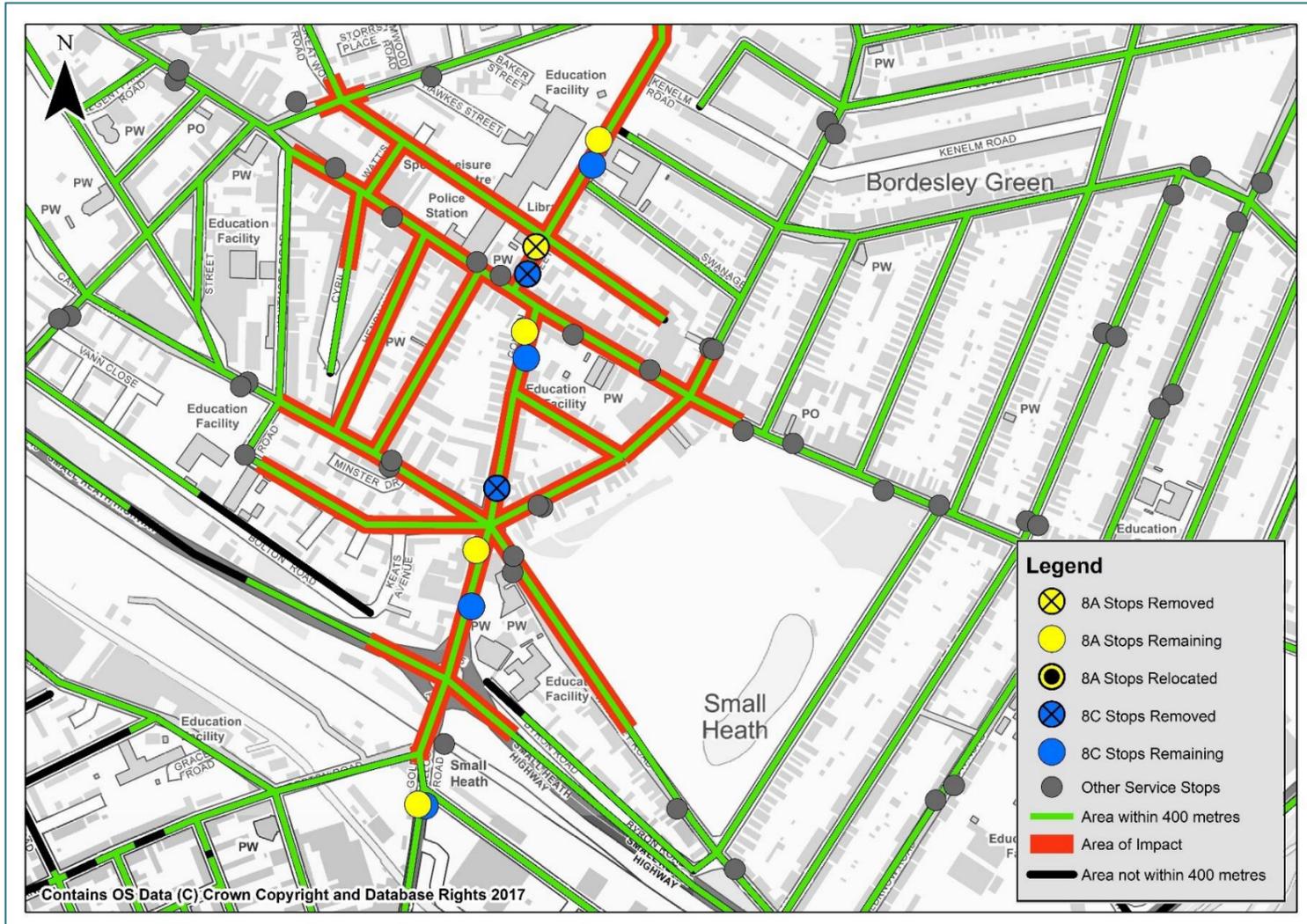


Figure 10. Supporting Map - 006

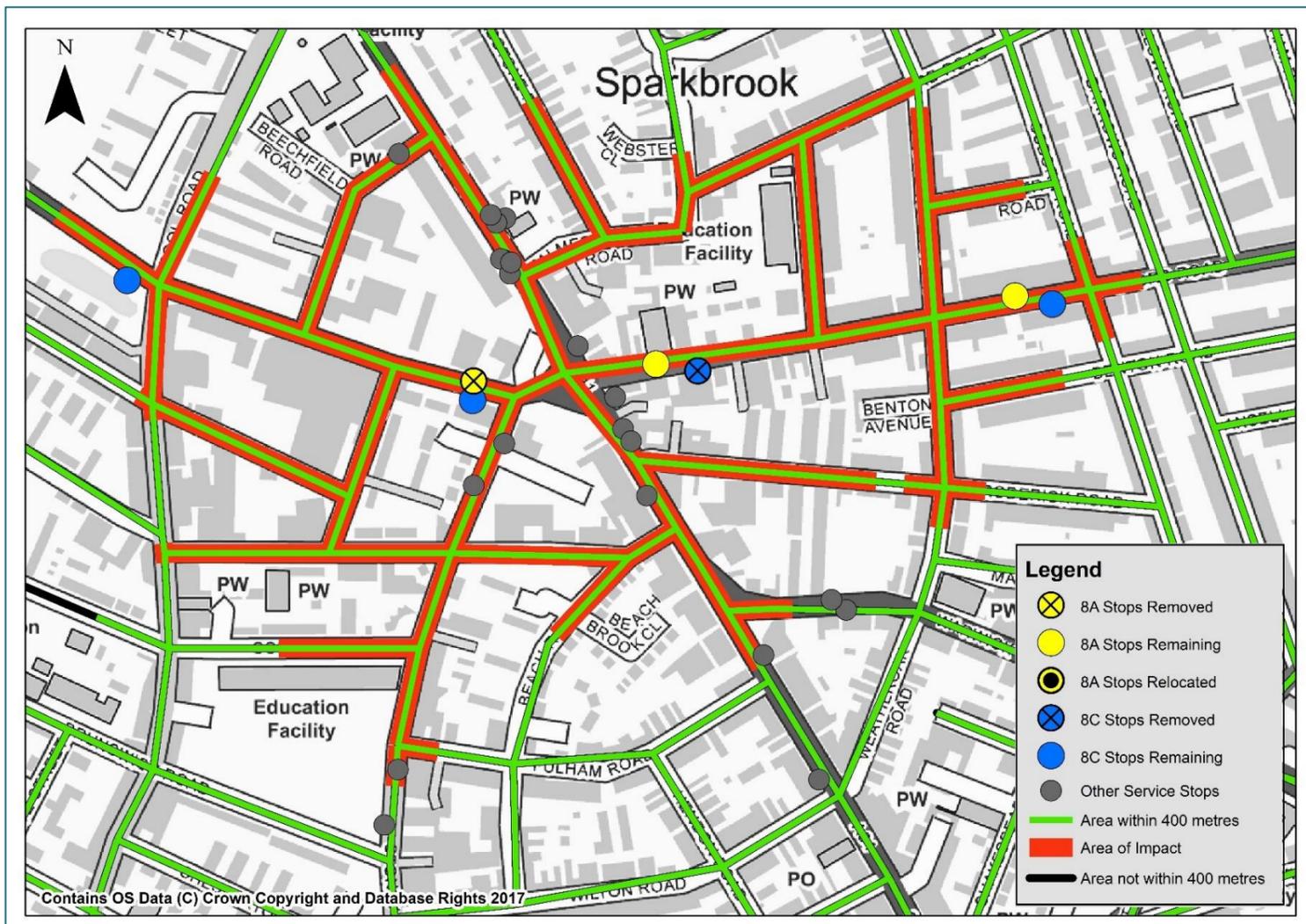


Figure 11. Supporting Map - 007

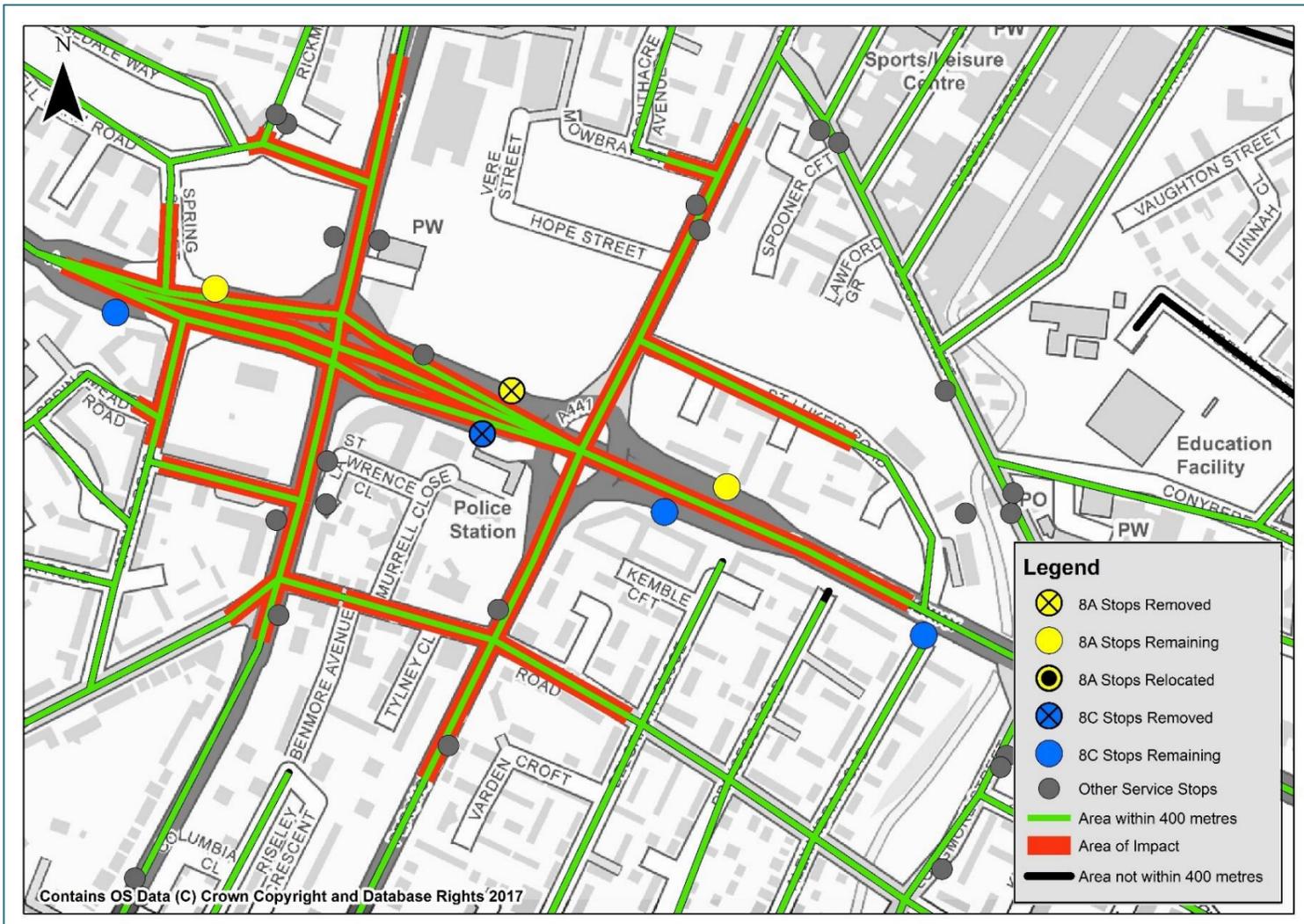


Figure 12. Supporting Map - 008

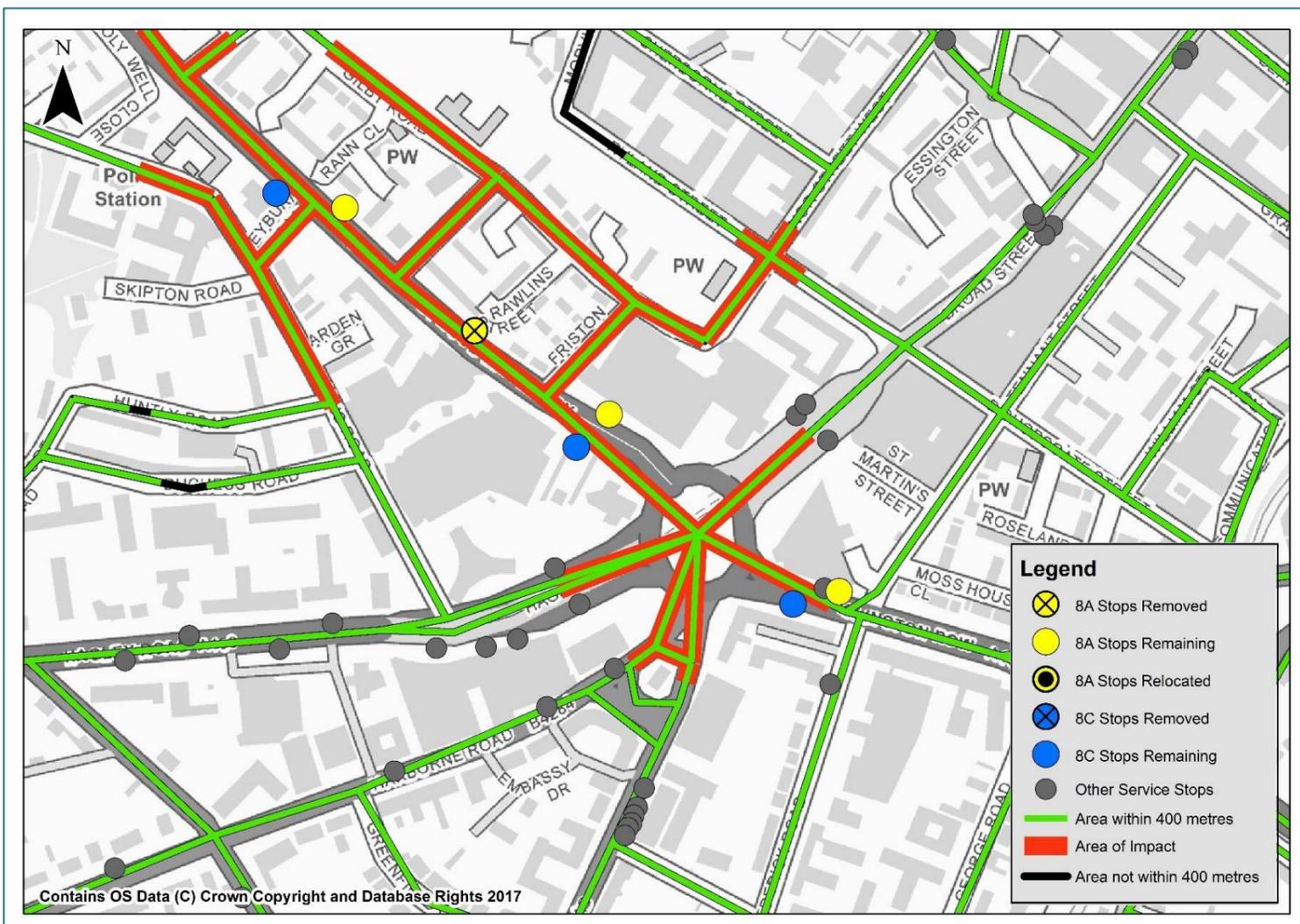


Figure 13. Supporting Map - 009

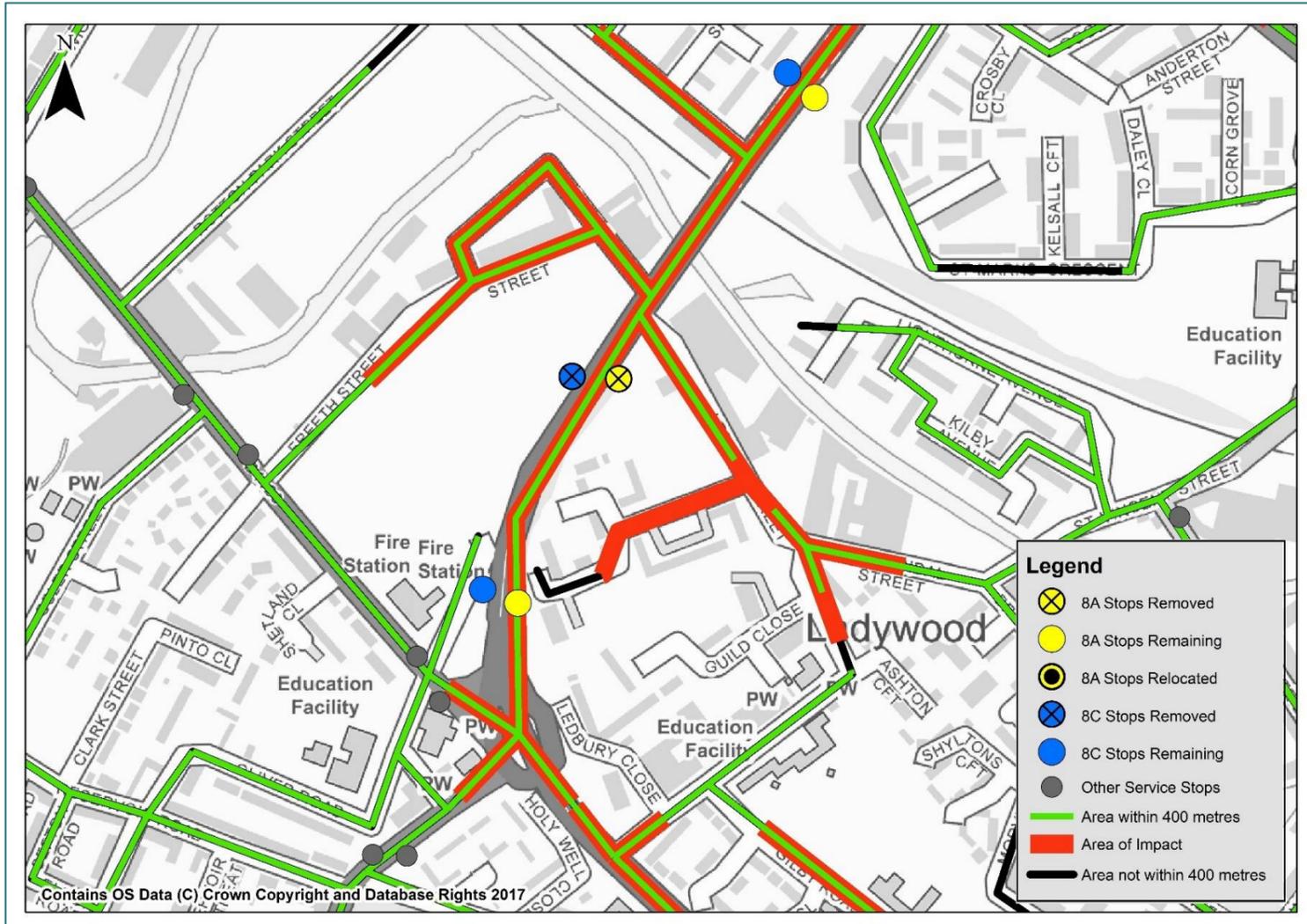


Figure 14. Supporting Map - 010

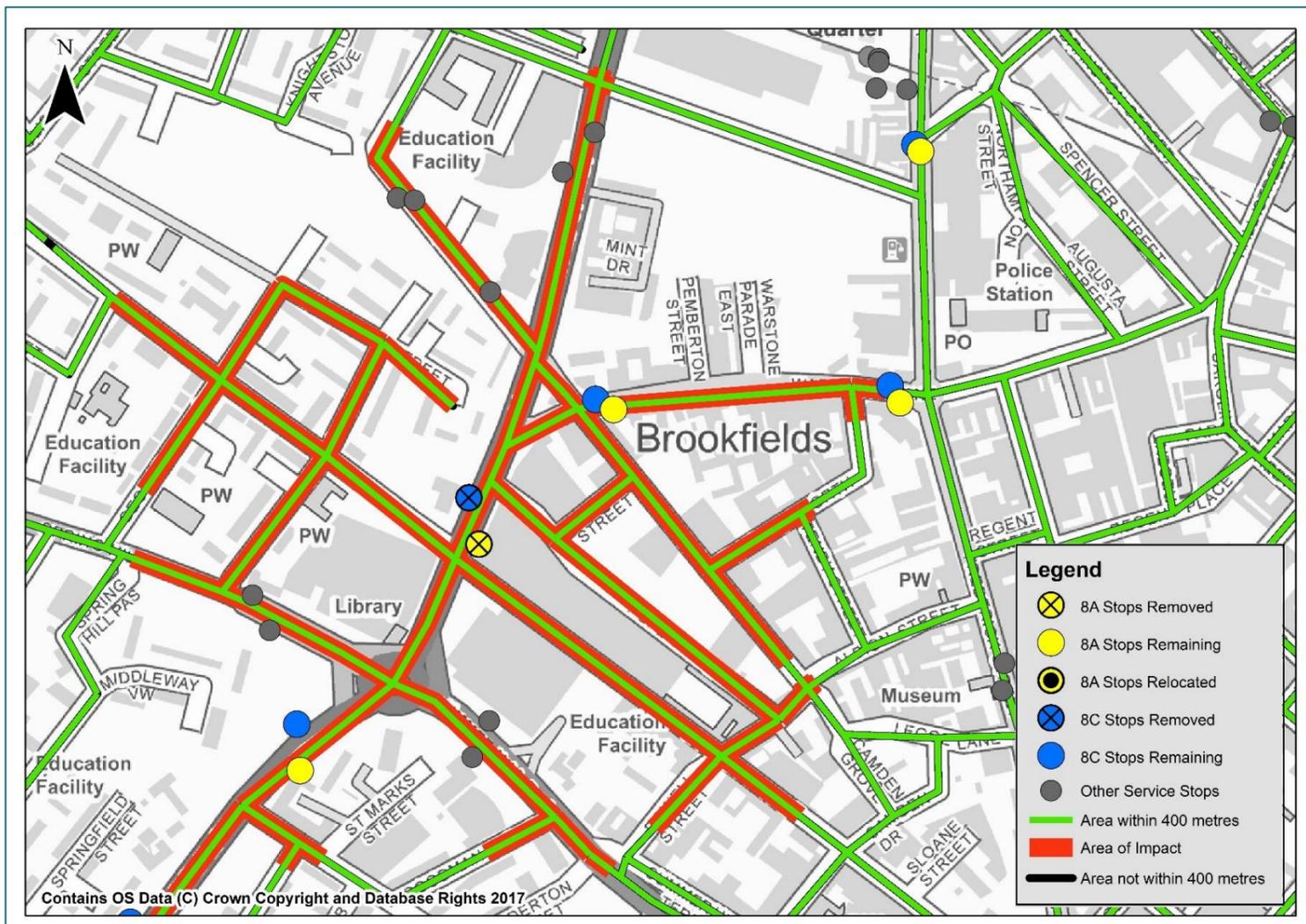
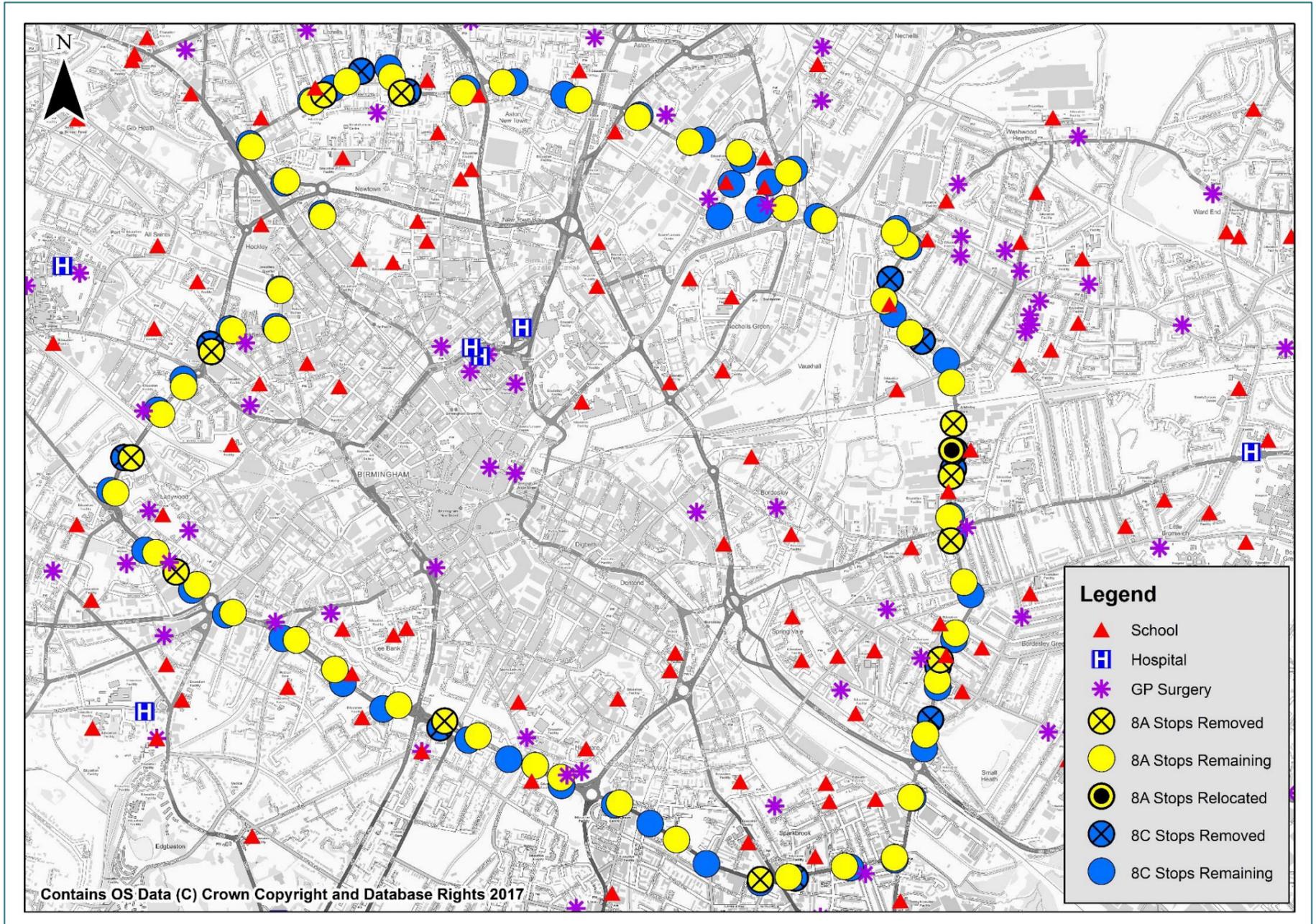


Figure 15. Proposed Rationalisation alongside Key Facilities



Technical note

5. Summary

Atkins was commissioned by National Express West Midlands to undertake a study investigating the scope for bus stops on several routes in Birmingham to be rationalised. This was in response to growing concern from National Express West Midlands and TfWM regarding increasingly long and unreliable bus journeys in the West Midlands.

There are several credible approaches which could be taken to determine the optimum stops for removal, but through discussion with National Express West Midlands and TfWM, Atkins has agreed a five-step process. This process has been informed by data provided by a combination of TfWM, the DfT and National Express West Midlands.

The focus of this commission has been on Route 8, which is a circular route, with 8A denoting buses traversing the route in the anti-clockwise direction and 8C denoting buses in the clockwise direction. The route serves the inner suburbs of the city and provides interchange with the key Birmingham radial corridors. The daytime frequency is five buses per hour (BPH), with buses taking approximately 70-80 minutes to complete the route. Timetabled journey times vary considerably through the day, reflecting both congestion in the city and differing dwell times in response to demand.

Having undertaken the five step process, Atkins has recommended a list of stops (10-12 stops per direction) which could be removed / relocated in the future. A reasonable working assumption is that removal of one stop can save of the order of 30 seconds, given the need for the bus to decelerate / accelerate and the dwell time associated with passengers boarding and alighting. On the basis of 10-12 stops being removed in both directions, it is reasonable to assume that approximately five minutes could be saved on the journey time in both directions, which may enable a reduction in the peak vehicle requirement (PVR) for National Express West Midlands. Reducing the number of stops is also expected to lead to an increase in punctuality, which was one of the stated targets of the West Midlands Bus Alliance.

Technical note

Appendix A. West Midlands Combined Authority Bus Service Access Standards

Technical note

West Midlands Combined Authority Bus Service Access Standards

Accessibility to the bus network

- 1.1 Residential Areas – The maximum desirable walking distance to bus services in continuously built-up areas is 400 metres during the hours of 07.00 to 19.00 on Monday to Saturday and 700 metres at other times. Wherever possible the services should provide links to local centres (post office, shops, services etc) and to interchanges with the public transport network.
- 1.2 The above distances are reduced in areas of severe gradients or where a high proportion of elderly people or people with mobility difficulties reside.
- 1.3 In lower density built-up areas the maximum desirable walking distance at all times is 700 metres, and in rural areas 1.5km.
- 1.4 Hospitals – minimum standards of service calculated according to total trips per annum using all modes of transport, to individual sites.
- 1.5 Major Urban Centres – bus access arrangements should be equivalent to or better than those provided for car users.
- 1.6 Suburban District Shopping Centres – to be served as closely as road layout will allow during main shop opening periods.
- 1.7 Places of Entertainment and Recreation – attractions be within 400/700 metres of a bus service during the hours of opening. Where this is not met, a special service with partnership funding will be considered.
- 1.8 Normal bus access standards will apply in Midland Metro and Bus Rapid Transit corridors unless adapted to reflect agreed local circumstances in relation to the provision of these rapid transit modes.

Frequency

- 2.1 Mondays to Saturdays - Minimum standard frequency for:
 - (a) Continuously built up areas: between 07.00 and 19.00 is two journeys per hour.
 - (b) Low density residential areas: between 07.00 and 19.00 is one journey per hour.
 - (c) Rural areas: between 07.00 and 19.00 is one journey per hour.

Technical note

- 2.2 Sundays – One journey per hour in continuously built up areas between noon and 19.00 hours, and subject to demand at other times, and elsewhere. As funding allows, this will be increased to a half hour frequency in continuously built-up areas between 10.00 and 18.00 hours.
- 2.3 Bank Holidays – As Sunday Services, excluding Christmas Day and Boxing Day. Special arrangements will apply for Boxing Day and New Year's Day.

Value for money requirements

- 3.1 Research will identify demand for services which are deemed to be socially necessary.
- 3.2 Services are categorised in the following order of priority, to be provided subject to available finance.
 - 1. Journeys to work
 - 2. Shopping and medical journeys
 - 3. Sundays and Bank Holidays
 - 4. Evenings
 - 5. Town and City Centre distributor services
 - 6. Night Services
- 3.3 Specific Journey Requirements – per trip
 - (a) 8 people or less: no service
 - (b) 8 – 10 people: feeder facility considered
 - (c) more than 10 people: through facility considered
- 3.4 Regular Journey Requirements – per hour
 - (d) 8 people or less: no service
 - (e) 8 – 10 people: feeder facility considered
 - (f) more than 10 people: minimum hourly service

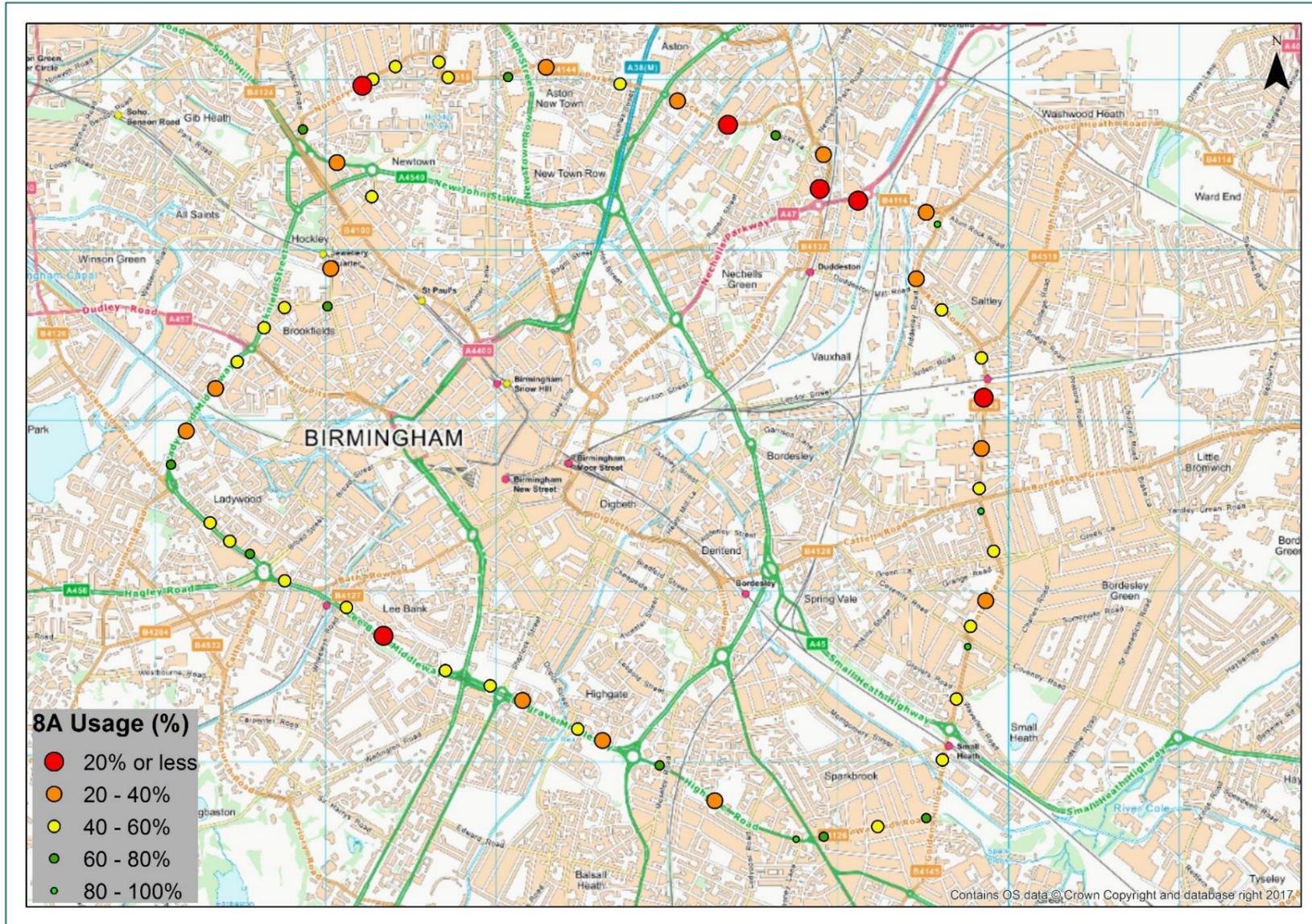
Technical note

Appendix B. Supporting Mapping for Routes 8A / 8C

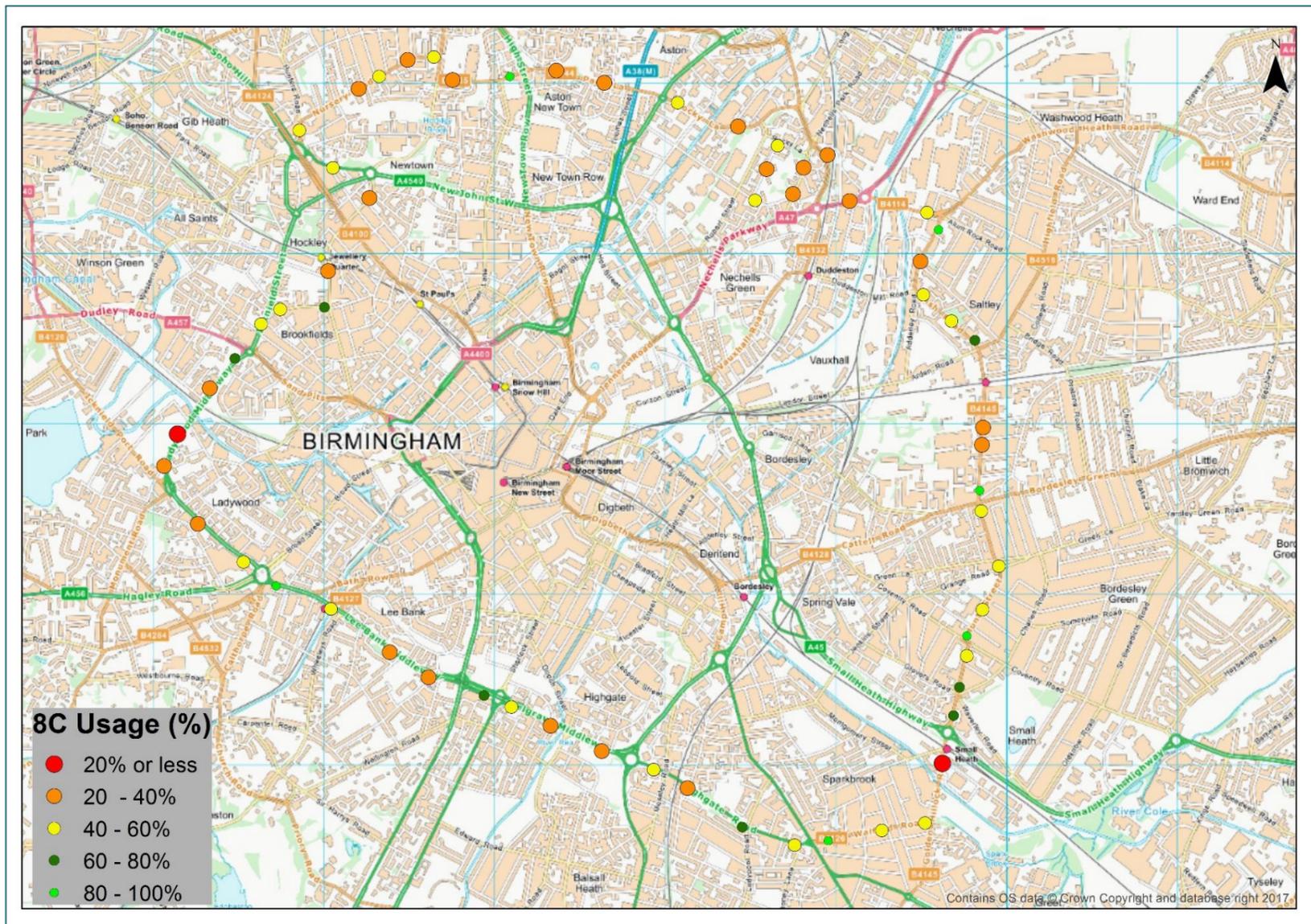
- **Map A:** Showing the proportion of buses calling. Red shading of a stop denotes less than 20% of buses calling. These maps have been used to inform Step 1 of the process;
- **Map B:** Showing distances (metres) between stops. Stops that are within 200m of another stop in the same direction are shown in red, with all other stops shown in green. These maps have been used to inform Step 2 of the process;
- **Map C:** Showing the infrastructure type (whether a pole or a shelter is provided);
- **Map D:** Showing whether the stop is a timing point;
- **Map E:** Showing the services calling at the bus stop (whether the stop is served by the 8A / 8C only or additional services); and
- **Map F:** Showing the location of bus stops relative to schools, GP surgeries and hospitals. Note that this has been based upon the DfT layer.

Note these maps currently show the old layout for Route 8C in the Nechells Green area. To be updated.

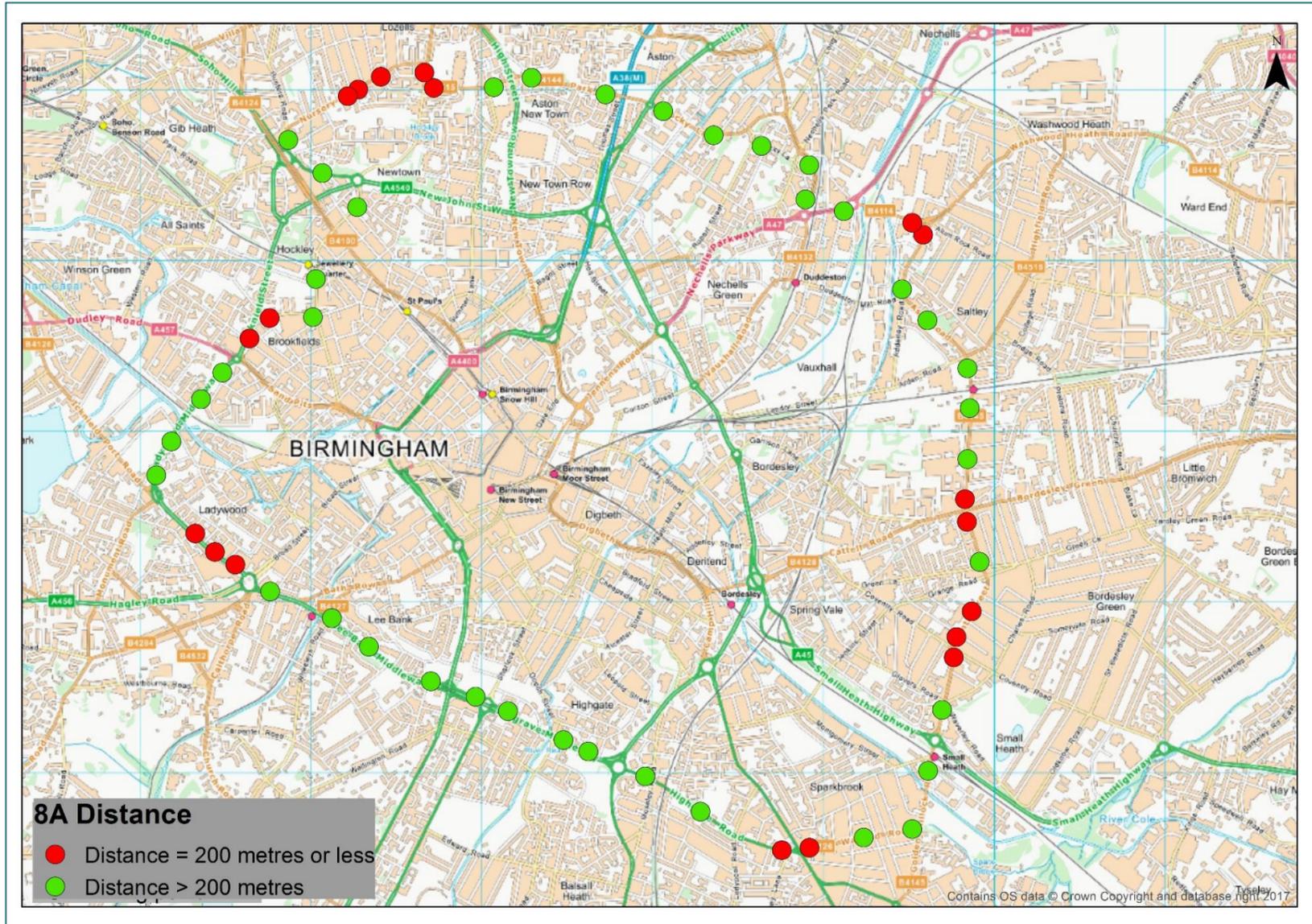
Map A (Proportion of Buses Calling) – 8A



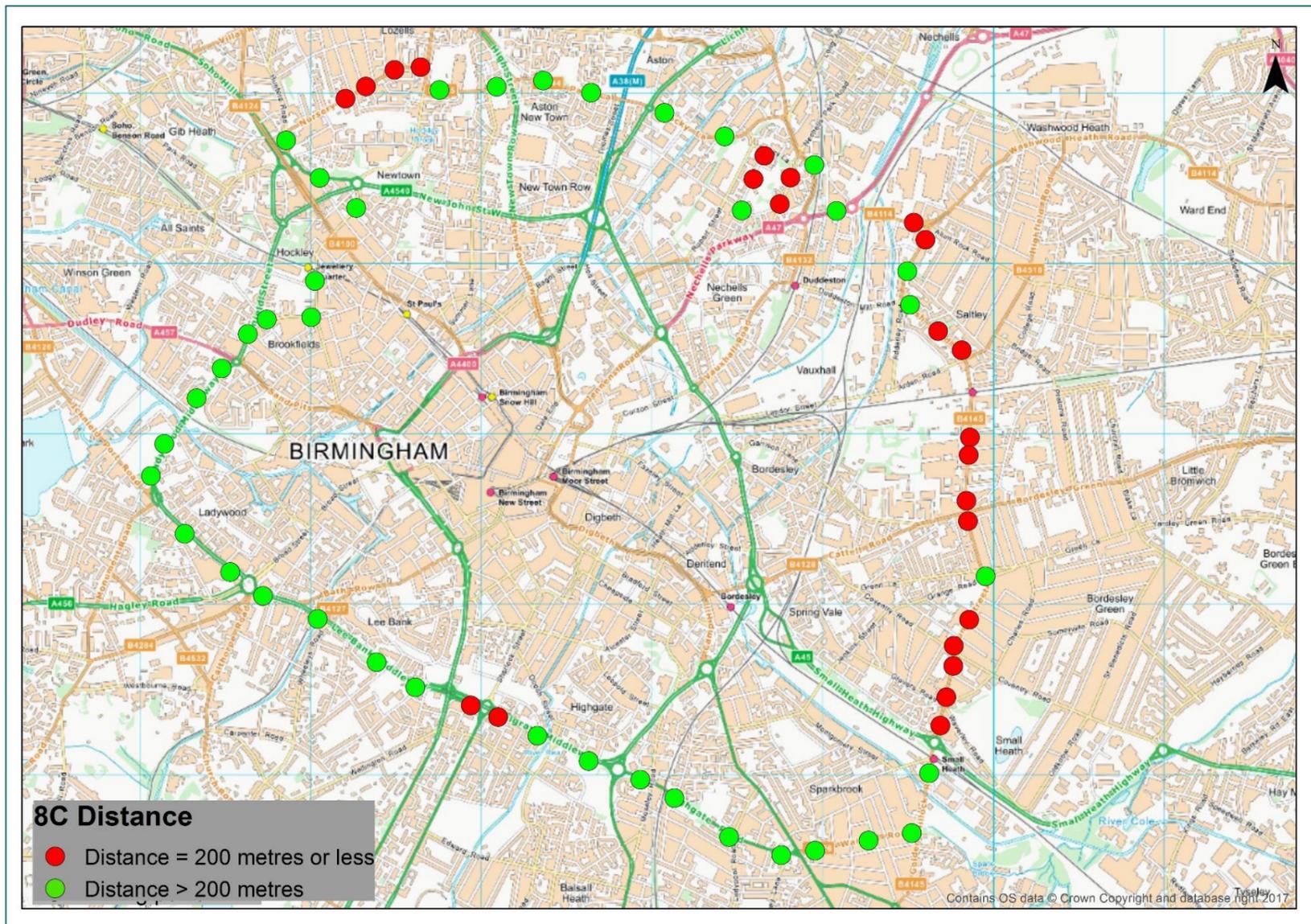
Map A (Proportion of Buses Calling) – 8C



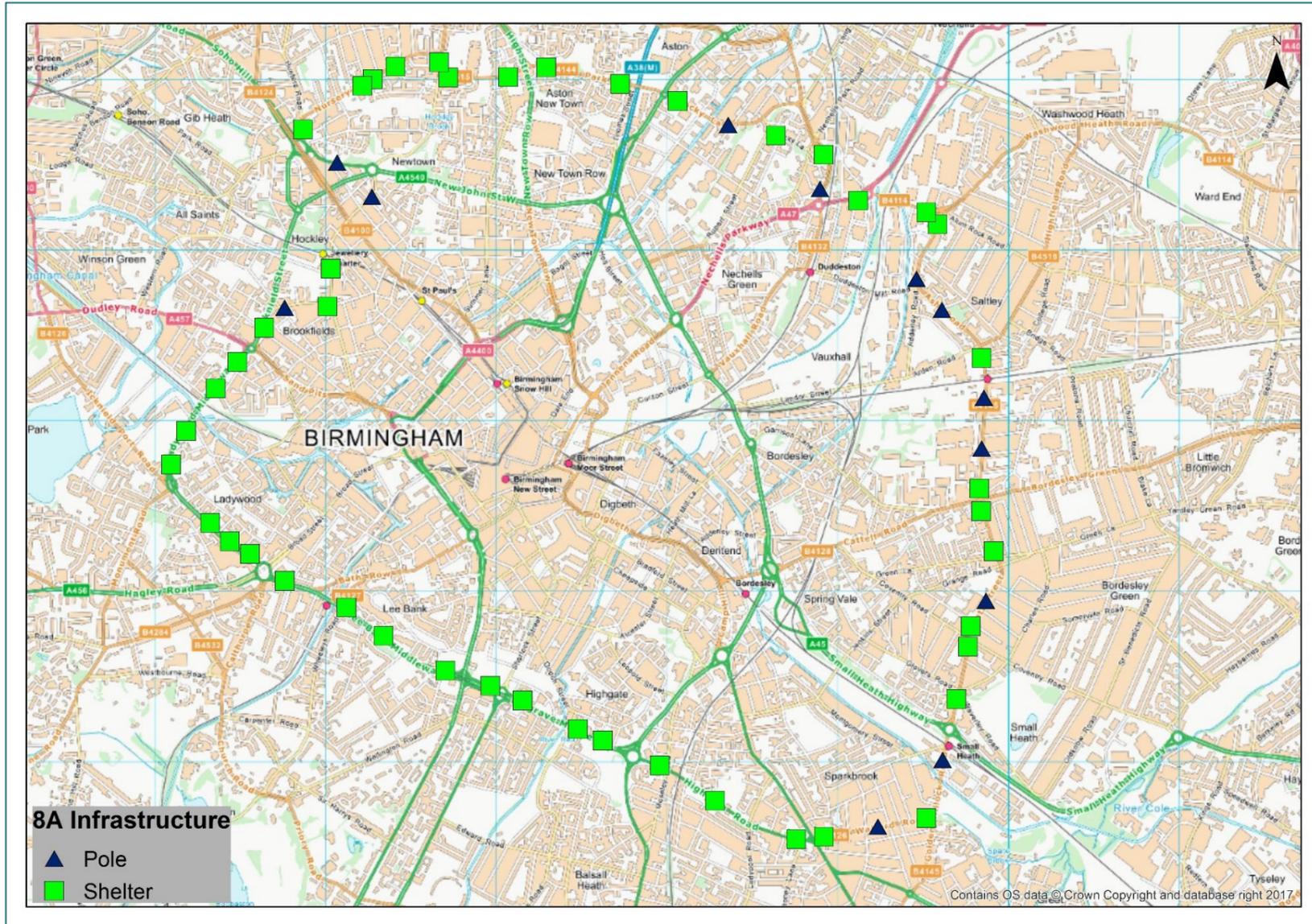
Map B (Distances between Stops) – 8A



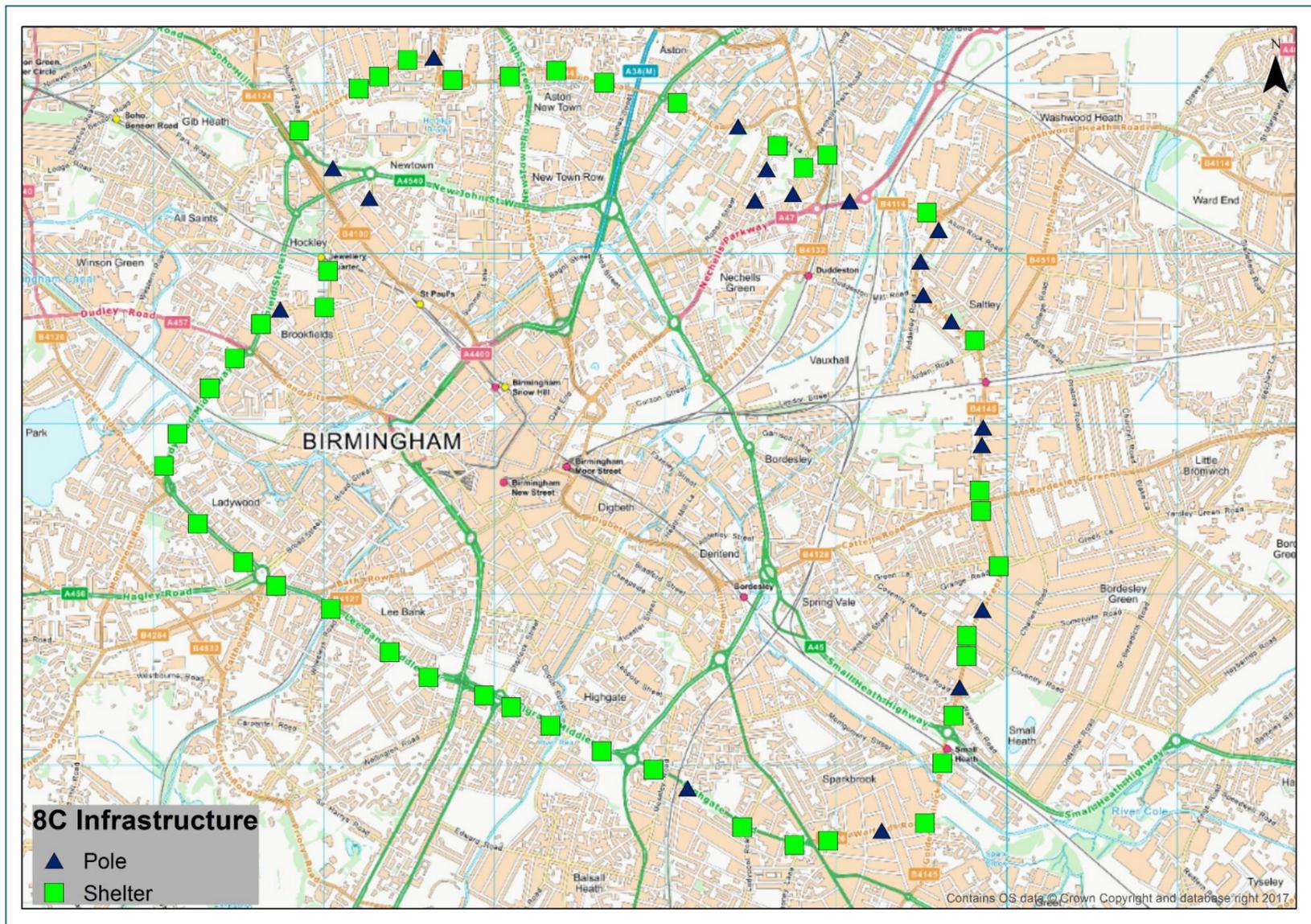
Map B (Distances between Stops) – 8C



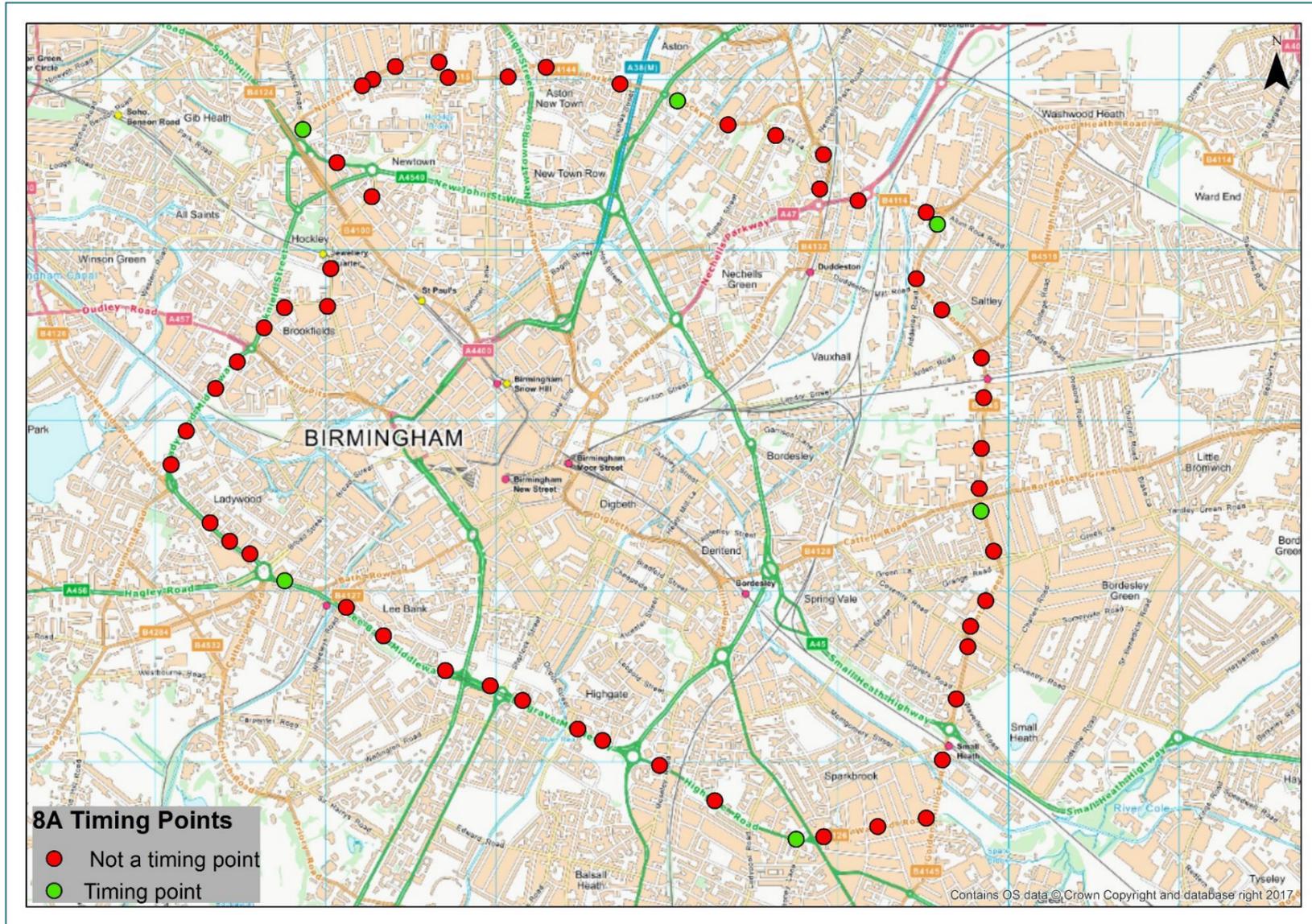
Map C (Infrastructure Type) – 8A



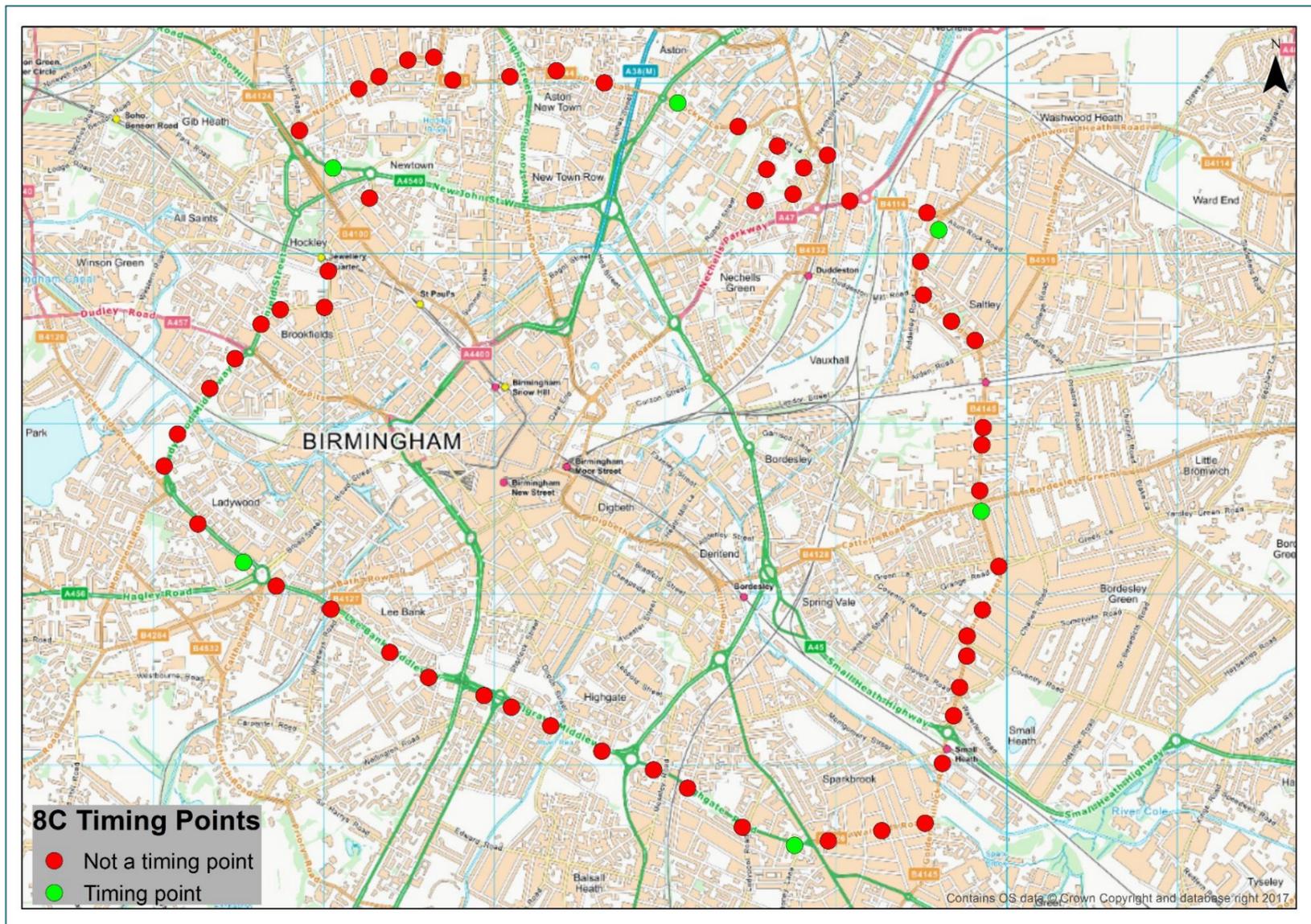
Map C (Infrastructure Type) – 8C



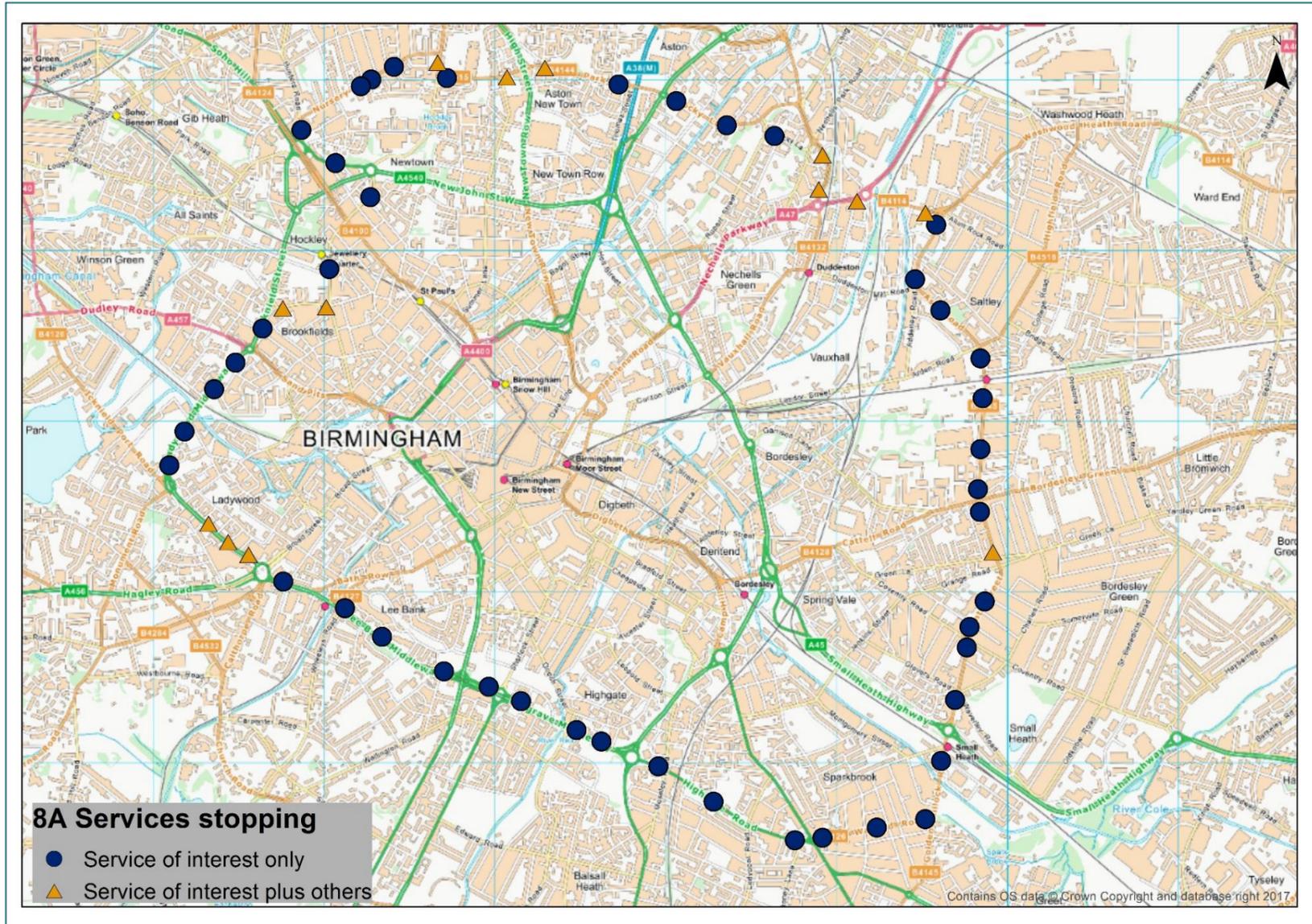
Map D (Timing Points) – 8A



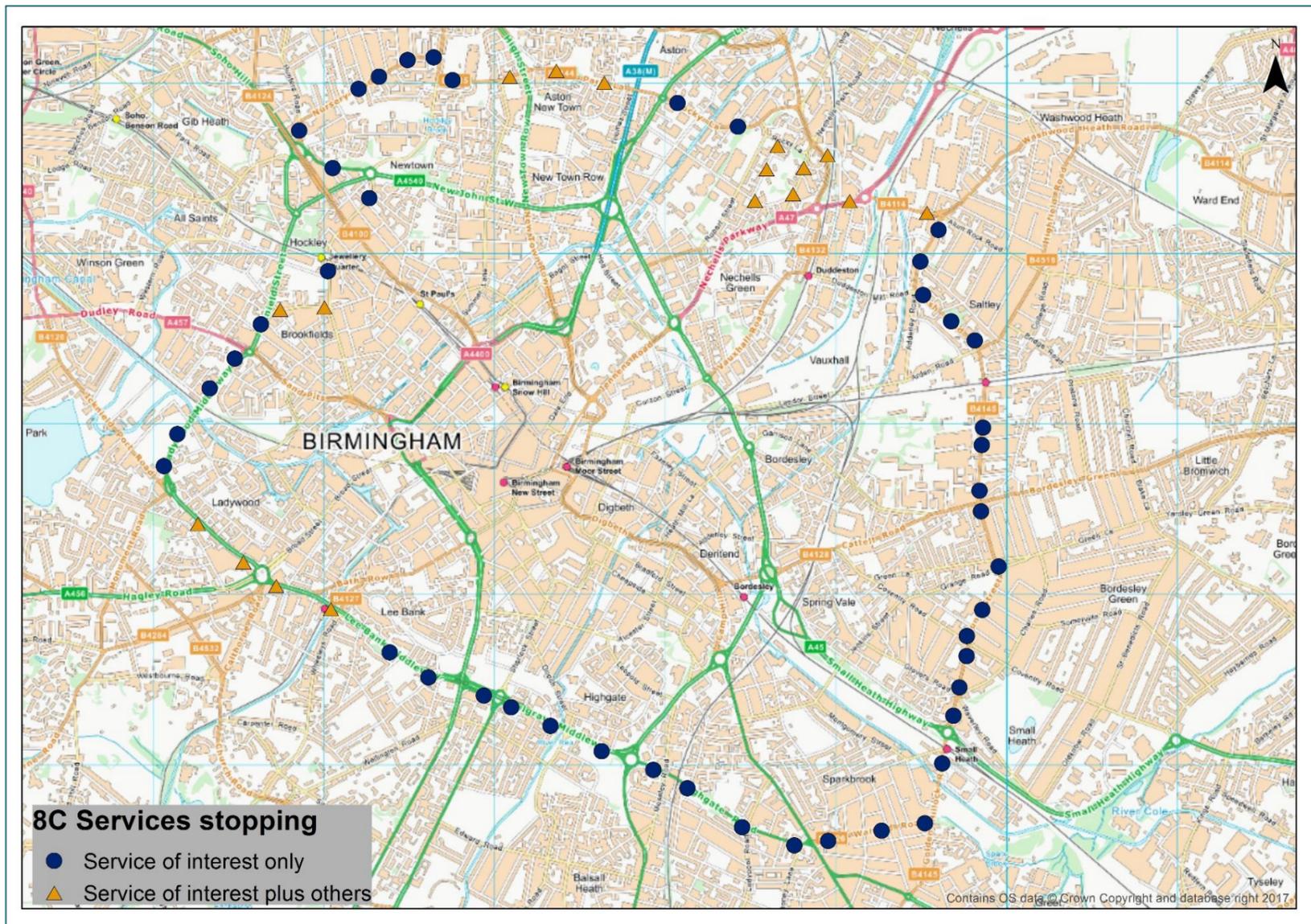
Map D (Timing Points) – 8C



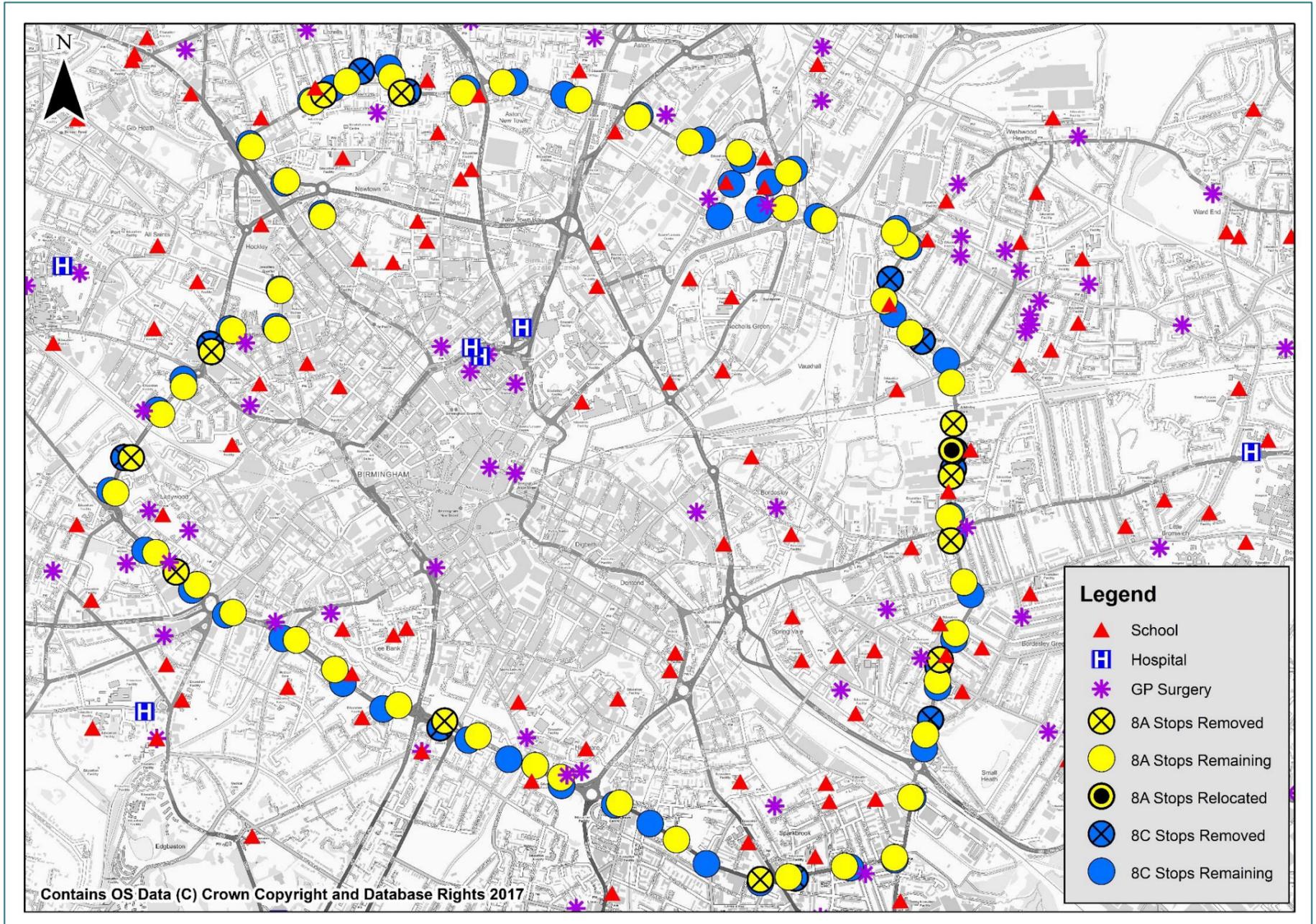
Map E (Services Calling) – 8A



Map E (Services Calling) – 8C



Map F (Key Facilities) – 8A / 8C



This page is intentionally left blank



Transport Delivery Committee

Date	4 September 2017
Report Title	West Midlands Rail Franchise Award
Accountable Director	Steve McAleavy, Interim Director of Transport Services
Accountable employee(s)	Peter Sargant, Head of Rail
Report has been considered by	Councillor Roger Horton – Lead Member Rail and Metro

Recommendation(s) for action or decision:

The Transport Delivery Committee is recommended:

1. To welcome the award of the new WM Rail Franchise to West Midlands Trains Ltd, noting the significant investments and improvements that are planned to be delivered.
2. To note that TfWM will be working with the new franchisee during the franchise mobilisation process to ensure that there is a seamless changeover between London Midland and West Midlands Trains.
3. To invite representatives of West Midlands Trains to the 4 December meeting for a full briefing on the details of the franchise just before its launch.

1.0 Purpose

- 1.1 The purpose of this report is to advise Transport Delivery Committee members on the outcome of the West Midlands franchise competition process.

2.0 Background

2.1 The West Midlands Rail franchise operates the majority of rail services in the TfWM area and is critical importance to the economy of the West Midlands. Since 2007 the franchise has been operated by GoVia (a consortium of GoAhead and Keolis) under the “London Midland” brand name.

2.2 The competition for a new West Midlands franchise has been underway since 2015, with the Invitation to Tender issued in September 2016. The franchise competition has involved close collaboration between the Department for Transport and West Midlands Rail (WMR), and included TfWM employees being seconded into the franchising team on behalf of WMR.

2.3 The competition was between GoVia and West Midlands Trains Ltd (a joint venture between Abellio, East Japan Railway Company and Mitsui & Co Ltd). This followed a third bidder (MTR Ltd) dropping out early in the process.

2.4 On 10 August the DfT announced that the franchise has been awarded to West Midlands Trains Ltd (WMT).

2.5 Both the DfT and West Midlands Rail have issued press releases which are attached which outline many of the improvements that the new franchise will deliver. The headlines include:

- 20,000 extra seats for peak passengers into Birmingham
- 100 new carriages on the Cross City Line
- 80 new carriages for the Snow Hill lines
- Major improvements to Sunday services
- Compensation if services are delayed by more than 15 minutes
- Free Wi-Fi on all main-line services
- Roll out of smart ticketing
- Trains and stations branded in a locally specified West Midlands Railway Livery.

2.6 The franchise will operate from 10 December 2017 through to March 2026, and there are different timescales for the delivery of different requirements. The main capacity and service enhancements will be delivered in 2021, although some significant timetable changes will be introduced in December 2018 and some further changes in 2019.

2.7 The DfT Press Release (Appendix 1), WMR Press Release (Appendix 2) and WMR Briefing Document (Appendix 3) are attached to this report. The improvements outlined above and in the press releases have been explicitly specified and contracted within the new Franchise Agreement.

- 2.8** At a briefing session on 14 August, WMT revealed that over and above the base requirements specified by DfT, WMT is looking to introduce a wider package of service improvements from December 2018 onwards. This includes restructuring the timetable across Birmingham New Street to create new through journey opportunities. This will also create a number of new long-distance through services to London from a number of stations in the West Midlands. This is likely to include an hourly service between Walsall and London. WMT is also looking at operating significantly earlier and later services to and from Birmingham International to cater for the needs of airport passengers and staff. The exact details will be developed as part of the timetable development process.
- 2.9** WMT will also be actively developing proposals for a number of new services within the WMR area including:
- New services on the Walsall to Wolverhampton Line serving new stations at Willenhall and Darlaston
 - New service to Brierley Hill as an extension of Birmingham - Stourbridge Junction services
 - New service on the Camp Hill Line serving stations at Moseley, Kings Heath and Hazelwell
 - New service to West Midlands Safari Park as an extension of Birmingham - Kidderminster services which will operate along the Severn Valley Railway
- 2.10** The delivery of these new services have not been explicitly contracted within the new franchise and are subject to feasibility studies being undertaken and support from WMCA/TfWM as required.
- 2.11** As part of a major package of station improvements WMT will be investing in 800 new LED Passenger Information displays at stations across the franchise which will allow significantly improved customer information to be displayed, especially during times of disruption.
- 2.12** There will also be a new Service Quality Regime operating across the WMR area which will support a commitment by WMT to significantly improve the customer experience both on-train and at-station.
- 2.13** WMT is currently developing its approach to staffing (both on-train and at-station) within the franchise, although it has stated that a second member of staff will remain in place on-board all services.
- 2.14** TfWM will now be undertaking activities associated with the changeover of franchise operator as part of the mobilisation process. This will include both novating and renegotiating existing contracts as required, and developing new agreements.
- 2.15** Given the early stage of development for some of the proposals it is proposed that representatives of West Midlands Trains are invited to the 4 December meeting of the committee to provide more information on the franchise prior to the formal launch on 10 December.

3.0 Financial implications

3.1 There are no direct financial implications as a result of this report. Franchise management responsibilities in relation to West Midlands Rail will be met from the budget in place that is funded from an annual DfT grant and annual contributions from West Midland Rail Member local authorities. Any legal or other additional costs incurred from the work undertaken by the mobilisation workstreams will be met from a re-prioritisation of remaining 2017-18 budgets.

4.0 Legal

4.1 Any legal implications arising from the new franchise are being identified through the franchise mobilisation process.

5.0 Equalities implications

5.1 The new franchise will deliver significant equalities benefits (for example more accessible trains on the Cross City line), and TfWM and WMR will be working with WMT to support the delivery of its commitments in this area.

6.0 Other implications – Not applicable

7.0 Schedule of background papers

- Appendix 1 – DfT Press Release
- Appendix 2 – WMR Press Release
- Appendix 3 – WMR Briefing Document

Appendix 1

DfT Press Release

Better trains, services and stations for passengers travelling between the north-west, the Midlands and London.



Rail passengers will get new longer trains with more seats and more space as nearly £1 billion is invested in services on the West Midlands network.

There will be 400 new carriages rolled out by 2021 and space for an extra 85,000 passengers on rush hour services in Birmingham and London, with the longer trains providing extra seats and space for passengers.

Under the deal with West Midlands Trains Ltd (a joint venture between Abellio, East Japan Railway Company and Mitsui & Co Ltd) to run the West Midlands franchise, passengers will get:

- free wifi on all main line services by the end of 2019
- for the first time compensation if services are delayed by more than 15 minutes
- improved access for those requiring extra assistance, including disabled people

Smart ticketing and live passenger information will also be rolled out under the deal, as part of a package of reforms that will improve journeys for passengers.

The franchise covers services across the West Midlands, as well as trains from London Euston to Crewe and from Liverpool to Birmingham.

Transport Secretary Chris Grayling said:

This is great news for passengers using West Midlands services – with new trains, more space, more regular services and easier access for disabled people.

We are improving the whole travelling experience with live train crowding information, compensation for people delayed by 15 minutes or more, smart ticketing and better value tickets for part-time workers.

This shows we are delivering on our commitment to build a railway that works for everyone.

Dominic Booth, Managing Director of Abellio UK, said:

We are delighted to have been announced as preferred bidder for the West Midlands franchise, driving growth in one of the most exciting regions in the country. We will be investing nearly £1 billion into the network, delivering new trains, better stations and a whole host of other benefits for passengers.

The trains running only in the West Midlands area will be jointly managed by the Department for Transport and West Midlands Rail (WMR), a consortium of 16 local councils.

Andy Street, Mayor of the West Midlands, said:

We want to see a new golden era for our local trains and today's announcement is an important step towards that.

Having the ability to use our local knowledge and understanding to shape what West Midlands Trains will deliver for passengers under this franchise has also been a game changer.

I believe the deal secured today will help create a railway that can not only improve people's journeys but keep our economy growing and we look forward to working with West Midlands Trains in making that happen.

View a [map showing the benefits by line](#).

There will be 20,000 extra seats for rush hour passengers in Birmingham, and 10,000 for people in London.

On top of this, there will be standing room for 50,000 passengers in Birmingham in metro-style carriages, similar to the ones used on the London Overground, for short cross-city journeys, and standing room for an additional 5,000 passengers in London.

The new franchise will see closer partnership working between track and train – delivering the Secretary of State's vision for the network. The West Midlands network of trains and infrastructure will be run by a local team of people with a commitment to the smooth operation of their routes, improving services and performance.

Other key benefits for passengers under the franchise deal include:

- plans to limit the impact of delays caused by leaves on the line in the autumn, including through the introduction of new modern trains
- an extension of smart ticketing in the West Midlands making this available at more stations, and a new smart card season ticket for people using the Northampton to Euston line
- more than 800 new digital information screens across 150 stations providing real time journey information, plus a new mobile service that gives live crowding information to help passengers plan ahead
- passengers will also be entitled to 25% compensation if their train is delayed by 15 minutes for the first time - they already receive 50% of their money back for delays of half an hour and full compensation if it is more than an hour
- more than £70 million invested in new and existing depots to improve train reliability
- more than £60 million invested on station improvements which will deliver:
 - over 1,000 new car park spaces
 - over 2,500 cycle parking spaces

- a cycle hire scheme
- new and refurbished waiting rooms
- more seats at stations

As well as feasibility studies for the development of new stations in the West Midlands.

The new contract will start in December and last until March 2026.

West Midlands

There will be more than 180 new train carriages for the West Midlands, creating more space for people.

This includes investment in 100 new carriages on the Cross City line and 80 new carriages for the Snow Hill line, offering longer and more spacious services.

The carriages for the Cross City line will offer metro-style services with increased space to carry more passengers, and wider doors for quicker access.

Other benefits for passengers include:

- more trains between Birmingham and Shrewsbury with 2 services per hour from December 2018
- a regular 2 trains per hour service between Birmingham and Rugeley via the Chase Line from December 2018
- a new direct hourly service between Birmingham and Stoke-on-Trent from December 2018 providing much needed additional capacity on this busy route
- an extension of Cross City line services from Longbridge to Bromsgrove
- a new hourly shuttle between Leamington Spa and Coventry serving the new station at Kenilworth.
- two morning and two evening rush hour direct services between Walsall and London from December 2018, helping to unlock economic growth in the region
- more Sunday services on the Cross City line with the number of trains per hour between Longbridge and Birmingham doubling from 2 per hour to 4 in December 2018, and then increasing to 6 in May 2021
- increased Sunday services on the Snow Hill line with the number of trains per hour between Snow Hill and Stourbridge Junction increasing from 2 to 6
- a new Sunday service between Birmingham and Shrewsbury from December 2018, and a second train per hour introduced in May 2021

London

Passengers on London services will benefit from 225 brand new carriages, with all other carriages being completely refurbished.

People travelling between Northampton and Euston and on the Abbey Line between St Albans Abbey and Watford Junction will be able to pay for their travel with a smart card for the first time.

In other improvements:

- more space for passengers will be rolled out on the Marston Vale line with earlier and later services between Bedford and Bletchley and a new hourly Sunday service from May 2021 for the first time

- modern trains for the Abbey line and improvements to Sunday services from May 2021 which will provide a similar level of service to that provided on a Saturday
- mobile phone and laptop chargepoints on all London services by May 2021
- more Sunday trains on the line from Euston to Northampton, with up to 4 services an hour running between Euston and Milton Keynes by May 2021

North-west

New trains will be arriving in the north-west on the Liverpool to Birmingham line, which passes through Crewe and Winsford. These are longer and have more seats for passengers than the existing trains.

A later last train from Liverpool to Birmingham on a Saturday, departing at least 45 minutes later.

Enhanced Sunday services between Birmingham and Liverpool from December 2021 increasing from one train per hour to 2 trains per hour.

A new Sunday service for Acton Bridge from May 2021.

Appendix 2

WMR Press Release

Rail passengers are to get more frequent services with new trains and extra seats as a result of a near £1 billion investment in the West Midlands network.

The cash injection is part of a deal announced today (August 10) that will see West Midlands Trains Ltd (a joint venture between Abellio, East Japan Railway Company and Mitsui & Co Ltd) run the region's rail services under new franchise from December onwards.

Trains running only in the West Midlands area will be jointly managed by the Department for Transport (DfT) and West Midlands Rail (WMR), a consortium of 16 local councils.

A package of improvements has been built into the franchise agreement aimed at providing more services and more space for passengers and to stimulate and support further economic growth and jobs across the region.

It is the first time that West Midlands authorities have had such a level of influence in setting out what a train company needs to deliver for local passengers.

Benefits include:

- 20,000 extra seats for rush hour passengers in Birmingham.
- 100 new carriages on the Cross City line
- 80 new carriages for the Snow Hill line
- Compensation if services are delayed by more than 15 minutes
- Free WiFi on all main line services
- A roll out of smart ticketing and live passenger information
- Trains and stations branded in a locally specified West Midlands Railway livery

Andy Street, Mayor of the West Midlands, said: "We want to see a new golden era for our local trains and today's announcement is an important step towards that.

"Having the ability to use our local knowledge and understanding to shape what West Midlands Trains will deliver for passengers and businesses has been a real game changer.

"When it comes to our local train services we have not had this level of local influence and management before and it fits with the wider powers and responsibilities currently being transferred from Whitehall to the West Midlands.

"The result of this influence is that we will see West Midlands Trains deliver more of the services that passengers want including earlier and later weekday services and more trains on Sundays.

"I believe this deal for the West Midlands will not only improve people's journeys but keep our economy growing and we look forward to working with West Midlands Trains in making that happen."

Under the franchise agreement West Midlands Trains will run local rail services in the West Midlands from December this year until March 2026.

As well as increased frequencies the deal will see major investment in new trains with local services branded under a new West Midlands Railway livery.

The 100 new carriages for the Cross City line, the busiest route on the West Midlands network, will be of a design that offers increased space to carry more passengers and wider doors for quicker access.

Cllr Roger Lawrence, chair of WMR and leader of the City of Wolverhampton Council, said: "We have spent many months working closely with the DfT on developing a franchise deal that can bring tangible improvements for passengers, particularly in terms of the frequency and capacity of their services.

"It's important to remember that tens of thousands of people rely on this local network to not only get to work each day but to undertake wider business trips and enjoy the cultural and leisure attractions of our region.

"This deal, together with the significant transport infrastructure set to be built in the West Midlands, will help ensure we have efficient train services that connect with the rest of the wider bus and tram network and, of course, the forthcoming high speed rail line. That will underpin economic growth and the new jobs being created in our region."

Other benefits for passengers in the franchise deal include:

- More trains between Birmingham and Shrewsbury with two services per hour from December 2018
- A regular two trains per hour service between Birmingham and Rugeley via the Chase Line from December 2018
- A new, direct hourly service between Birmingham and Stoke-on-Trent from December 2018 providing much needed additional capacity
- An extension of Cross-City line services from Longbridge to Bromsgrove
- A new hourly shuttle between Leamington Spa and Coventry serving the new station at Kenilworth
- Two morning and two evening rush hour direct services between Walsall and London from December 2018, helping to unlock economic growth in the region
- More Sunday services on the Cross-City line with the number of trains per hour between Longbridge and Birmingham doubling from two per hour to four in December 2018, and then increasing to six in May 2021
- Increased Sunday services on the Snow Hill line with the number of trains per hour between Snow Hill and Stourbridge Junction increasing from two to six
- A new Sunday service between Birmingham and Shrewsbury from December 2018, and a second train per hour introduced in May 2021

Cllr Mark Winnington, vice chair of WMR and Staffordshire County Council's cabinet member for economic growth, added: "All successful economies have a fast and efficient transport network at their heart.

"The deal announced today can help ensure we have a network that can better support the regional economy while delivering services that are focussed on the real needs of passengers.

"We are particularly pleased that our local services will carry their own West Midlands Railway livery as we felt it was important to have a distinct brand and identity for the regional network."

The franchise covers services across the West Midlands, as well as trains from London Euston to Crewe and from Liverpool to Birmingham.

The deal will, for the first time, see passengers entitled to 25 per cent compensation if their train is delayed by more than 15 minutes. They already receive 50 per cent of their money back for delays of half an hour and full compensation if it is more than an hour.

Around £60m will be invested on station improvements across the franchise area delivering 1,000 new car park spaces, 2,500 cycle parking spaces, a cycle hire scheme, new and refurbished waiting rooms and more seats at stations. There will also be improved access for those requiring extra assistance, including disabled people.

Feasibility studies will be undertaken for the development of new stations in the West Midlands and there will be plans to limit the impact of delays caused by leaves on the line in the autumn, including through the introduction of new modern trains.

Appendix 3

WMR Briefing Document

West Midlands Franchise Award

Headlines and Benefits

10/08/2017

1. Executive summary

Today the Department for Transport (DfT) has announced the winner of the competition to become the next West Midland Franchisee, heralding nearly £1 billion of investment in services on the West Midlands route. This will mean more space on trains, more frequent services and better facilities for passengers.

West Midlands Trains Ltd (a joint venture between Abellio, East Japan Railway Company and Mitsui & Co Ltd) will deliver substantially more space for passengers and a fleet of brand new and refurbished trains serving the region. Improved passenger information and accessibility standards, more services at weekends and evenings, flexible ticketing for part-time workers, better compensation, free Wi-Fi, station upgrades and an innovative staff gainshare scheme will all contribute to a significantly enhanced passenger experience across the entire network.

The franchise will operate from 10 December 2017 through to March 2026.

Passengers in the West Midlands will benefit from 180 new train carriages creating more space for people, especially during rush hour. This includes an investment in 100 new carriages on the Cross City line in Birmingham, and a further 80 for the Snow Hill line. The new Cross City line carriages will offer metro-style passenger facilities, with increased space to carry more passengers and wider doors.

There will be more than 300 extra Sunday services across the franchise, with most routes operating at Saturday frequencies. There will be more evening and later Saturday services from Birmingham and a new hourly service from Birmingham and Wolverhampton to Crewe via Stafford and Stoke-on-Trent.

The plans for the new franchise have been built around demands expressed by passengers during the public consultation, and have been developed in conjunction with West Midlands Rail Limited (WMR), a partnership of 16 authorities in the region. This local collaboration will continue throughout the period of the Franchise, with WMR exercising leadership over the implementation of the Franchise in the West Midlands region.

A more detailed list of benefits for the region is shown in section 2. A line by line summary can be found in section 3.

2. Key benefits

The new franchise will deliver the following benefits across the West Midlands network:

- Rail passengers will get new trains with more seats and more space as nearly £1 billion is invested in services on the West Midlands network.
- Passengers in the West Midlands will benefit from 180 new train carriages creating more space for people, especially during rush hour. This includes an

investment in 100 new carriages on the Cross City line in Birmingham, and a further 80 for the Snow Hill line. The new Cross City Line carriages will offer metro-style passenger facilities, just like on the London Overground, with increased space to carry more passengers and wider doors.

- There will be 20,000 extra seats for rush hour passengers in Birmingham, and 10,000 for people in London. On top of this, there will be standing room for 50,000 passengers in Birmingham in the metro-style carriages referred to above.
- By the end of the first year West Midlands Trains will create two separable business units; one for the West Midlands and the other for services on the West Coast Main Line. West Midlands Rail will have lead the contract management of the services in the West Midlands business unit. This is to ensure the new franchise will be responsive to regional needs.
- The West Midlands separable business unit will receive a unique brand, known as *West Midlands Railway*. The intention is that this brand will become a unifying symbol for the region, physically and psychologically connecting disparate districts and counties together, subliminally creating a positive sense of belonging that will enable the region to prosper.
- West Midlands Trains will work with West Midlands Rail, West Midlands Combined Authority, Local Authorities and other third parties on development infrastructure schemes to improve the railway.
- More than £70m invested in depots to improve train reliability, including an entirely new maintenance and stabling facility at Duddleston.
- A railway fit to meet the demands of modern life with greater choice of travel options for passengers thanks to the introduction of new services, including:
 - More trains between Birmingham and Shrewsbury with two services per hour from December 2018. A regular two trains per hour service between Birmingham and Rugeley via the Chase Line from December 2018.
 - A new direct hourly service between Birmingham and Stoke-on-Trent from December 2018 providing much needed additional capacity on this busy route.
 - An extension of Cross-City line services from Longbridge to Bromsgrove.
 - A new hourly shuttle between Leamington Spa and Coventry serving the new station at Kenilworth
 - Two morning and two evening rush hour direct services between Walsall and London from December 2018, helping to unlock economic growth in the region.
 - More Sunday services on the Cross-City line with the number of trains per hour between Longbridge and Birmingham doubling from two per hour to four in December 2018, and then increasing to six in May 2021.
 - Increased Sunday services on the Snow Hill line with the number of trains per hour between Snow Hill and Stourbridge Junction increasing from two to six.

- A new Sunday service between Birmingham and Shrewsbury from December 2018, and a second train per hour introduced in May 2021.
 - Improved Sunday services on the Walsall and Wolverhampton lines from May 2021.
- Passengers will also be entitled to 25 per cent compensation if their train is delayed by 15 minutes. They will continue to receive 50 per cent of their money back for delays of half an hour and full compensation if it is more than an hour.
 - An extension of smart ticketing in the West Midlands making this available at more stations, and a new smart card season ticket for people using the Northampton to Euston line.
 - All 150 stations across the West Midlands network will have at least one ticket vending machine.
 - Better provision of information to passengers throughout their journey with audio and visual passenger displays on all trains by the end of 2019 and new mobile phone content which will provide real time train crowding information to help customers plan their journey. The new franchise will introduce over 800 digital customer screens that will provide real time journey information and 60 multi-modal customer information screens providing real time onward travel information to passengers at key interchange stations.
 - Free Wi-Fi will also be available on all main line trains by the end of December 2019.
 - More accessible services with a reduction in the period of prior notice required for passenger assist, down from 24 hours to 12 hours in January 2020 and reduced further to 4 hours in January 2021.
 - More than £60m invested on station improvements which will deliver over 1,000 new car park spaces, over 2,500 cycle parking spaces, a cycle hire scheme trial, new and refurbished waiting rooms, and more seats at stations. West Midlands Trains will also improve connections between trains at key interchange stations and improve connections to other forms of transport.
 - A commitment to work with WMR, Network Rail and the West Midlands Combined Authority to investigate the potential for opening a number of new stations across the region.
 - A Service Quality Regime in the West Midlands region and on branch lines to maintain the quality of stations, trains and customer service for passengers.
 - The new franchise will recognise the rail network as a community asset with an investment of at least £1.25m for the development of community rail initiatives.
 - West Midlands Trains will also deliver a sustainability strategy to deliver a 49% reduction in carbon emission per vehicle kilometre travelled and support local business. The new franchise will also deliver an innovation strategy with an investment of £2.25 million in partnership projects with West Midlands Combined Authority, Network Rail & the University of Birmingham.

- £13m investment in training for staff in customer facing roles and an employee gainshare scheme
- Over 900 apprenticeships offered with female employees making up at least 20% of those entering into engineering and driving apprenticeships.

3. Benefits by Route

In addition to the general improvements delivered across the whole franchise area, the summary below outlines improvements delivered by railway line/service:

3.1. Birmingham Chase Line (Birmingham – Walsall – Cannock – Rugeley)

- electric rolling stock introduced following the completion of the on-going electrification works
- a half-hourly service between Birmingham, Walsall and Rugeley Trent Valley Monday to Saturday by December 2018 and on Sundays by May 2021
- earlier and later services between Birmingham and Walsall, and between Birmingham and Rugeley Trent Valley including on a Sunday
- new direct services between Walsall and London during rush hours (with 2 morning services into London and 2 evening peak services returning from London) from December 2018
- a service quality regime to improve the quality of stations, trains and customer service for passengers

3.2. Birmingham Cross City line (Lichfield – Birmingham – Bromsgrove/Redditch)

- an investment in more than 100 brand new electric carriages introduced from 2020 specially designed and dedicated to the Cross City line in Birmingham
- extension of services to Bromsgrove once the line is electrified in December 2018 delivering 3 electric trains per hour between Birmingham and Bromsgrove
- extension of services from Lichfield City to Lichfield Trent Valley to provide 4 services per hour Monday to Saturday by December 2018 and on Sundays by May 2021
- earlier and later services between Redditch and Birmingham and between Birmingham and Lichfield
- increased Sunday frequency between Birmingham and Four Oaks to provide 6 services per hour by May 2021
- increased Sunday frequency between Birmingham and Longbridge to provide 4 services per hour Monday to Saturday by December 2018 and on Sundays by May 2021 with 3 to Bromsgrove and 3 to Redditch
- a robust strategy to deliver services during the autumn leaf-fall period
- a service quality regime to improve the quality of stations, trains and customer service for passengers

3.3. Birmingham – Worcester – Hereford

- an additional evening service from Birmingham to Worcester, and an earlier first service from Worcester to Birmingham on Monday to Friday by December 2018
- enhanced Saturday evening service to provide a regular hourly service between Birmingham and Worcester by December 2018
- additional evening services between Birmingham and Hereford in both directions on Saturdays by December 2018

- enhanced frequency on Sundays between Hereford and Birmingham with at least 5 additional services in each direction by May 2021
- earlier first services between Birmingham and Hereford in both directions on Saturdays by May 2021
- a service quality regime to improve the quality of stations, trains and customer service for passengers

3.4. Snow Hill lines (Worcester – Kidderminster - Birmingham – Stratford-upon-Avon – Leamington)

- carriages will be fully refurbished and supported by an investment in 80 brand new diesel carriages introduced from 2020 dedicated to operating services in and around Birmingham
- additional rush hour services between Stratford-upon-Avon and Dorridge, creating a regular hourly service in both directions between Stratford-upon-Avon and Birmingham via Solihull from May 2021
- an additional early morning service between Dorridge and Birmingham via Solihull Monday to Friday from December 2018
- enhanced evening frequencies between Birmingham and Kidderminster, Birmingham and Solihull, and Birmingham and Shirley in each direction Monday to Friday by December 2018
- enhanced frequencies by May 2021 on the Snow Hill lines on a Sunday with services from Birmingham increasing to 2 trains per hour to Stratford-upon-Avon, 3 trains per hour to Shirley, 3 trains per hour to Solihull, 6 trains per hour to Stourbridge Junction with 4 extending to Kidderminster
- earlier first services on the Snow Hill lines by May 2021 on a Sunday
- a service quality regime to improve the quality of stations, trains and customer service for passengers

3.5. Stourbridge Town – Stourbridge Junction

- earlier first services between Stourbridge Town and Stourbridge Junction on a Saturday in both directions
- frequency on a Sunday increases from 4 to 6 services an hour by May 2021

3.6. Birmingham – Birmingham International – Coventry – Northampton

- additional services between Rugby and Birmingham Monday to Friday by December 2018
- earlier first service and later last service between Birmingham and Coventry Monday to Saturday by December 2018
- later last service from Birmingham to Rugby and Northampton Monday to Friday by December 2018
- frequency on a Sunday between Birmingham, Rugby and Northampton increases from 1 to 2 services an hour by May 2021

3.7. Birmingham – Wolverhampton – Shrewsbury

- carriages will be fully refurbished and supported by an investment in 80 brand new diesel carriages introduced from 2020 dedicated to operating services in and around Birmingham
- additional services to create a regular all-day twice-hourly service between Birmingham, Wolverhampton and Shrewsbury Monday to Saturday by December 2018 in addition to the current hourly service operated by Arriva Trains Wales
- between Shrewsbury and Wolverhampton, the new hourly service shall as a minimum call at Wellington, Telford, Shifnal and Codsall

- earlier first service from Wolverhampton to Birmingham, and a later last service from Wolverhampton to Birmingham by December 2018
- a new hourly Sunday West Midlands Franchise service between Shrewsbury and Birmingham, replacing the less frequent Arriva Trains Wales service between Shrewsbury and Wolverhampton, with 2 services per hour provided by May 2021
- increased Sunday frequency for stopping services between Birmingham and Wolverhampton increasing from 1 to 2 services an hour by December 2018 and then to 3 services per hour by May 2021
- a service quality regime to improve the quality of stations, trains and customer service for passengers

3.8. Birmingham – Stoke-on-Trent – Crewe

- longer trains providing additional capacity on this busy route
- a new hourly service between Birmingham and Crewe via Stoke-on-Trent from December 2018 providing a regular all-day service for Stone, Kidsgrove and Alsager
- additional calls during the morning and evening rush hours at Stone, Kidsgrove and Alsager compared to today providing direct services to Birmingham
- additional evening services between Birmingham and Crewe via Stoke-on-Trent during the week and at weekends

3.9. Nuneaton – Coventry – Kenilworth – Leamington

- a new hourly service between Coventry and Leamington following the opening of the new station at Kenilworth
- an additional hourly service in each direction between Coventry and Nuneaton following the construction of a new platform at Coventry delivering 2 trains per hour Monday to Friday and Sunday, and 3 trains per hour on a Saturday
- earlier and later services between Coventry and Nuneaton including on Sundays
- a service quality regime to improve the quality of stations, trains and customer service for passengers

3.10. Liverpool – Crewe – Birmingham

- later last service from Birmingham to Liverpool on a Saturday by December 2018
- at least 4 additional station calls at Acton Bridge Monday to Saturday, and a new Sunday service from December 2018
- enhanced Sunday frequency between Birmingham and Liverpool increasing from 1 to 2 services an hour by May 2021
- earlier first services between Birmingham and Liverpool in both directions on a Sunday and a later last service from Birmingham to Liverpool

3.11. London – Crewe

- journey times between London and Crewe via the Trent Valley are reduced from December 2018 as services run fast between Stafford and Crewe
- later last service from London Euston to Crewe via the Trent Valley Monday to Friday by December 2018
- later last service from London Euston to Crewe via the Trent Valley on Saturdays by December 2018
- earlier first service from Crewe to London Euston on Sundays by May 2021

This page is intentionally left blank

TRANSPORT DELIVERY COMMITTEE

COMMITTEE MEETING		REPORT AND AUTHOR	AGENDA SETTING MEETING	
<i>Date of Meeting</i>	<i>Date Final Reports to be submitted to Governance Services</i>		<i>Date of Meeting</i>	<i>Date Reports to be submitted to Governance Services</i>
9 October 2017	28 September	<ul style="list-style-type: none"> • Bus Business Update Steve McAleavy (Author TBA) • Customer Engagement Update Steve McAleavy (Lee Eteo) • Passenger Information Delivery Update Mike Waters (Chris Lane) • Park and Ride Update Steve McAleavy (Peter Sargant) • Wolverhampton and Birmingham Advanced Quality Bus Partnerships Steve McAleavy (Guy Craddock) • Network Rail Update (briefing) Richard Dugdale, Network Rail • Wolverhampton Interchange Vision Laura Shoaf (Richard Hardman/Malcolm Holmes) 	22 September	19 September
6 November 2017	26 October	<ul style="list-style-type: none"> • Rail Business Update Steve McAleavy (Babs Coombes) • Safer Travel Update Steve McAleavy (Mark Babington) 	23 October	19 October

TRANSPORT DELIVERY COMMITTEE

COMMITTEE MEETING		REPORT AND AUTHOR	AGENDA SETTING MEETING	
<i>Date of Meeting</i>	<i>Date Final Reports to be submitted to Governance Services</i>		<i>Date of Meeting</i>	<i>Date Reports to be submitted to Governance Services</i>
		<ul style="list-style-type: none"> • Swift Delivery Update Steve McAleavy (Matt Lewis) • Financial Monitoring Report Sean Pearce (Linda Horne) • Capital Programme Delivery Monitoring Report Laura Shoaf (Sandeep Shingadia) • Chiltern Partnership Agreement Steve McAleavy (Babs Coombes/Peter Sargant) • Midland Metro Penalty Fares Phil Hewitt (Sophie Allison) 		
4 December 2017	23 November	<ul style="list-style-type: none"> • Metro Business Update Phil Hewitt (Sophie Allison) • Cycling and Walking Update Sandeep Shingadia (Claire Postin) • Customer Services Performance Update Steve McAleavy (Sarah Jones) • Presentation/Briefing From West Midlands Trains Ltd on new Rail Franchise 	20 November	17 November

TRANSPORT DELIVERY COMMITTEE

COMMITTEE MEETING		REPORT AND AUTHOR	AGENDA SETTING MEETING	
<i>Date of Meeting</i>	<i>Date Final Reports to be submitted to Governance Services</i>		<i>Date of Meeting</i>	<i>Date Reports to be submitted to Governance Services</i>
8 January 2018	21 December	<ul style="list-style-type: none"> • Bus Business Update Steve McAleavy (TBA) • Bus Alliance Update Steve McAleavy (Edmund Salt) • Financial Monitoring Report Sean Pearce (Linda Horne) • Capital Programme Delivery Monitoring Report Laura Shoaf (Sandeep Shingadia) 	15 December	13 December
5 February 2018	25 January	<ul style="list-style-type: none"> • Rail Business Update Steve McAleavy (Babs Coombes) • Swift Delivery Update Steve McAleavy (Matt Lewis) 	22 January	18 January
5 March 2018	22 February	<ul style="list-style-type: none"> • Metro Business Update Phil Hewitt (Sophie Allison) • Accessible Transport Update Steve McAleavy (Richard Mayes) 	19 February	15 February

TRANSPORT DELIVERY COMMITTEE

COMMITTEE MEETING		REPORT AND AUTHOR	AGENDA SETTING MEETING	
<i>Date of Meeting</i>	<i>Date Final Reports to be submitted to Governance Services</i>		<i>Date of Meeting</i>	<i>Date Reports to be submitted to Governance Services</i>
		<ul style="list-style-type: none"> • Customer Infrastructure Update Steve McAleavy (Andy Thrupp) • Financial Monitoring Report Sean Pearce (Linda Horne) • Capital Programme Delivery Monitoring Report Laura Shoaf (Sandeep Shingadia) 		
9 April 2018	28 March	<ul style="list-style-type: none"> • Bus Business Update Steve McAleavy (TBA) • Passenger Information Delivery Update Mike Waters (Chris Lane) • Park and Ride Update Steve McAleavy (Peter Sargant) 	26 March	23 March
14 May 2018	2 May	<ul style="list-style-type: none"> • Rail Business Update Steve McAleavy (Babs Coombes) • Safer Travel Update Steve McAleavy (Mark Babington) • Bus Alliance Update Steve McAleavy (Edmund Salt) 	30 April	25 April

TRANSPORT DELIVERY COMMITTEE

COMMITTEE MEETING		REPORT AND AUTHOR	AGENDA SETTING MEETING	
<i>Date of Meeting</i>	<i>Date Final Reports to be submitted to Governance Services</i>		<i>Date of Meeting</i>	<i>Date Reports to be submitted to Governance Services</i>
		<ul style="list-style-type: none"> • Financial Monitoring Report Sean Pearce (Linda Horne) • Capital Programme Delivery Monitoring Report 		
11 June 2018	31 May	Laura Shoaf (Sandeep Shingadia) <ul style="list-style-type: none"> • Metro Business Update Phil Hewitt (Sophie Allison) • Cycling and Walking Update Sandeep Shingadia (Claire Postin) • Customer Services Performance Update Steve McAleavy (Sarah Jones) 	25 May	22 May

This page is intentionally left blank