



Redevelopment of 2152
(N. Bristol) Sqn Air
Training Corps Centre,
Pine Grove, Filton

Highways and Transport Scoping
Report prepare on behalf of
Wessex Reserve Forces' and
Cadets' Association

June 2022

Revision	Date	Description	Prepared By	Checked By	Authorised By
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1. Introduction

- 1.1 The Highways and Transport Scoping Report is prepared by Milestone Transport Planning Limited (MTP) on behalf of Wessex Reserve Forces' and Cadets' Association (the '*applicant*') in relation to the redevelopment of the 2152 (N. Bristol) Sqn Air Training Corps (ATC) Centre at Pine Grove, Filton.
- 1.2 The development will comprise the phased demolition of the exiting outdated buildings on the site and to provide a replacement fit for purpose ATC Centre with associated external parade ground and car parking.
- 1.3 The new ATC Centre will be combined into a single multi-level building complex providing a range of activities including a multi-user training facility, classrooms, simulator room, a 25m range, storage, and office / admin facilities.
- 1.4 As well as serving 2152 (N. Bristol) ATC, the new Centre will see an intensification of use as it will also be home to three other ATC detachments within the wider Bristol area: -
- [2152DF \(Downend\);](#)
 - [2442 \(Westbury-on-Trym\);](#) and
 - [37 \(Frampton Cotterell\).](#)
- 1.5 It is anticipated that a full planning application will be submitted to South Gloucestershire Council (SGC) in due course, to address the highways and transport implications arising from the proposed development, that as a minimum will be accompanied by a Transport Statement (TS).
- 1.6 The purpose of the TS will be to consider the implications of development related travel on the operational and safety characteristics of the surrounding highway and transport networks. In addition, the TS will consider the appropriateness of the type of development proposed in this location in the context of transport-related policy at both National and Local level with the emphasis on ensuring that the site is accessible by all modes of travel.
- 1.7 Alongside the TS, a Framework Travel Plan (FTP) and a Construction Traffic Management Plan (CTMP) will be prepared by MTP to accompany the planning application.
- 1.8 The TS will demonstrate that in terms of Planning Policy at both National and Local level and through robust interventions including the implementation of a Travel Plan and mitigation, where appropriate, the application site and the surrounding highways and transport networks can accommodate the proposed level of development.

Scope of Report

1.9 It is anticipated that the TS structure will be as follows:

- Section 2 will evaluate the development proposals in light of current national and local planning policies, to demonstrate compliance with the core principles.
- Section 3 will assess the baseline highways and transport conditions within the vicinity of the site, along with the existing travel patterns of cadets / staff to the existing ATC sites. It will also assess the potential opportunities for travel by sustainable modes to the proposed consolidated site.
- Section 4 will describe the proposed development including the access, parking, delivery, and servicing strategy in context with national and local best practice design guidance.
- Section 5 will assess the trip generating potential of the development proposal in comparison with the site's existing operation to establish the net impact on the surrounding local highway and transport networks.
- Section 6 will summarise the report's main findings.

2. Planning Policy Framework

2.1 This section of the TS will consider the proposed development in the context of the following policy documents:

- [National Planning Policy Framework \(2021\)](#)
- [South Gloucestershire Local Plan 'Core Strategy 2006 – 2027' \(2013\)](#)
- [South Gloucestershire Local Plan 'Policies, Sites and Places Plan' \(2017\)](#)
- [Gloucestershire's Local Transport Plan 2020 – 2041 \(2021\)](#)

2.2 The site's internal layout will be designed with reference to guidelines set out in both volumes of Manual for Streets along with the relevant South Gloucestershire Supplementary planning documents (SPD) to ensure the layout is safe, secure, and conducive to non-car modes.

3. Existing Conditions

- 3.1 Section 3 of the TS will describe the site in its current form, pre-development. It will give details of its location and surroundings, pedestrian and cycle facilities and public transport accessibility.
- 3.2 Section 3 will also describe the surrounding highway network and the study area, as well as analysing traffic flow characteristics, existing patterns of parking, and road safety data. The section's subheadings and a brief description of their contents are as below.

Existing Site Information

- 3.3 As shown by Figure 1, the 2152 (N. Bristol) Sqn ATC site is located at the end of a residential cul-de-sac, Pine Grove. Pine Grove is bounded by residential properties on both sides of the carriageway, the majority of which have dropped kerb accesses to private drives.

Figure 1 Site Location



- 3.4 It is understood that existing cadets / staff meet at the 2152 (N. Bristol) Sqn ATC site on parade nights (Wednesdays and Fridays) between 19:00 – 21:30.

Existing Cadet / Staff Travel Patterns

- 3.5 A crucial part of the TS will be to identify existing numbers of cadets / staff, home postcodes, catchments, and mode of travel of choice used to reach each of the existing ATC centres. A profile of movements / activities that will take place at the proposed consolidated site will then be prepared.

Postcode Analysis

- 3.6 Prior to preparing this report, MTP received current postcode data for existing cadets / staff at all four of the existing ATC sites on 23rd May 2022.
- 3.7 To understand the existing / proposed catchment scenario, analysis has been undertaken to determine the number of cadets / staff that live within a 10-minute walk, 10-minute cycle, and 5-minute drive of the four existing ATC sites, as well as the proposed consolidated site, namely the 2152 (N. Bristol) ATC Centre, Pine Grove, Filton. These figures are attached at Appendix 1 and summarised in Table 3.1.

Table 3.1 Summary of Postcode Analysis

Base	Current Numbers		No. of Cadets Within			No. of Staff Within		
	Cadets	Staff	<10 Min Walk	<10 Min Cycle	<5 Min Drive	<10 Min Walk	<10 Min Cycle	<5 Min Drive
Existing ATC Sites								
2152 (North Bristol)	42	9	1	12	13	0	3	3
2152DF (Downend)	24	10	2	18	21	0	4	4
2442 (Westbury-on-Trym)	45	7	4	25	39	1	1	3
37 (Frampton Cotterell)	15	5	1	2	2	1	1	1
AVERAGE	32	8	2 (6%)	14 (44%)	19 (59%)	1 (13%)	2 (25%)	3 (38%)
Proposed Consolidated Site								
2152 (North Bristol)	126	31	1 (1%)	18 (14%)	23 (18%)	0 (0%)	6 (19%)	6 (19%)

- 3.8 Table 3.1 reveals that due to the increased catchment the proposed consolidated site will lead to an overall reduction in the number of cadets / staff within the 'active' 10-minute walk and cycle catchments. As such, a key part of the TS will be addressing the proposed movement and access strategy.
- 3.9 As part of the TS, further analysis will be conducted to understand the number of existing cadets / staff within the maximum recommended walk and cycle distances of 2.0 and 5.0-kilometres, respectively, to the proposed consolidated site.

Existing Modal Split

- 3.10 In order to identify existing travel patterns at the 2152 (N. Bristol) Sqn ATC site, it is proposed that as part of the TS, MTP will instruct an independent survey company to conduct an activity survey at the entrance to the site on an existing parade night (between 16:00 – 22:00). This survey will enable existing numbers and mode of travel at the entrance of the site to be identified.

- 3.11 However, the activity survey will not identify whether any cadets / staff have been dropped off on the surrounding highway network and then arrive to the site by foot. As such, on the same night as the independent survey is undertaken, the on-site ATC staff will undertake a further '*hands up*' travel survey. Any cadets / staff that have been dropped off by private vehicle will also be asked to identify where they have been dropped off.
- 3.12 The combination of these two surveys will enable a baseline modal split to be identified, this will be utilised in Section 5 of the TS and within the modal shift targets set out within the FTP.

Active Travel Modes

- 3.13 This sub-section of the TS will describe the opportunities for accessing the site by foot and cycle, including provision for safe crossing facilities.
- 3.14 Pine Grove is provided with lit continuous footways of circa 1.4-metres in width on both sides of the carriageway. Footway widths increase to circa >2.0-metres on the A38 Gloucester Road North and where pedestrian desire lines exist, crossings are provided with dropped kerbs.
- 3.15 Approximately 300-metres to the north of Pine Grove there is a signalised pedestrian crossing on the A38 Gloucester Road North facilitating safe pedestrian movement across the A38.
- 3.16 Additionally, 200-metres south of Pine Grove, all 4-arms of the roundabout junction between the A38 / Braemar Avenue / Northville Road are provided with zebra crossings, dropped kerbs, and tactile paving.
- 3.17 An off-street local cycleway is provided to the east of the Filton Abbey Wood railway line. The cycleway runs north-south connecting Bristol, Filton Abbey Wood rail station, Stoke Gifford, and Bradley Stoke.
- 3.18 There are also a number of quiet residential streets in the vicinity of the proposed consolidated site that are conducive to local trips. Carriageway widths are typically wide enough to accommodate both cyclists and vehicles and visibility is generally of a good level aiding inter-visibility between cyclists and vehicles.

Provision for Public Transport Access

- 3.19 The TS will provide a summary of viable public transport options for those cadets / staff outside of the '*active*' travel catchments.

Bus Services

- 3.20 This sub-section will indicate the nearest bus stops to the site and detail the services available.
- 3.21 The nearest bus services operate from stops on the A38 Gloucester Road North View, approximately 150 (for northbound services) and 250-metres (for southbound services) south-west of the site. Bus stops are provided with a shelter, seating, and timetable information. Table 3.2 provides a summary of the bus routes operating from the bus stops outlined above.

Table 3.2 Summary of Local Bus Routes from A38

Route No.	Daily Weekday Frequency (No. of buses per hour)	Route
3X	3 per day*	Aztec West – Redland Station – City Centre
71	3	City Centre to UWE Frenchay Campus Via Gloucester Road, Filton Avenue
75	2	Hengrove Depot – Cribbs Causeway Via Hengrove Park, Hartcliffe, Withywood, Bedminster, City Centre, Gloucester Road, Filton, Patchway

*Buses from Aztec West at 16:20, 17:20, and 18:20 taking 10-minutes to arrive at Filton

Rail Services

- 3.22 Although unlikely cadets will utilise rail services to access the proposed consolidated site, staff might. As such, this option will be explored further within the TS. Filton Abbey Wood railway station is located approximately 1.6-kilometres north-east of the site, accessible in a walk time of 20-minutes, and provide frequent services to destinations including

Surrounding Highway Network

- 3.23 Pine Grove is approximately 135-metres in length and limited to circa 4.2-metres in width. Parking controls are in place, in the form of double-yellow line restrictions / plates on approach to the junction of Pine Grove with the busy A38 Gloucester Road North.
- 3.24 Within the TS submission a detailed description of the characteristics of each major road / junction that falls within the study area will be provided.
- 3.25 In order to build a comprehensive picture of the type and volume of movements associated with the existing uses, as part of the TS, MTP will instruct an independent survey company to conduct a Manual Classified Count (MCC) survey at the Pine Grove / A38 Gloucester Road North junction. It is proposed that this survey is undertaken between 16:00 – 22:00 on an ATC parade night (day TBC).

Road Safety Data

- 3.26 To enable a review of road safety in the immediate vicinity of the site, Personal Injury Accident (PIA) / collision data for the latest five-year period will be obtained from South Gloucestershire Council.
- 3.27 Figure 2 reveals that the proposed study area for the PIA analysis comprises a 540-metre section of the A38 Gloucester Road North, extending north-east from the 4-arm roundabout between the A38 / Braemar Avenue / Northville Road to the 3-arm roundabout between the A38 / Elm Park. Pine Grove and Gayner Road will also be included.
- 3.28 Full details of the PIA's, casualty severity and consideration of the likely causation factors will be provided within the TS. The findings will be analysed to assess whether there are any patterns in the data attributable to defective road conditions or layouts.

Figure 2 Proposed Study Area for Personal Injury Accident Analysis



Parking Analysis

- 3.29 To gain an understanding of current on-street parking conditions, an independent data collection company will be instructed by MTP to conduct a parking beat survey on the local highway network surrounding the site.
- 3.30 It is proposed that the parking beat surveys will be conducted at 15-minute intervals during a 6-hour period (16:00 – 22:00) on two parade nights and one non-parade night. This approach ensures that the maximum parking demand associated with 2152 (N. Bristol) Sqn ATC site is captured, along with the spare capacity on non-parade nights.
- 3.31 Figure 3 reveals that the study area for the parking beat surveys includes Pine Grove and Gayner Road, two local streets that offer stretches of unrestricted parking and are therefore likely to be used for cadet drop-off / pick-up. Two local car parks, including the Council-owned Gloucester Road North / Filton Road car park to the south of the site and the Filton Leisure Centre car park to the north, both of which are within 650-metres walk distance (i.e., 8-minute walk) of the 2152 (N. Bristol) Sqn ATC site will also be included within the parking study area.
- 3.32 These two local car parks provide potential for off-site drop-off / pick-up of cadets at the start and end of each evening meeting. This could involve minibus transfer to / from the site however given the restrictive width of Pine Grove, consideration will also be given to a 'park & stride' solution.

4. Scheme Proposals

- 4.1 As identified in Section 1, the emerging development proposals comprise the phased demolition of the exiting outdated buildings on the site and to provide a replacement fit for purpose ATC Centre with associated external parade ground and car parking.
- 4.2 The new ATC Centre will be combined into a single multi-level building complex providing a range of activities including a multi-user training facility, classrooms, simulator room, a 25m range, storage, and office / admin facilities. A proposed site layout plan prepared by SC Architecture Ltd is attached at Appendix 2.
- 4.3 As well as serving 2152 (N. Bristol) ATC, the new Centre will see an intensification of use as it will also be home to three other ATC detachments within the wider Bristol area, namely: -
- 2152DF (Downend);
 - 2442 (Westbury-on-Trym); and
 - 37 (Frampton Cotterell).
- 4.4 Consequently, the proposed consolidated site could be used by up to 80 / 90 cadets every weekday night. There will be 1 staff to every 10 cadets, with 2 ½ HQ staff Mon – Fri Office Hours.
- 4.5 The 2152 (North Bristol) ATC site currently has 3 parade nights a week. Table 4.1 reveals a proposed plan for parade nights. During a site visit (17th May 2022), MTP were made aware that the cadet catchments are not solely dependent on distance but also which day the parade night occurs. Some cadets will travel further to be able to take part in a night that works for them. As such, the TS will need to will need to account for the existing catchments / parade schedule to understand the likely journey patterns of cadets / staff travelling to the proposed consolidated site.

Table 4.1 Proposed Plan for Parade Nights

Base	Monday	Tuesday	Wednesday	Thursday	Friday
2152 (North Bristol)			✓		✓
2152DF (Downend)	✓		✓		
2442 (Westbury-on-Trym)		✓		✓	
37 (Frampton Cotterell)	✓			✓	

Movement & Access

- 4.6 This section of the TS will outline the proposed Movement and Access Strategy related to the proposed consolidated site. Details of the proposed vehicular access points will be provided together with details of suitable links to the pedestrian, cycle, and public transport networks.
- 4.7 As shown on the proposed site layout plan, it is intended that the proposed consolidated site would be service via a modified version of the existing vehicular access off the southern side of Pine Grove. Providing access to the proposed internal car parking area, internal footways, and cycle stores.

4.8 Servicing and delivery vehicles will enter / exit the site, via the modified access, and will be able to turn within the site and exit in forward gear. Within the development fire appliances will be able to reach within 45-metres of any building and the maximum carry distance for refuse collection will be 25-metres.

4.9 Figure 4 reveals an indicative movement and access strategy to the proposed consolidated site.

Figure 4 Indicative Pedestrian / Vehicle Movement and Access Strategy



Parking Arrangements

- 4.10 The proposed consolidated site will be provided with 20 car parking spaces plus 1 disabled parking space. Details of the staff and visitor demand for car parking on a daily basis will be provided in the TS.
- 4.11 Cycle parking will be provided in secure, covered stores in accordance with South Gloucestershire Council standards.

Measures to Promote Sustainable Travel

- 4.12 This sub-section will provide details of the person trip generation management through promoting sustainable choices in the form of a comprehensive FTP.
- 4.13 The FTP will aim to encourage cadets / staff to change their travel behaviour in favour of sustainable travel modes and to sustain these changes over the long term. A framework of effective measures and smarter choices will be identified to achieve an overall goal of reducing the impact of traffic generated by the proposed consolidated site. The FTP will be submitted separately as part of the planning application package.
- 4.14 The types of measures that will be considered to encourage sustainable transport are listed below:
- Provide travel information within a Travel Information Pack and notice boards;
 - Active encouragement of the use of the '*park & stride*' solution, and existing local public transport services for access to the proposed consolidated site;
 - Cadet parents agreeing and signing a '*Travel Plan charter*' committing to minimisation of car travel;
 - Promotion of participation of '*Walk in May*' and '*Walk on Wednesdays*' and cycle training through the Government-supported '*Bikeability*' scheme (www.dft.gov.uk/bikeability);
 - Appointing Cadet Travel Ambassadors to engage and educate other cadets on sustainable travel.

Construction Logistics

4.15 In order to minimise disturbance to local residents, particularly on Pine Grove, and the operation of the local highway network, a number of mitigating measures will be implemented and enforced throughout the duration of the construction period, the details of which will be provided within a CTMP. The CTMP is likely to include:

- Restricted hours to avoid peak arrival and departure periods on the local road network;
- Measures to protect existing footways and marked pedestrian routes using barriers / signage, as appropriate;
- Protection of any statutory services equipment;
- Monitoring of vehicle movements, speeds, and turning using banksmen;
- Routing of any construction traffic, the preferred routes to / from the subject site will be advised. The routes will be assigned to direct and strategic roads and as such drivers will be expected to comply with the preferred routing method;
- Details of any reinstatement works required following completion of works; and
- Communication Strategy with neighbours.

5. Potential Trip Generation and Net Impact Assessment

- 5.1 This section of the TS will present a multi-modal comparison between proposed and existing movements associated with the 2152 (N. Bristol) Sqn ATC site over the course of a typical weekday parade night (e.g., 16:00 – 22:00).

Existing Operation

- 5.2 As stated in Section 3, in order to identify existing travel patterns at the 2152 (N. Bristol) Sqn ATC site, MTP will instruct an independent survey company to conduct an activity survey at the entrance to the site on an existing parade night (between 16:00 – 22:00). This survey will enable existing numbers and mode of travel at the entrance of the site to be identified.
- 5.3 On the same night as the independent survey is undertaken, the on-site ATC staff will undertake a further 'hands up' travel survey. Any cadets / staff that have been dropped off by private vehicle will also be asked to identify where they have been dropped off.
- 5.4 The combination of these two surveys will enable a baseline modal split / trip generation of the site to be identified.

Proposed Operation

- 5.5 As stated in Section 4, the proposed consolidated site could be used by up to 80 / 90 cadets every weekday night. There will be 1 staff to every 10 cadets, with 2 ½ HQ staff Mon – Fri Office Hours.
- 5.6 Given the attendance records of the existing ATC sites is circa 50%, 40 / 45 cadets every weekday may be more likely. However, to be robust MTP will assess the worst-case scenario as part of the TS.
- 5.7 The TS will present a summary of multimodal trips undertaken during a typical weekday parade night (e.g., 16:00 – 22:00). This will be informed through the baseline surveys, as well as accounting for the existing catchments / parade schedule to understand the likely journey patterns of cadets / staff travelling to the proposed consolidated site.
- 5.8 Finally, there is potential for the proposed consolidated site to provide wider community uses during non-parade nights. During these uses there may a maximum of circa 150 people on site at any one time. MTP will explore this further within the TS.

Net Impact

- 5.9 This section of the TS will compare the multi-modal generation of the proposed consolidated site proposals with the existing use, to establish the net impact on the local highway and transport networks during a typical weekday parade night.

6. Summary

- 6.1 A summary of the TS's findings and conclusions will be provided. These will be set against the aims and objectives of local and national policy and seek to demonstrate the site is capable of providing for safe and suitable access to the wider highways and transport network.
- 6.2 In respect of the Scoping Note, the views of South Gloucestershire Council as the Highway Authority are sought on the general principles and scope of the proposals, particularly in regard to the undertaking of traffic surveys to further understand the existing / proposed activity associated with the ATC site(s). Subject to this, MTP would progress the preparation of the Transport Statement and all supporting technical and design assessments together with the preparation of a Framework Travel Plan and Construction Traffic Management Plan for submission.

Appendix 1

Existing ATC Catchment Plans

Key

37 (Frampton Cotterell) ATC Site



Postcode Data

Cadets (15 on record)



Staff (5 on record)



Catchments

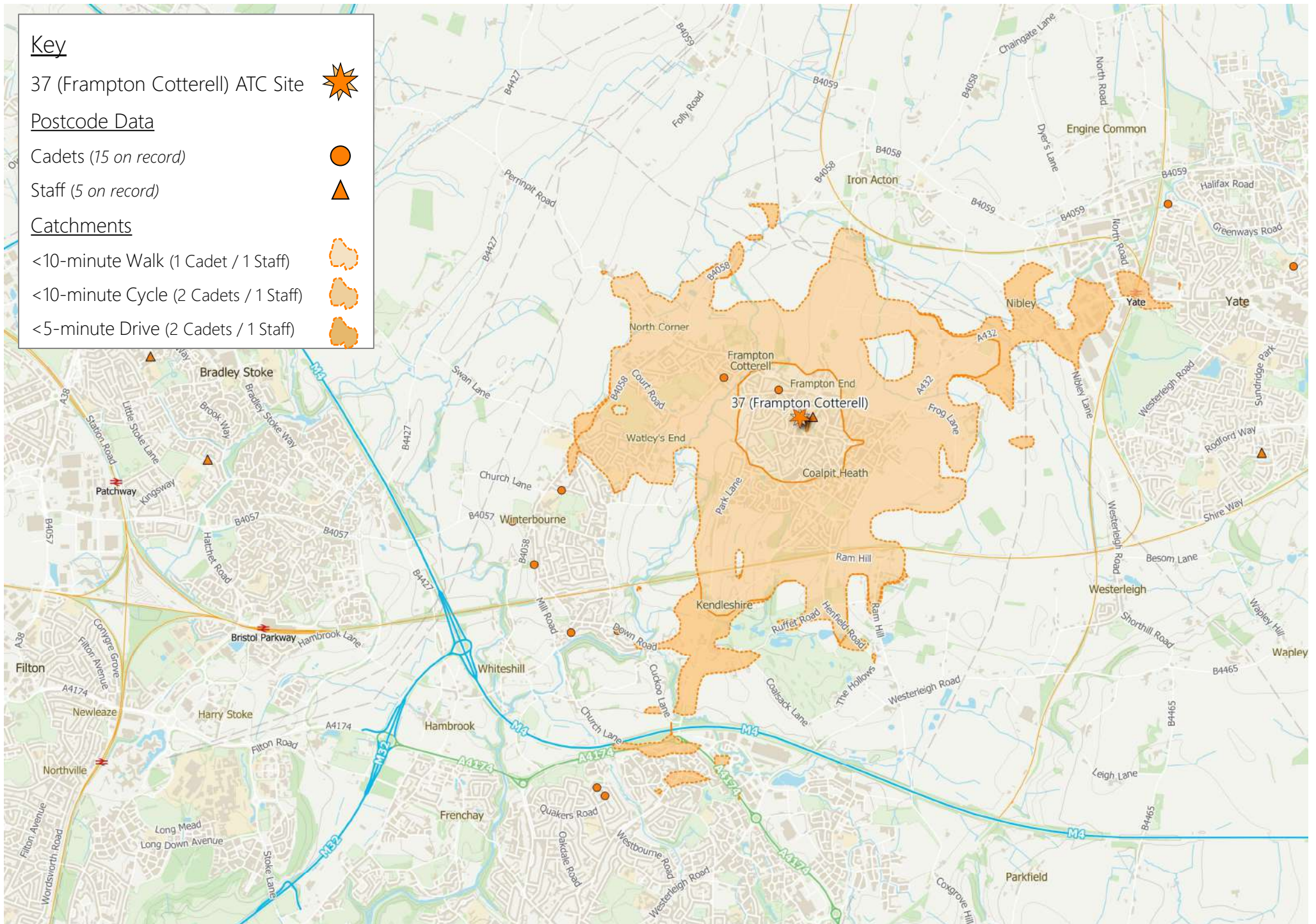
<10-minute Walk (1 Cadet / 1 Staff)



<10-minute Cycle (2 Cadets / 1 Staff)



<5-minute Drive (2 Cadets / 1 Staff)



Key

2152DF (Downend) ATC Site

Postcode Data

Cadets (24 on record)

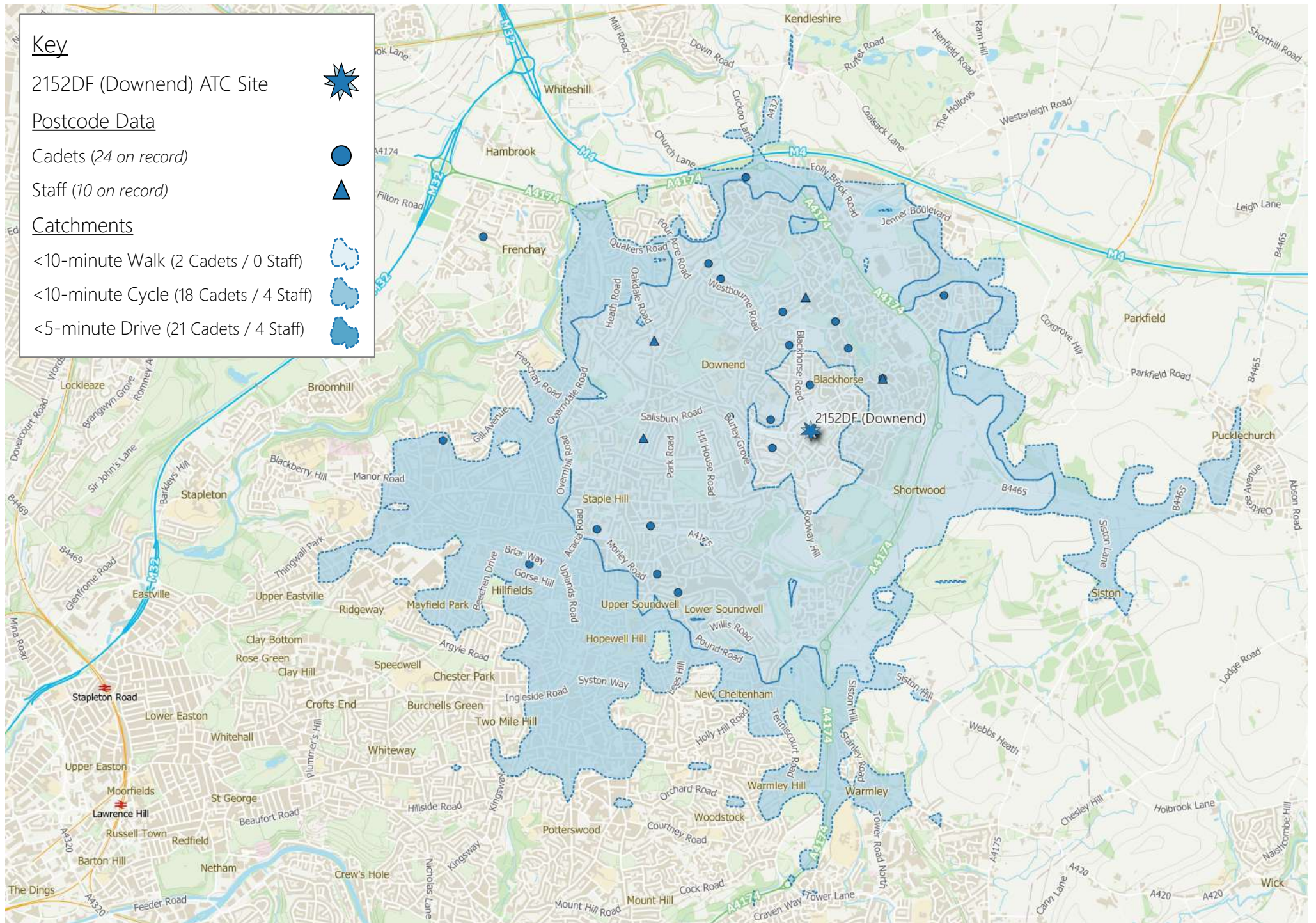
Staff (10 on record)

Catchments

<10-minute Walk (2 Cadets / 0 Staff)

<10-minute Cycle (18 Cadets / 4 Staff)

<5-minute Drive (21 Cadets / 4 Staff)



Key

2152 (North Bristol) ATC Site

Postcode Data

Cadets (42 on record)

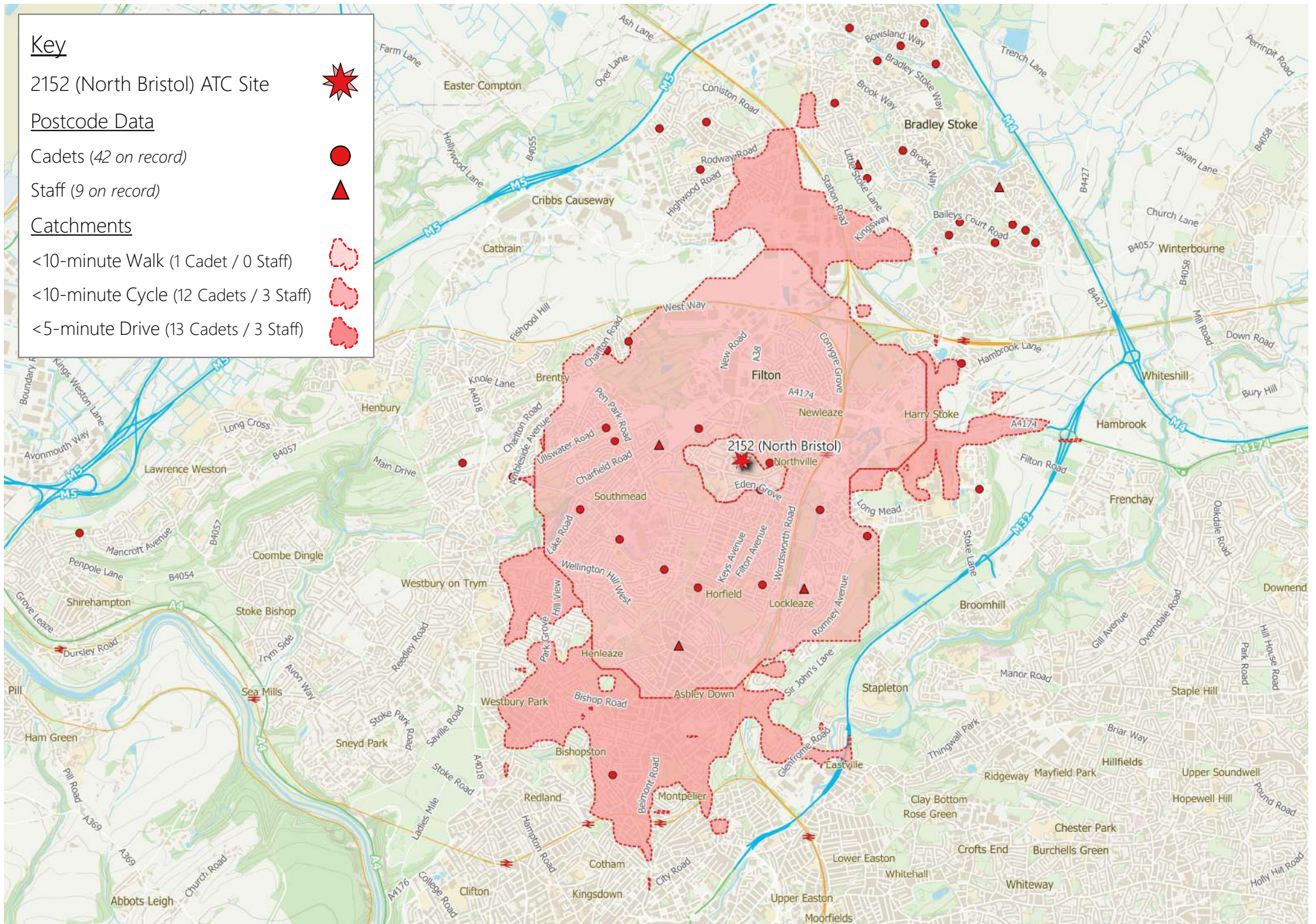
Staff (9 on record)

Catchments

<10-minute Walk (1 Cadet / 0 Staff)

<10-minute Cycle (12 Cadets / 3 Staff)

<5-minute Drive (13 Cadets / 3 Staff)



Key

2442 (Westbury-On-Trym) ATC Site

Postcode Data

Cadets (45 on record)



Staff (7 on record)



Catchments

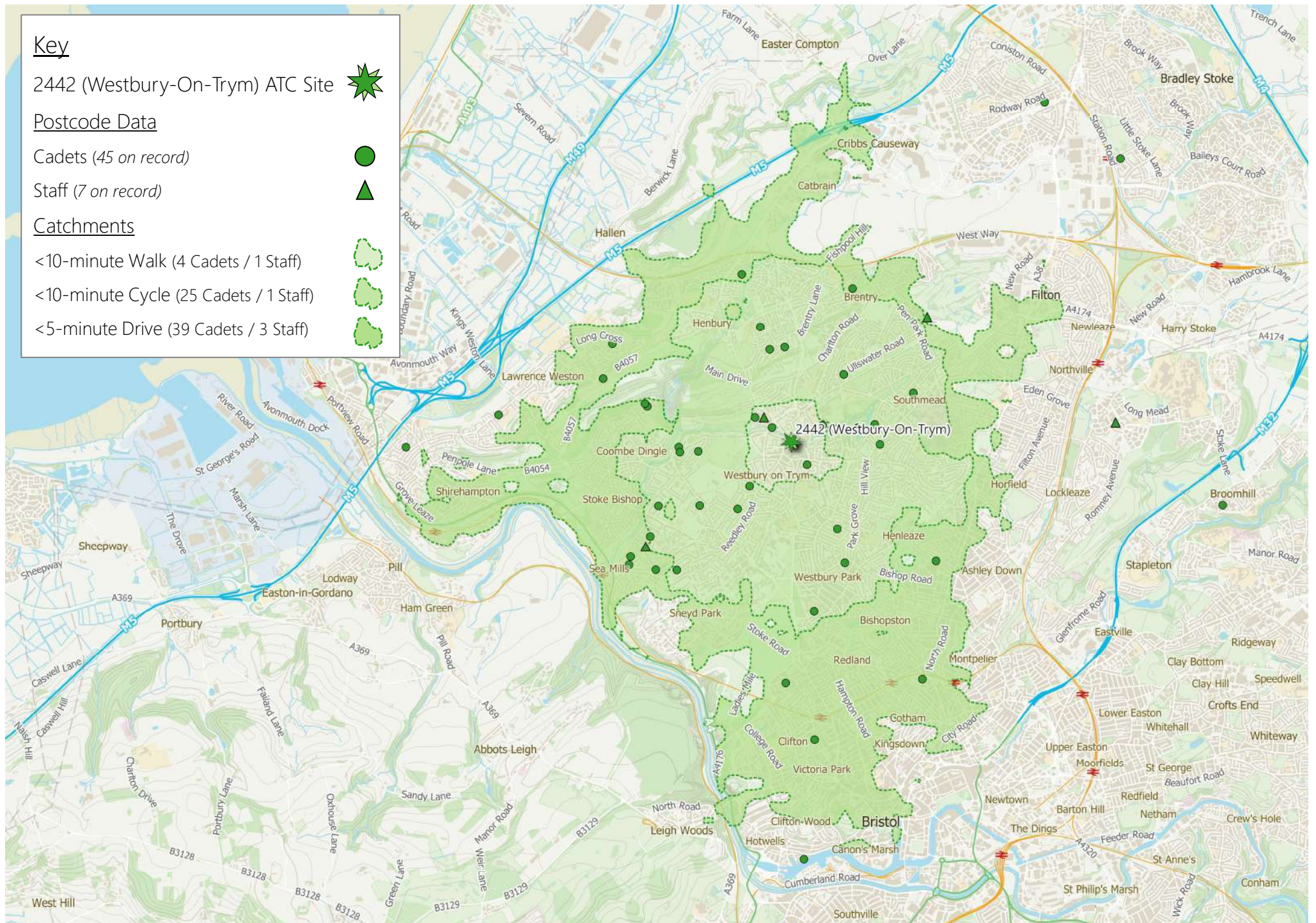
<10-minute Walk (4 Cadets / 1 Staff)



<10-minute Cycle (25 Cadets / 1 Staff)



<5-minute Drive (39 Cadets / 3 Staff)



Proposed ATC Catchment Plan

Key

2152 (North Bristol) ATC Site

Postcode Data

Cadets (126 on record)

Currently @ 2152 (42)

Currently @ 2152DF (24)

Currently @ 2442 (45)

Currently @ 37 (15)

Staff (31 on record)

Currently @ 2152 (9)

Currently @ 2152DF (10)

Currently @ 2442 (7)

Currently @ 37 (5)

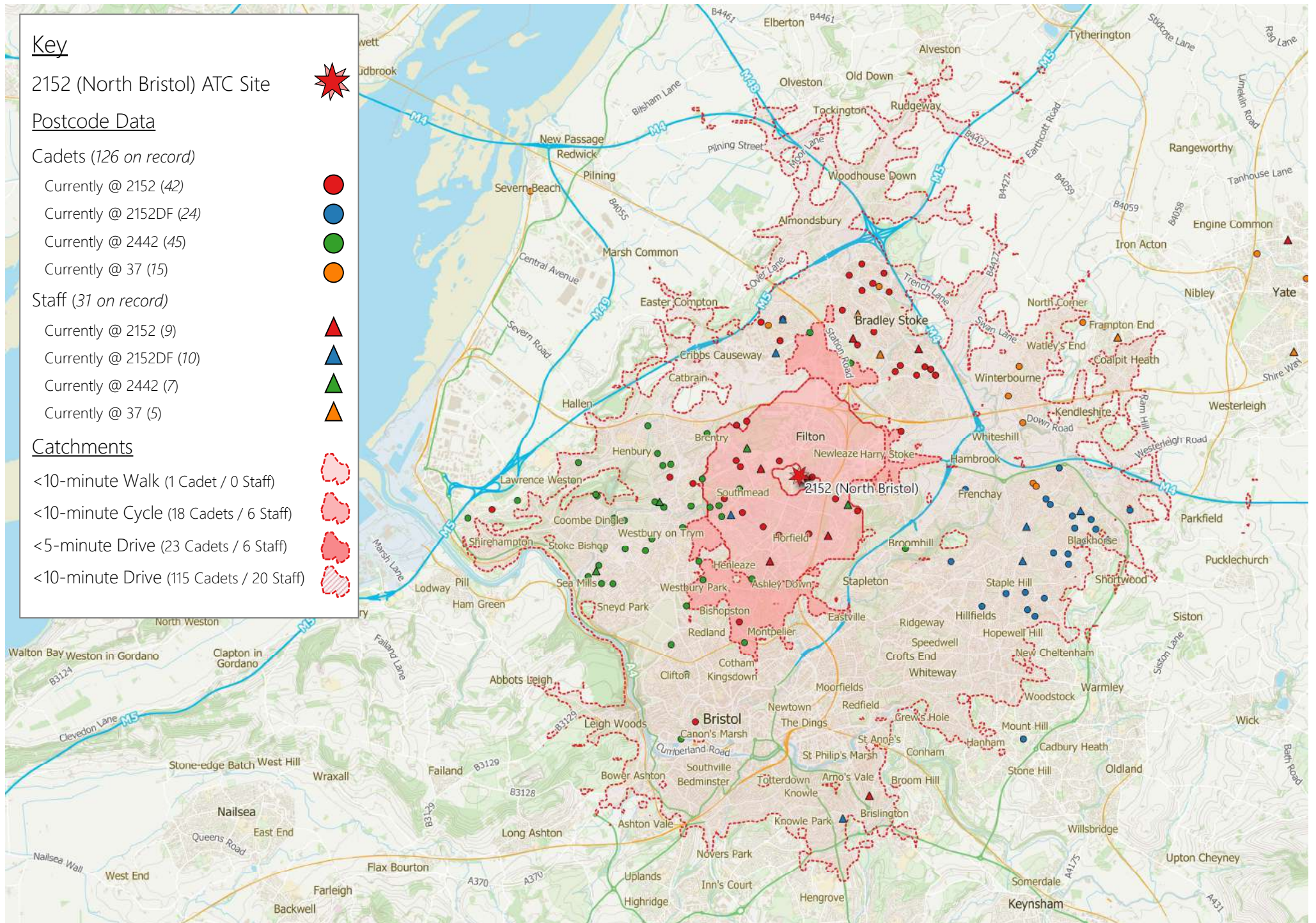
Catchments

<10-minute Walk (1 Cadet / 0 Staff)

<10-minute Cycle (18 Cadets / 6 Staff)

<5-minute Drive (23 Cadets / 6 Staff)

<10-minute Drive (115 Cadets / 20 Staff)



Appendix 2

