# New Sydney Place and Sydney Road Liveable Neighbourhood

## Traffic Monitoring

| | |
|---|---|
| Document Ref: | 30187260-ARC-XXX-XX-TR-TP-00001 |
| Revision: | P08 |

AUGUST 2025

# New Sydney Place and Sydney Road Liveable Neighbourhood

## Traffic Monitoring

| | |
|---|---|
| Author | DS |
| Checker | DS |
| Reviewer | EW |
| Approver | EW |
| Document Ref. | 30187260-ARC-XXX-XX-TR-TP-00001-P08 New Sydney Place Traffic Monitoring |
| Date | AUGUST 2025 |

# Version Control

| Version | Date | Author | Checker | Reviewer | Approver | Changes |
|---|---|---|---|---|---|---|
| P01 | 17/09/2024 | DS | DS | EW | EW | Draft for client comment |
| P02 | 10/12/2024 | DS | DS | EW | EW | Working draft revision |
| P03 | 10/01/2025 | HS | DS | EW | EW | Revised with Autumn 2024 data |
| P04 | 29/01/2025 | HS | DS | EW | EW | Revised for client comments |
| P05 | 03/02/2025 | HS | DS | EW | EW | Revised for client comments |
| P06 | 25/07/2025 | HS | DS | EW | EW | Revised with June 2025 data |
| P07 | 04/08/2025 | DS | DS | EW | EW | Revised for client comments |
| P08 | 06/08/2025 | DS | DS | EW | EW | Revised for client comments |

# Contents



# Tables

# Figures

# Glossary

| Term | Definition |
|---|---|
| Active Travel | Walking, cycling and wheeling (wheelchair, mobility scooter, buggy etc.). |
| Automatic Number Plate Recognition (ANPR) | Cameras which can record the registration plates of individual vehicles passing a camera location and record the length of time it takes a vehicle to travel between cameras in two locations. |
| Automatic Traffic Counter (ATC) | A temporary counter that is laid in the road, made up of two rubber tubes and a control unit. It records the number of vehicles; the types of vehicles; and the speeds of vehicles. |
| Baseline Traffic Data | Traffic flow and speed data collected before the installation of the through-traffic restriction trial to enable a comparison with the same traffic flow and speed data collected during the trial (post-installation) |
| Experimental Traffic Regulation Order (ETRO) | A temporary legal arrangement used to trial changes to the road network, such as rerouting of motor vehicles. |
| GPS Tracking Data | Location data collected from personal devices, such as mobile phones, and vehicles which provides information on journey times, speeds, routing and start and end points. |
| LGV | LGV (Light Goods Vehicle) refers to a vehicle primarily used for the transport of goods that typically weigh up to 3.5 tonnes, including vans and small trucks. |
| Link | A road, or a section of a road between junctions, for example the A36 Beckford Road between Bathwick Street and Warminster Road. |
| Link Count | The volume of motor vehicles recorded on a defined stretch of highway during the stated time-period. Including OGVs, LGVs, car, bus, and motorcycle. |
| Liveable Neighbourhood | An area with improved residential streets which encourage safe, active and more sustainable forms of travel, such as walking, wheeling and cycling. |
| Max (Maximum) | The largest value recorded during a particular survey or set of surveys. |
| Mean | The average of a set of numbers, calculated by adding up all the numbers and dividing this value by the quantity of numbers. It is the most used type of average however is more susceptible to be skewed by unusually small or unusually large numbers in the dataset. |
| Median | The average of a set of numbers, calculated by taking the middle value of the set of numbers. It is a less commonly used type of average however is less susceptible to be skewed by unusual values in a limited dataset. |
| OGV | OGV (Ordinary Goods Vehicle) refers to a vehicle weighing over 3.5 tonnes, subdivided into OGV1 (rigid vehicles with two or three axles) and OGV2 (rigid vehicles with four or more axles or articulated vehicles). |

| Term | Definition |
|---|---|
| Passenger Car Units (PCUs) | A common unit of traffic with different vehicle types expressed as a factor of one car, for example a heavy goods vehicle is considered to comprise 2.3 PCUs for analytical purposes. |
| Permanent Traffic Counter | A counter that is installed on a long-term basis to record monthly or annual trends in traffic flows and speeds, typically formed of magnetic loops in the ground with an associated counting device. |
| Post-Installation Traffic Data | Traffic flow and speed data collected after the installation of the through-traffic restriction/during the trial that enables comparison with traffic flow and speed data collected before the trial was installed (baseline data). . |
| Temporary camera survey | A temporary traffic count which can record different users, such as pedestrians, cyclists and vehicles, via video survey. |
| Temporary radar survey | A temporary traffic count undertaken using a radar device which can detect the quantity of vehicles and the speeds at which they are travelling. |

# 1 Introduction

## 1.1 Overview

1.1.1 This report has been prepared by Arcadis on behalf of Bath and North East Somerset Council (B&NES). It presents a comparison of traffic data collected before and after a through-traffic restriction trial was installed on Sydney Road in April 2024 as part of the New Sydney Place and Sydney Road Liveable Neighbourhood.

1.1.2 The trial was introduced under an Experimental Traffic Regulation Order (ETRO) in April 2024 and ran for an initial six-month period. Throughout this period, B&NES consulted the community and assessed the effects on traffic and air quality. In early 2025, the Cabinet Member of Resources evaluated the monitoring data and public consultation outcomes and opted to make the scheme permanent, contingent upon the outcomes of a formal Traffic Regulation Order (TRO). Additional monitoring data was collected in June 2025.

1.1.3 On 3 July 2025, a 21-day notice was issued outlining the council's intention to make the through-traffic restriction permanent under provisions of the Road Traffic Regulation Act 1984. However, until the TRO process is completed and the scheme is formally implemented, it remains under trial monitoring status, and all data collected will continue to be considered as part of the monitoring period.

## 1.2 Aim of the Scheme

1.2.1 The through-traffic restriction, part of the Liveable Neighbourhood (LN) programme, aims to prevent motorists from using New Sydney Place and Sydney Road as a shortcut to avoid the Bathwick St / Beckford Road A36 junction. It seeks to enhance safety at the Sydney Road and North Road junctions with the A36 Warminster Road and to create a safer, quieter, and healthier environment for those walking, cycling, or wheeling. The scheme encourages more local residents to walk or cycle for shorter journeys and aims to reduce the number of short car trips.

1.2.2 While the scheme does not restrict vehicle access to homes, businesses, or Sydney Gardens, it may require drivers to take alternative routes. Cyclists and pedestrians can easily pass through, and emergency services have access via removable bollards. Parking arrangements remain unchanged, with no loss of parking spaces.

# 2 Traffic Monitoring

## 2.1 Overview

2.1.1 This chapter sets out the purpose of the traffic monitoring; details of the traffic data collected before and after the implementation of restriction; and the method that has been used to analyse the traffic data.

## 2.2 Purpose of Traffic Monitoring

2.2.1 The purpose of the baseline (pre-installation) and in-trial surveys is to understand how traffic flows in the local area have changed since the implementation of the trial. This includes:

- Changes to motor vehicle traffic and active travel flows on New Sydney Place and Sydney Road.
- Changes to motor vehicle traffic flows on the A36 Beckford Road and A36 Sydney Place.
- Changes to motor vehicle traffic flows on local roads comprising Bathwick Hill, Cleveland Walk, and North Road.
- Changes to motor vehicle traffic flows on local roads comprising Sham Castle Lane, St Anns Way, and Sutton Street.
- Changes to journey times and delay on the A36 Beckford Road and the A36 Sydney Place.

## 2.3 About the Monitoring

2.3.1 The legal order for the scheme came into effect on 1 April 2024 and the consultation for the through-traffic restriction trial started on 3 April 2024 due to a bank holiday.

2.3.2 Baseline traffic data was collected on consecutive days during the periods of 25 September 2023 to 01 October 2023; 21 February 2024 to 27 February 2024; and 19 March 2024 & 26 March 2024. The data gathered average daily counts over the course of a week before the trial started.

2.3.3 Post-installation traffic data was collected:

- for seven consecutive days from 03 June 2024 to 09 June 2024 (two months after the through-traffic restriction was installed).
- for seven consecutive days from 13 July 2024 to 19 July 2024 (three months after installation).
- for seven consecutive days in the Autumn of 2024, from 02 November 2024 to 08 November 2024 (seven months after installation).
- for seven consecutive days in the Summer of 2025, from 16 June 2025 to 22 June 2025 (fourteen months after installation) to provide further insight into the impact of the trial prior to the final TRO decision.

2.3.4 By comparing post-installation average daily counts with baseline data, the impacts of the trial can be considered.

2.3.5 All monitoring was conducted outside of the planned closure of the A36 at Limpley Stoke by Highways England, which closed on 12 August 2024. This work reduces traffic on A36 Warminster Road. While the work is ongoing to Spring in 2025, the road was briefly opened in Autumn (November 2024) and the council took this opportunity to conduct another period of monitoring in the Bathwick area to support a comparison with the original baseline data taken in Autumn 2023. See Section 2.5. Monitoring in June 2025 provides additional data to compare against baseline and 2024 in-trial data and this is also not impacted by works on the A36.

2.3.6 Monitoring was also conducted outside of school holidays as per usual practice, with one exception. In July 2024, the monitoring period overlapped with the King Edward's School summer holiday. This was due to the council having a short window to conduct monitoring between the North Parade Bridge re-opening on 8 July 2024 and the A36 shutting on 12 August 2024.

## 2.4 Method

2.4.1 A range of data was collected during baseline and in-trial periods, as summarised in Table 1 and with locations presented later on maps in Figure 1 and Figure 2. The table includes the acronyms 'ATC' for Automatic Traffic Count, and 'ANPR', for Automatic Number Plate Recognition, which are types of data collection explained in more detail in the paragraphs following the table.

*Table 1: Data Collection*

| Location | Reference | ATC No. | Baseline Method | In-Trial Method | Baseline Dates | Summer 2024 In-Trial Dates | Autumn 2024 In-Trial Dates | Summer 2025 In-Trial Dates |
|---|---|---|---|---|---|---|---|---|
| **Motor Vehicle Traffic Flows** | | | | | | | | |
| A36 Beckford Road, between Bathwick Street and Warminster Road | L4 | N/A | Permanent traffic counter | Permanent traffic counter | 25 September 2023 to 01 October 2023 | 03 June 2024 to 09 June 2024<br>13 July 2024 to 19 July 2024 | 02 November 2024 to 08 November 2024 | 16 June 2025 to 22 June 2025 |
| A36 Darlington Street, between Bathwick Hill Roundabout and New Sydney Place | L13 | ATC 6 | ATC | ATC | 25 September 2023 to 01 October 2023 | 03 June 2024 to 09 June 2024<br>13 July 2024 to 19 July 2024 | 02 November 2024 to 08 November 2024 | 16 June 2025 to 22 June 2025 |
| Bathwick Hill, east of Cleveland Walk | L9 | ATC 4 | ATC | ATC | 25 September 2023,<br>29 September 2023 to 02 October 2023 | 03 June 2024 to 09 June 2024<br>13 July 2024 to 19 July 2024 | 02 November 2024 to 08 November 2024 | 16 June 2025 to 22 June 2025 |
| Bathwick Hill, between Bathwick Hill Roundabout and Raby Place | L10 | ATC 5 | ATC | ATC | 25 September 2023 to 01 October 2023 | 03 June 2024 to 09 June 2024<br>13 July 2024 to 19 July 2024 | 02 November 2024 to 08 November 2024 | 16 June 2025 to 22 June 2025 |
| Cleveland Walk, northeast of Bathwick Hill | L8 | ATC 9 | ATC | ATC | 25 September 2023 to 01 October 2023 | 03 June 2024 to 09 June 2024<br>13 July 2024 to 19 July 2024 | 02 November 2024 to 08 November 2024 | 16 June 2025 to 22 June 2025 |
| Cleveland Walk, south of North Road | L7 | ATC 2 | ATC | ATC | 25 September 2023 to 01 October 2023 | 03 June 2024 to 09 June 2024<br>13 July 2024 to 19 July 2024 | 14 November 2024 to 20 November 2024 | 16 June 2025 to 22 June 2025 |
| North Road, east of Cleveland Walk | L6 | ATC 3 | ATC | ATC | 25 September 2023 to 01 October 2023 | 03 June 2024 to 09 June 2024<br>13 July 2024 to 19 July 2024 | 02 November 2024 to 08 November 2024 | 16 June 2025 to 22 June 2025 |
| North Road, west of King Edward's School | L5 | ATC 1 | ATC | ATC | 25 September 2023 to 01 October 2023 | 03 June 2024 to 09 June 2024<br>13 July 2024 to 19 July 2024 | 02 November 2024 to 08 November 2024 | 16 June 2025 to 22 June 2025 |
| Sham Castle Lane, south of Vellore Lane | L12 | ATC 7 | ATC | ATC | 25 September 2023 to 01 October 2023 | 03 June 2024 to 09 June 2024<br>13 July 2024 to 19 July 2024 | 02 November 2024 to 08 November 2024 | 16 June 2025 to 22 June 2025 |
| St Anns Way, south of Sham Castle Lane | L11 | ATC 8 | ATC | ATC | 25 September 2023 to 01 October 2023 | 03 June 2024 to 09 June 2024<br>13 July 2024 to 19 July 2024 | 02 November 2024 to 08 November 2024 | 16 June 2025 to 22 June 2025 |
| Sutton Street, between A36 Sydney Place and Henrietta Gardens | L14 | ATC 12 | Temporary radar survey | ATC | 21 February 2024 to 27 February 2024 | 03 June 2024 to 09 June 2024<br>13 July 2024 to 19 July 2024 | 17 November 2024 to 23 November 2024 | 16 June 2025 to 22 June 2025 |

| Location | Reference | ATC No. | Baseline Method | In-Trial Method | Baseline Dates | Summer 2024 In-Trial Dates | Autumn 2024 In-Trial Dates | Summer 2025 In-Trial Dates |
|---|---|---|---|---|---|---|---|---|
| New Sydney Place, east of A36 Darlington Street | L3 | ATC 10 | ANPR | ATC | 25 September 2023 to 01 October 2023 | 03 June 2024 to 09 June 2024<br>13 July 2024 to 19 July 2024 | 02 November 2024 to 08 November 2024 | 16 June 2025 to 22 June 2025 |
| Sydney Road, between New Sydney Place and Sham Castle Lane | L1 | N/A | Temporary camera survey | Temporary camera survey | 25 September 2023 to 01 October 2023 | 03 June 2024 to 09 June 2024<br>13 July 2024 to 19 July 2024 | 02 November 2024 to 08 November 2024 | 16 June 2025 to 22 June 2025 |
| Sydney Road, south of A36 Beckford Road | L2 | ATC 11 | ANPR | ATC | 25 September 2023 to 01 October 2023 | 03 June 2024 to 09 June 2024<br>13 July 2024 to 19 July 2024 | 02 November 2024 to 08 November 2024 | 16 June 2025 to 22 June 2025 |
| **Active Travel Flows** | | | | | | | | |
| Sydney Road, between New Sydney Place and Sham Castle Lane | L1 | - | Temporary camera survey | Temporary camera survey | 25 September 2023 to 01 October 2023 | 03 June 2024 to 09 June 2024<br>13 July 2024 to 19 July 2024 | 02 November 2024 to 08 November 2024 | 16 June 2025 to 22 June 2025 |
| **Origin Destination Data** | | | | | | | | |
| New Sydney Place, east of the A36 Darlington Street | L3 | - | ANPR | - | 25 September 2023 to 01 October 2023 | - | - | - |
| Sydney Road, south of the A36 Beckford Road | L2 | - | ANPR | - | 25 September 2023 to 01 October 2023 | - | - | - |
| **Queue Lengths** | | | | | | | | |
| A36 Beckford Road / A36 Warminster Road / Sydney Road | - | - | Manual enumeration | Manual enumeration | 19 March 2024, 26 March 2024 | 05 June 2024, 06 June 2024<br>17 July 2024 | - | - |
| A36 Bathwick Street / A36 Beckford Road / A36 Sydney Place | - | - | Manual enumeration | Manual enumeration | 19 March 2024, 26 March 2024 | 05 June 2024, 06 June 2024<br>17 July 2024 | - | - |
| A36 Darlington Street / A36 Sydney Place / New Sydney Place | - | - | Manual enumeration | Manual enumeration | 19 March 2024, 26 March 2024 | 05 June 2024, 06 June 2024<br>17 July 2024 | - | - |
| **Travel Time Data – Journeys** | | | | | | | | |
| A36 Warminster Road to A36 Darlington Street via Beckford Road | - | - | GPS tracking data | GPS tracking data | 25 September 2023 to 01 October 2023<br>01 June 2023 to 30 June 2023 | 03 June 2024 – 09 June 2024<br>01 June 2024 to 30 June 2024 | 01 November 2024 to 30 November 2024 | 01 June 2025 to 30 June 2025 |
| **Travel Time Data – Roads** | | | | | | | | |

| Location | Reference | ATC No. | Baseline Method | In-Trial Method | Baseline Dates | Summer 2024 In-Trial Dates | Autumn 2024 In-Trial Dates | Summer 2025 In-Trial Dates |
|---|---|---|---|---|---|---|---|---|
| A36 Bathwick Street | - | - | GPS tracking data | GPS tracking data | 19 March 2024, 26 March 2024<br>01 June 2023 to 30 June 2023 | 05 June 2024, 06 June 2024<br>01 June 2024 to 30 June 2024 | 02 November 2024 to 08 November 2024 | 01 June 2025 to 30 June 2025 |
| A36 Beckford Road | - | - | GPS tracking data | GPS tracking data | 19 March 2024, 26 March 2024<br>01 June 2023 to 30 June 2023 | 05 June 2024, 06 June 2024<br>01 June 2024 to 30 June 2024 | 02 November 2024 to 08 November 2024 | 01 June 2025 to 30 June 2025 |
| A36 Darlington Street | - | - | GPS tracking data | GPS tracking data | 19 March 2024, 26 March 2024<br>01 June 2023 to 30 June 2023 | 05 June 2024, 06 June 2024<br>01 June 2024 to 30 June 2024 | 02 November 2024 to 08 November 2024 | 01 June 2025 to 30 June 2025 |
| A36 Sydney Place | - | - | GPS tracking data | GPS tracking data | 19 March 2024, 26 March 2024<br>01 June 2023 to 30 June 2023 | 05 June 2024, 06 June 2024<br>01 June 2024 to 30 June 2024 | 02 November 2024 to 08 November 2024 | 01 June 2025 to 30 June 2025 |
| A36 Warminster Road | - | - | GPS tracking data | GPS tracking data | 19 March 2024, 26 March 2024<br>01 June 2023 to 30 June 2023 | 05 June 2024, 06 June 2024<br>01 June 2024 to 30 June 2024 | 02 November 2024 to 08 November 2024 | 01 June 2025 to 30 June 2025 |
| New Sydney Place | - | - | GPS tracking data | GPS tracking data | 19 March 2024, 26 March 2024<br>01 June 2023 to 30 June 2023 | 05 June 2024, 06 June 2024<br>01 June 2024 to 30 June 2024 | 02 November 2024 to 08 November 2024 | 01 June 2025 to 30 June 2025 |
| Sydney Road | - | - | GPS tracking data | GPS tracking data | 19 March 2024, 26 March 2024<br>01 June 2023 to 30 June 2023 | 05 June 2024, 06 June 2024<br>01 June 2024 to 30 June 2024 | 02 November 2024 to 08 November 2024 | 01 June 2025 to 30 June 2025 |

## Baseline

2.4.2 Baseline data was collected during the periods 25 September 2023 to 01 October 2023; 21 February 2024 to 27 February 2024; and 19 March 2024 & 26 March 2024.

2.4.3 The following baseline data was collected:

- Motor vehicle traffic flow data for links using Automatic Traffic Counters (ATCs), permanent survey sites, and temporary radar surveys.
- Motor vehicle and active travel traffic flow data for links using temporary camera surveys.
- Motor vehicle origin destination and traffic flow data using Automatic Number Plate Recognition (ANPR) surveys.
- Motor vehicle queue lengths through manual enumeration.

2.4.4 In addition, baseline travel time data was also collected for the month of June 2023.

2.4.5 The above surveys are described in more detail in the sections that follow.

### Motor Vehicle Traffic Flows

2.4.6 The baseline motor vehicle traffic flows that were collected are mapped in Figure 1 and described in Table 1.

2.4.7 The motor vehicle traffic surveys recorded the following vehicle types:

- Motorcycles.
- Cars.
- Light goods vehicles (vans).
- Heavy goods vehicles (lorries).
- Buses and coaches.

2.4.8 Most of the baseline motor vehicle traffic flow counts were undertaken using ATCs, except for L1, which was undertaken using a temporary camera survey; L2 and L3, which were undertaken using ANPR; L4, for which data was obtained from a permanent traffic counter and L14, which was undertaken using a temporary radar survey.

2.4.9 All baseline counts were undertaken in late September – early October 2023 apart from L14, which was undertaken in February 2024.

2.4.10 All baseline counts were undertaken for continuous 24-hour periods, apart from L1, L2, and L3 which were undertaken for the hours 0600-2200.

### Active Travel Flows

2.4.11 A baseline survey of active travel flows was undertaken on Sydney Road, between New Sydney Place and Sham Castle Lane, using a temporary camera survey during the period 25 September 2023 to 01 October 2023.

2.4.12 Active travel flows were recorded for the hours 0600-2200.

2.4.13 The active travel surveys recorded the following travel modes:

- Pedestrians (inclusive of wheelchair users or mobility scooters).
- Cyclists.

## Origin Destination Data

2.4.14 During baseline surveys in September – October 2023, ANPR cameras were placed on New Sydney Place, east of the A36 Darlington Street, and on Sydney Road, south of the A36 Beckford Road. Data was collected from 0600-2200 to record the numbers of vehicles using the route as a through route.

2.4.15 The cameras recorded vehicle registration numbers so that unique vehicles using the road could be counted. If the vehicle appeared on both cameras within three minutes, it could be inferred that it was using New Sydney Place and Sydney Road as a through route and not stopping for a specific reason.

2.4.16 Origin destination data was not collected on New Sydney Place and Sydney Road during the June 2024 and July 2024 in-trial periods because the restriction prevented any motor vehicles from passing through.

## Queue Lengths

2.4.17 Baseline surveys of queue lengths were undertaken at the following junctions:

- A36 Beckford Road / A36 Warminster Road / Sydney Road
- A36 Bathwick Street / A36 Beckford Road / A36 Sydney Place
- A36 Darlington Street / A36 Sydney Place / New Sydney Place

2.4.18 The queue length surveys were undertaken via manual enumeration on Tuesday 19 March 2024 and Tuesday 26 March 2024 for the hours 0700-0900 and 1400-1730. The counts were undertaken during school term time.

2.4.19 The queue lengths were recorded in Passenger Car Units (PCUs). PCU is a term used in traffic analysis as a way of converting traffic – which is composed of various types of vehicles - into a common unit, for analytical purposes. The conversion factors for each vehicle type are set out in Table 2. An example interpretation of the table is that a bus is 2.0 PCUs, while a pedal cycle is 0.2 PCUs.

*Table 2: PCU Factors*

| Vehicle Type | Factor |
|---|---|
| Pedal Cycle | 0.2 |
| Motorcycle | 0.4 |
| Passenger Car | 1.0 |
| Light Goods Vehicle (LGV) | 1.0 |
| Medium Goods Vehicle (MGV) | 1.5 |
| Buses and coaches | 2.0 |
| Heavy Goods Vehicle (HGV) | 2.3 |

### Travel Time Data

2.4.20 GPS tracking data was obtained from a source of data collected from fixed and non-fixed in-vehicle GPS devices used for navigation and telematics. The data provides travel times for motor vehicles on both roads and specific journeys.

2.4.21 Baseline journey time data was obtained for journeys between the A36 Warminster Road and the A36 Darlington Street via Beckford Road, in both directions. Data was obtained for the period 25 September 2023 to 01 October 2023 and the whole month of June 2023.

2.4.22 Baseline vehicular travel time data was obtained for the following roads:

- A36 Bathwick Street
- A36 Beckford Road
- A36 Darlington Street
- A36 Sydney Place
- A36 Warminster Road
- New Sydney Place
- Sydney Road

2.4.23 Baseline travel time data for roads was obtained for the queue survey days of Tuesday 19 March 2024 and Tuesday 26 March 2024 for the hours 0700-0900 and 1400-1730, and also for the whole month of June 2023.

## In-Trial

2.4.24 Traffic data was collected during the periods 03 June 2024 to 09 June 2024, 13 July 2024 to 19 July 2024, 02 November 2024 to 08 November 2024 and 16 June 2025 to 22 June 2025 (apart from in two locations – Cleveland Walk, south of North Road, and Sutton Street, between A36 Sydney Place and Henrietta Gardens – as set out in Table 1).

2.4.25 The data collected from 16 June 2025 to 22 June 2025 took place after the decision had been made to make the scheme permanent, but the scheme remained subject to the ongoing formal TRO process. As such, the June 2025 data is considered part of the in-trial monitoring phase.

2.4.26 The following monitoring data was collected:

- Motor vehicle traffic flow data using ATCs and permanent survey sites.
- Motor vehicle and active travel traffic flow data using temporary camera surveys.
- Motor vehicle queue lengths through manual enumeration 05 June 2024, 06 June 2024, and 17 July 2024 (not collected in November 2024 or June 2025).

2.4.27 In addition, travel time data was also obtained for the months of June 2024 and November 2024, for the week commencing 02 November 2024 and the month of June 2025.

2.4.28 The in-trial data collection periods are set out in Table 1.

2.4.29 The in-trial traffic data was generally collected using the same methods as for the baseline, with differences in data collection methods highlighted below.

### Motor Vehicle Traffic Flows

2.4.30 During the in-trial data collection periods, data for L14 (Sutton Street, between the A36 Sydney Place and Henrietta Gardens), L3 (New Sydney Place, east of the A36 Darlington Street, and L2 (Sydney Road, south of the A36 Beckford Road) was collected using ATCs.

2.4.31 During the baseline, data for Sutton Street was collected using a radar survey, and data for New Sydney Place and Sydney Road was collected using ANPR.

## 2.5 Data Validation

2.5.1 The A36 at Limpley Stoke, to the southeast of Bath, was closed to all traffic from August 2024 to Spring 2025 due to instability of the carriageway, which is set on a slope in the valley. The closure applied to all vehicles at all times. As the A36 is a trunk road, this closure had the potential to impact on traffic patterns in Bath. The council did not therefore undertake traffic monitoring during the closure.

2.5.2 To enable other road works in Wiltshire, the closure of the A36 at Limpley Stoke was temporarily lifted from 18 October 2024 to 11 November 2024. This provided an opportunity to undertake further monitoring surveys as the trunk road was once again available to all road users.

2.5.3 To understand whether traffic patterns during the temporary suspension of the road closure returned to typical levels, a benchmarking exercise was undertaken. This involved a comparison of traffic flow data on the A36 at Trossachs Drive in Bathampton from November 2023 (i.e. prior to the closure at Limpley Stoke) with November 2024, during the temporary suspension of the road closure.

2.5.4 The benchmarking exercise investigated how traffic flows varied between the week commencing 2 November 2024 and the same week in November 2023, specifically the week commencing 4 November 2023. Eastbound, westbound, and total flows were analysed to understand the changes, as set out in Table 3.

*Table 3: November 2024 Benchmarking Comparison*

| Direction | November 2023 Average Weekday | November 2023 Average Day | November 2024 Average Weekday | November 2024 Average Day | Percentage Change Average Weekday | Percentage Change Average Day |
|---|---|---|---|---|---|---|
| Eastbound | 4,938 | 4,588 | 4,000 | 3,662 | -19% | -20% |
| Westbound | 4,324 | 4,021 | 3,719 | 3,468 | -14% | -14% |
| Total | 9,262 | 8,610 | 7,718 | 7,129 | -17% | -17% |

2.5.5 Traffic flows on the A36 were generally lower in November 2024 than in November 2023, with an average 17% decrease in traffic volumes.

2.5.6 Whilst the data suggests that traffic volumes on the A36 towards the east did not fully return to typical conditions during the temporary reopening of the road at Limpley Stoke, it is important to note that overall traffic patterns in the local area are influenced by a variety of key roads, including the A4 London Road to the northeast; the A36 Pulteney Road to the south; and the A4 The Paragon to the northwest.

2.5.7 Each of these key roads has their own traffic patterns that influence the traffic flows around Sydney Road therefore a change in traffic flows on one road in isolation may not affect overall traffic patterns in the local area.

2.5.8 It is important to understand that the road network is a live operational system and there will always be incidents and events during any given survey period. Consequently, it is considered that the November 2024 data gives a useful understanding of traffic patterns following the implementation of the trial through-traffic restriction, and was undertaken at a similar time of year to the baseline surveys.

# 3 Analysis

## 3.1 Data Presentation

3.1.1 Most of the motor vehicle traffic flows were collected for 7 days for continuous 24-hour periods. On this basis, motor vehicle traffic flows, for both the baseline and in-trial periods are presented as average day 24-hour flows. Where motor vehicle flows were recorded for other periods, factors have been applied to convert them to average day 24-hour flows.

3.1.2 The active travel flow data was recorded for 7 days for the hours 0600-2200 therefore average day 0600-2200 data is presented for both the baseline and in-trial periods.

3.1.3 The locations of the traffic flow counts are mapped in Figure 1 and the locations of the queue length surveys are mapped in Figure 2.

*Figure 1: Locations of Traffic Flow Counts*

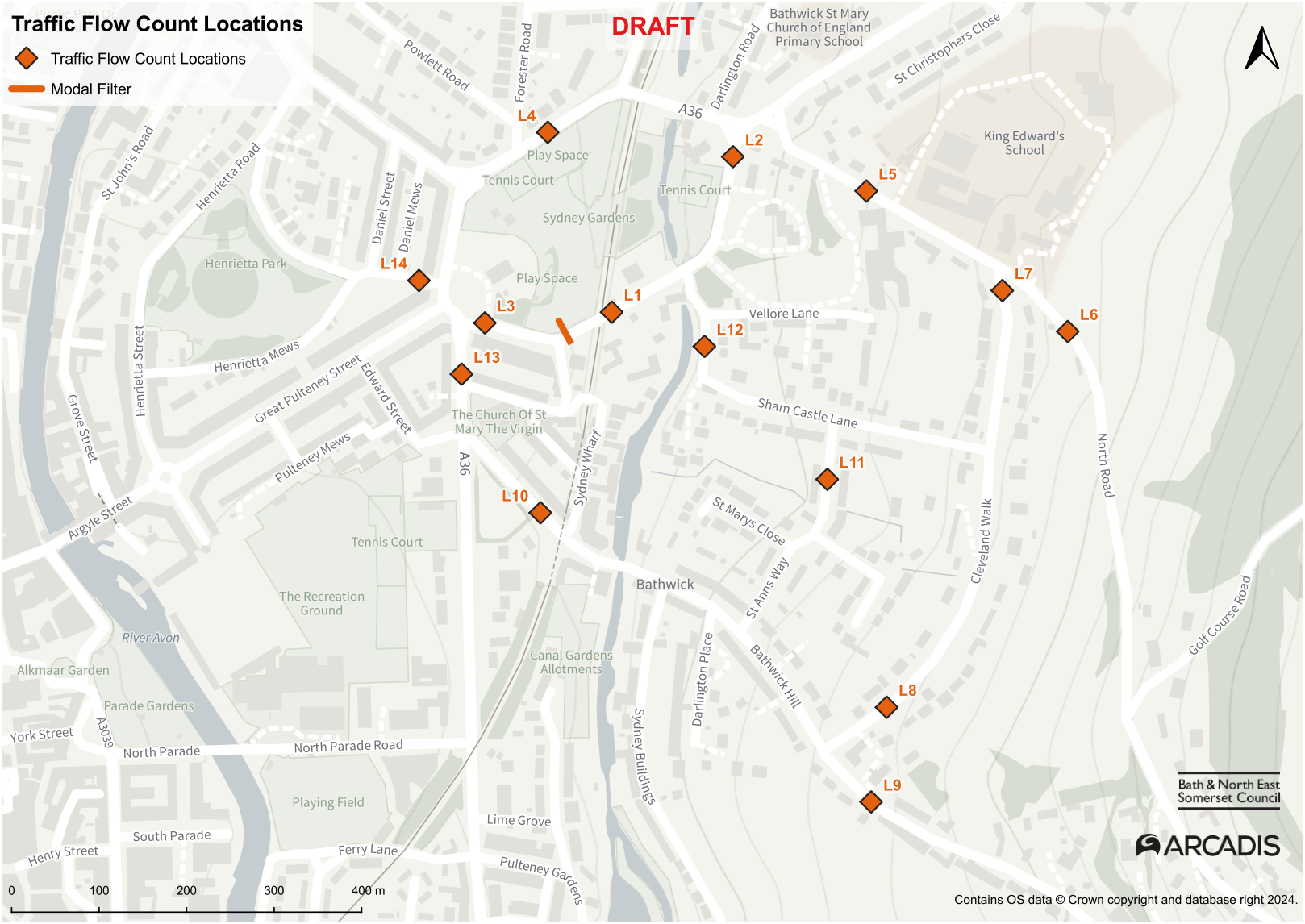
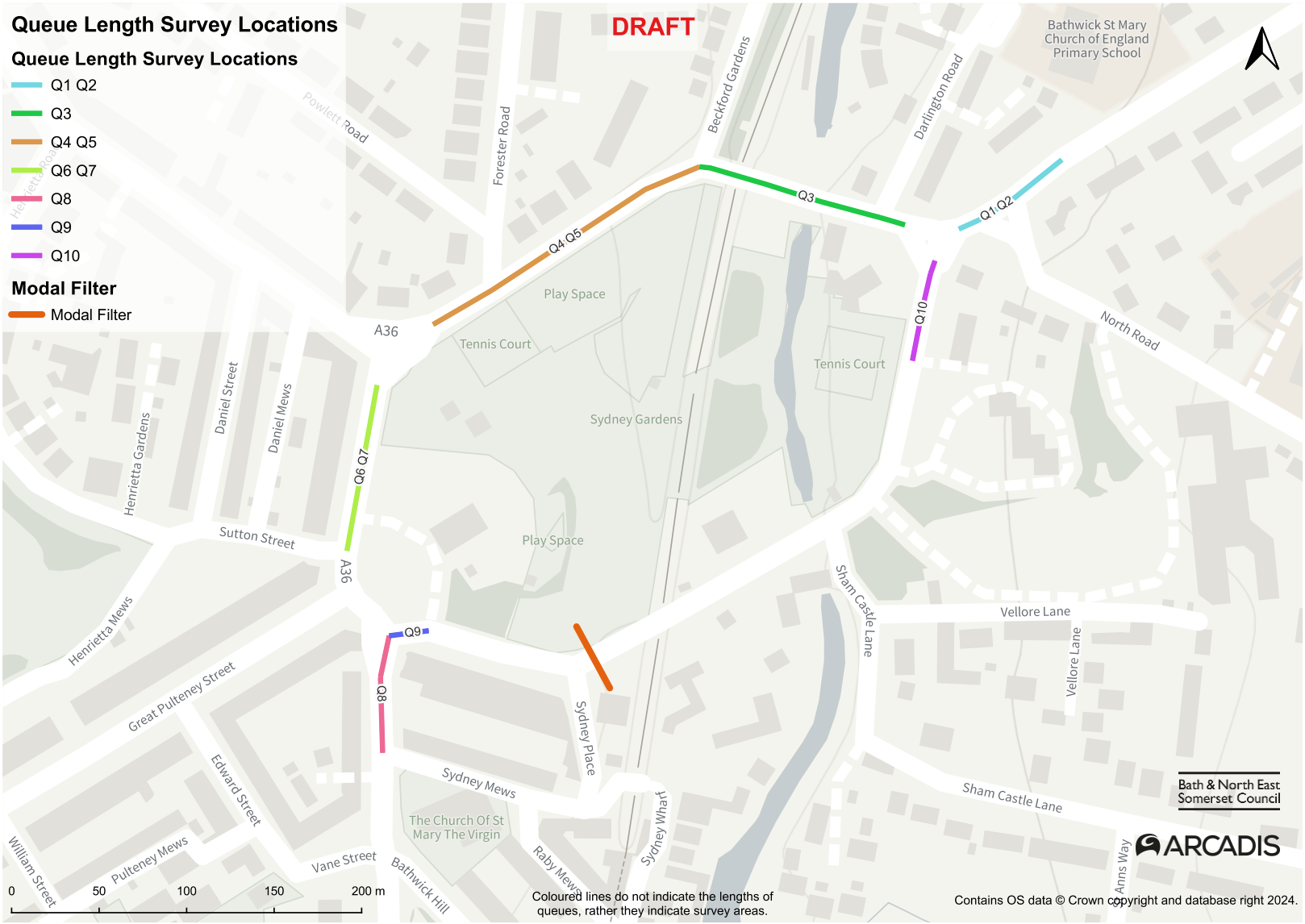


*Figure 2: Locations of Queue Length Surveys*



## 3.2 Observations

3.2.1 The following sections set out the observations that have been made following an analysis of the survey data for both the baseline and in-trial periods, along with a review of changes to traffic patterns between the baseline and two in-trial periods.

### Motor Vehicle Traffic Flows

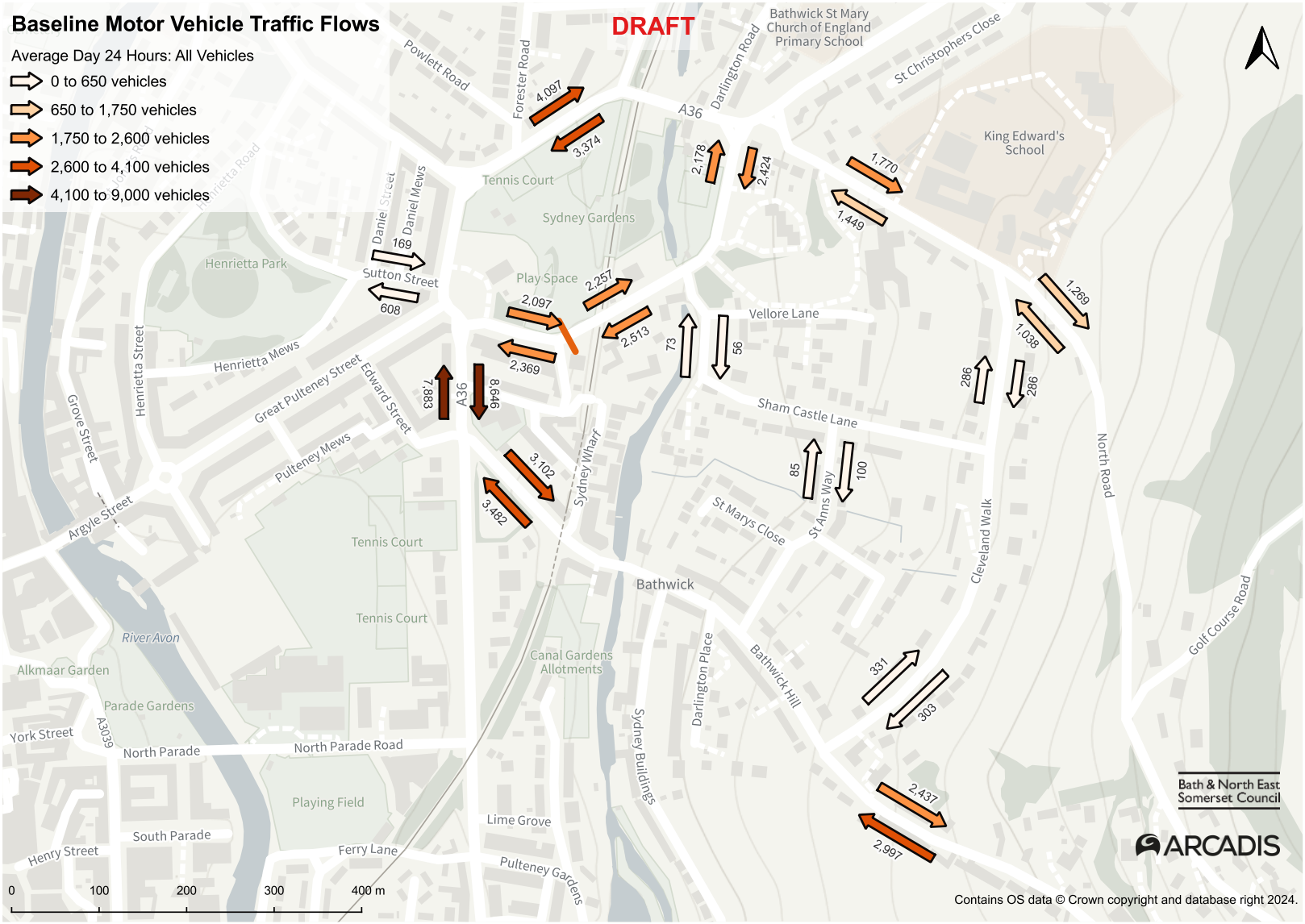
#### Baseline

3.2.2 Baseline motor vehicle traffic flows for the 7-day average travelling in both directions (All Vehicles) are summarised in Table 4 and mapped in Figure 3.

*Table 4: Baseline Motor Vehicle Traffic Flows (7-day average across both directions)*

| Road Name | Count No. | All Vehicles |
|---|---|---|
| A36 Beckford Road, between Bathwick Street and Warminster Road | L4 | 7,471 |
| A36 Darlington Street, between Bathwick Hill Roundabout and New Sydney Place | L13 | 16,529 |
| Bathwick Hill, east of Cleveland Walk | L9 | 5,434 |
| Bathwick Hill, between Bathwick Hill Roundabout and Raby Place | L10 | 6,585 |
| Cleveland Walk, northeast of Bathwick Hill | L8 | 634 |
| Cleveland Walk, south of North Road | L7 | 572 |
| North Road, east of Cleveland Walk | L6 | 2,308 |
| North Road, west of King Edward's School | L5 | 3,219 |
| Sham Castle Lane, south of Vellore Lane | L12 | 129 |
| St Anns Way, south of Sham Castle Lane | L11 | 185 |
| Sutton Street, between A36 Sydney Place and Henrietta Gardens | L14 | 777 |
| New Sydney Place, east of A36 Darlington Street | L3 | 4,466 |
| Sydney Road, between New Sydney Place and Sham Castle Lane | L1 | 4,770 |
| Sydney Road, south of A36 Beckford Road | L2 | 4,602 |

*Figure 3: Baseline Motor Vehicle Traffic Flows*



3.2.3 The data shows that, over the 7 days, the A36 Darlington Street carried the highest traffic flows during the baseline survey period, with 16,529 motor vehicles per average day traveling on the road (i.e. in either direction). New Sydney Place and Sydney Road was used by between 4,466 and 4,770 motor vehicles per day, whilst the A36 Beckford Road was used by 7,471 vehicles per day.

3.2.4 Bathwick Hill was used by 5,434 motor vehicles per average day across both directions east of Cleveland Walk, rising to 6,585 motor vehicles per day between the Bathwick Hill Roundabout and Raby Place. North Road was trafficked by 2,308 motor vehicles per day to the east of Cleveland Walk, rising to 3,219 motor vehicles per day to the west of King Edward's School. Cleveland Walk was used by 572 to 634 motor vehicles per day.

3.2.5 The local roads of Sham Castle Lane and St Anns Way were used by 129 and 185 motor vehicles per average day across both directions respectively, whilst Sutton Street was trafficked by 777 motor vehicles per day.

3.2.6 For most roads, the directional split of motor traffic flows was within three percentage points of a 50:50 split. However, it was found that on Sutton Street, the majority (78%) of traffic travelled westbound, whilst on North Road, the majority (55%) of traffic at both count points was travelling south-eastbound.

3.2.7 On the A36 Beckford Road, 55% of motor vehicles were found to be travelling north-eastbound, whilst on the parallel Sydney Road, the majority (53%) were found to be travelling south-westbound.

## In-Trial

3.2.8 Motor vehicle traffic flows per average day across both directions during the in-trial survey periods are set out in Table 5. The flows are mapped in Figure 4, Figure 5, Figure 6, and Figure 7 for June 2024, July 2024, November 2024, and June 2025 respectively.

*Table 5: In-Trial Motor Vehicle Traffic Flows (7-day average across both directions)*

| Road | Count No. | June 2024 All Vehicles | July 2024 All Vehicles | November 2024 All Vehicles | June 2025 All Vehicles |
|---|---|---|---|---|---|
| A36 Beckford Road, between Bathwick Street and Warminster Road | L4 | 10,476 | 10,168 | 10,070 | 10,756 |
| A36 Darlington Street, between Bathwick Hill Roundabout and New Sydney Place | L13 | 15,329 | 15,251 | 15,218 | 15,794 |
| Bathwick Hill, east of Cleveland Walk | L9 | 4,303 | 5,021 | 5,030 | 4,340 |
| Bathwick Hill, between Bathwick Hill Roundabout and Raby Place | L10 | 6,464 | 6,307 | 6,275 | 5,320 |
| Cleveland Walk, northeast of Bathwick Hill | L8 | 706 | 481 | 721 | 712 |
| Cleveland Walk, south of North Road | L7 | 696 | 429 | 671 | 651 |
| North Road, east of Cleveland Walk | L6 | 2,593 | 1,935 | 2,846 | 2,321 |
| North Road, west of King Edward's School | L5 | 3,309 | 2,331 | 3,660 | 3,185 |
| Sham Castle Lane, south of Vellore Lane | L12 | 174 | 173 | 172 | 172 |
| St Anns Way, south of Sham Castle Lane | L11 | 280 | 235 | 239 | 250 |
| Sutton Street, between A36 Sydney Place and Henrietta Gardens | L14 | 796 | 857 | 805 | 797 |
| New Sydney Place, east of A36 Darlington Street | L3 | 684 | 640 | 439 | 539 |
| Sydney Road, between New Sydney Place and Sham Castle Lane | L1 | 20 | 145 | 91 | 21 |
| Sydney Road, south of A36 Beckford Road | L2 | 1,376 | 1,456 | 1,436 | 1,502 |

*Figure 4: June 2024 In-Trial Motor Vehicle Traffic Flows*

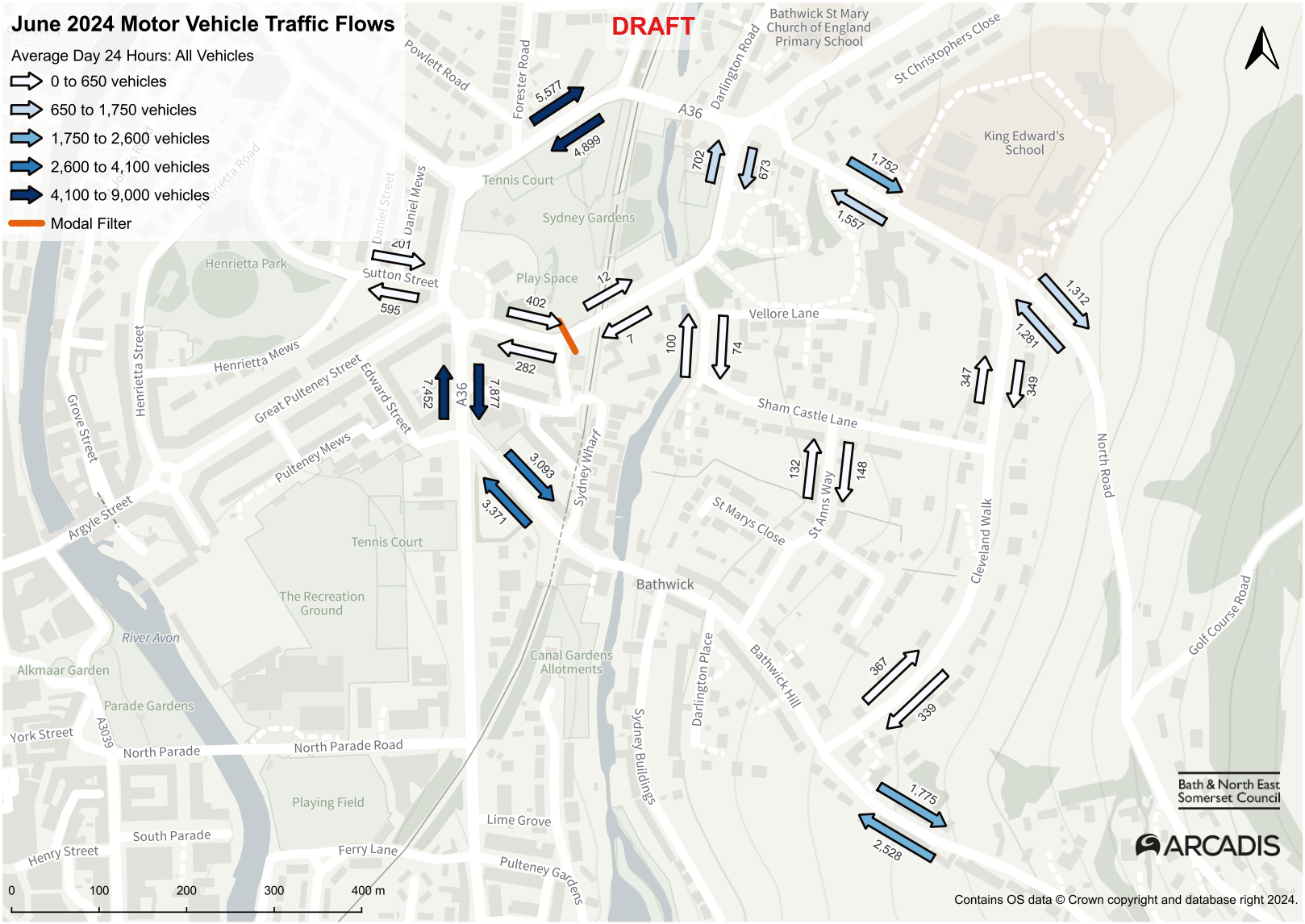


*Figure 5: July 2024 In-Trial Motor Vehicle Traffic Flows*

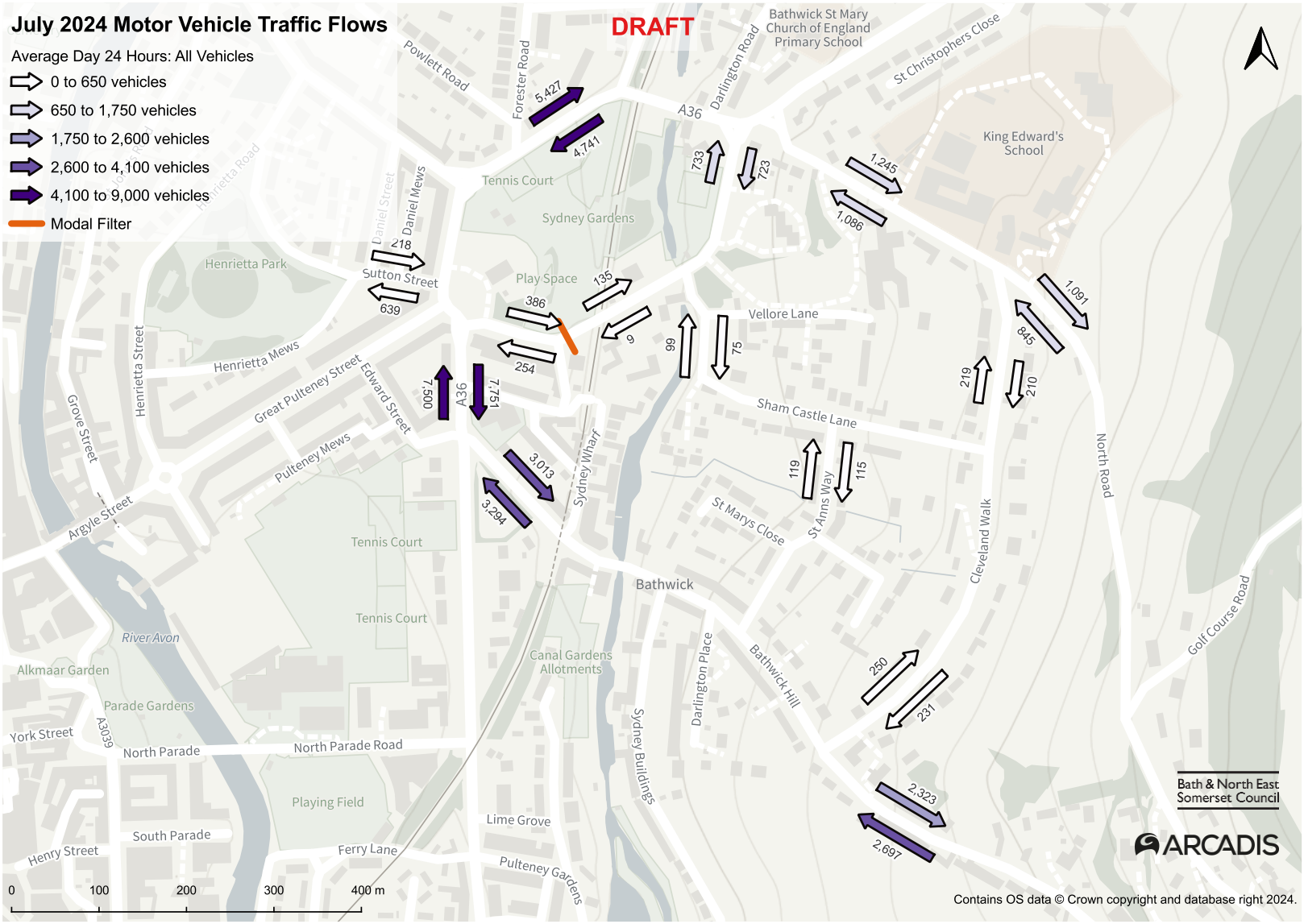


*Figure 6: November 2024 In-Trial Motor Vehicle Traffic Flows*

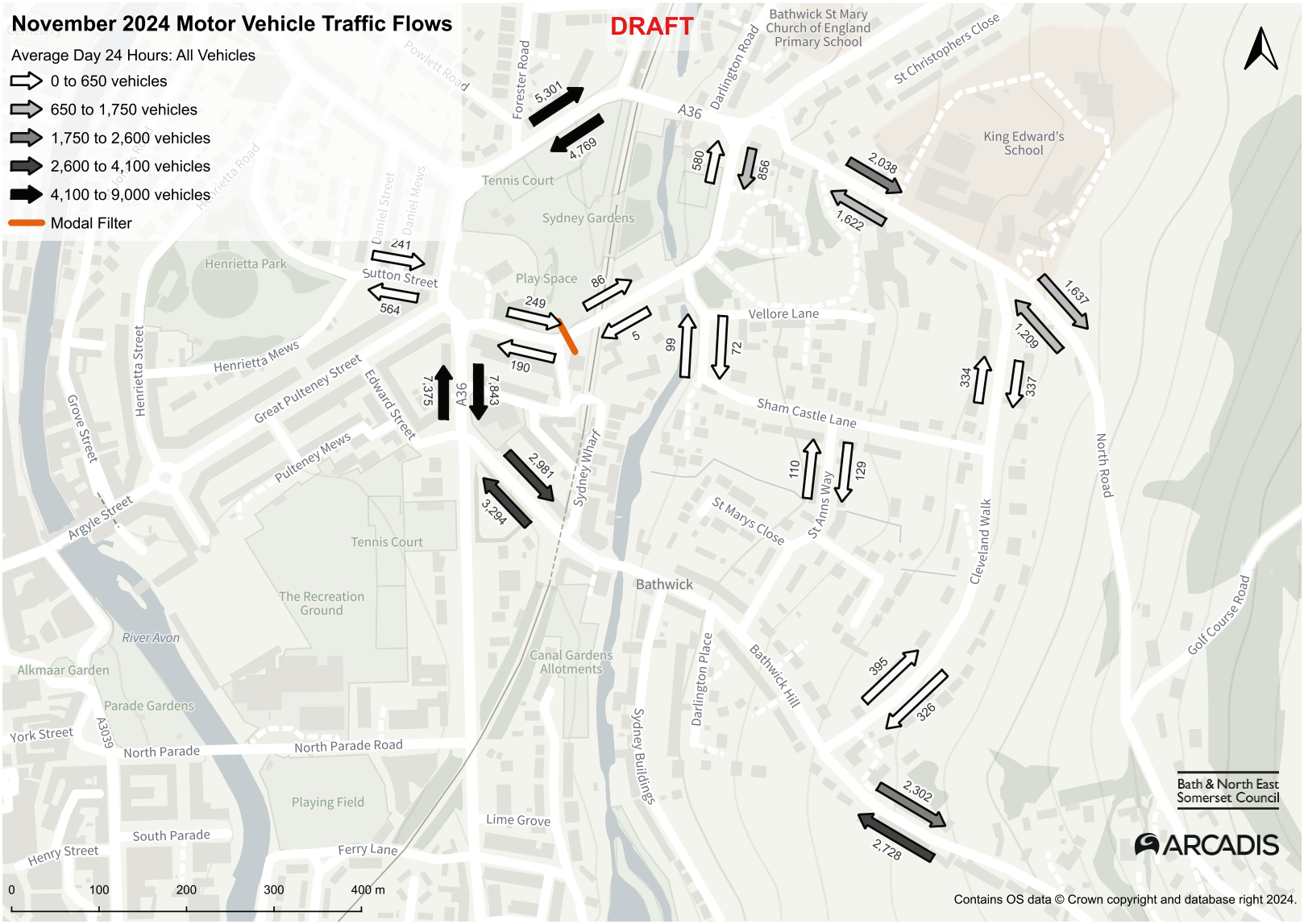
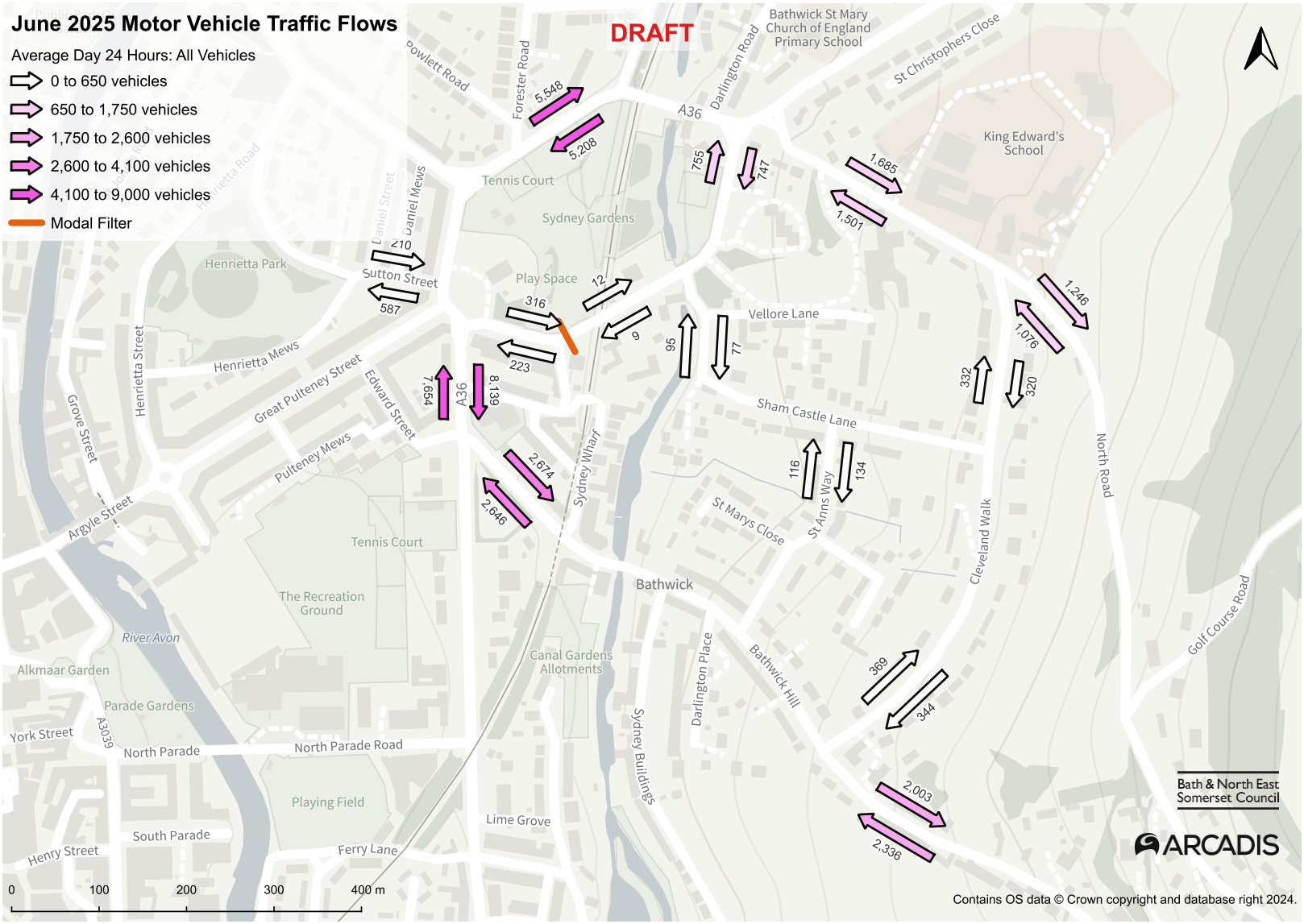


*Figure 7: June 2025 In-Trial Motor Vehicle Traffic Flows*



3.2.9 A written description of the in-trial traffic-flow monitoring results is provided below, followed by a comparison with the baseline traffic-flow data in Table 6.

3.2.10 The data shows that across the 7 days, similar to baseline monitoring the A36 Darlington Street carried the highest traffic flows in June 2024, July 2024, November 2024 and June 2025, with 15,329 motor vehicles per day in June 2024, 15,251 motor vehicles per day in July 2024, 15,218 motor vehicles per day in November 2024, and 15,794 motor vehicles per day in June 2025.

3.2.11 Traffic flows on Sydney Road, south of the A36 Beckford Road, were 1,376 motor vehicles per day in June 2024, 1,456 motor vehicles per day in July 2024, 1,436 motor vehicles per day in November 2024, and 1,502 motor vehicles per day in June 2025. Traffic flows on New Sydney Place, east of the A36 Darlington Street, were 684 motor vehicles per day in June 2024, 640 motor vehicles per day in July 2024, 439 motor vehicles per day in November 2024, and 539 motor vehicles per day in June 2025.

3.2.12 At the location of the through-traffic restriction on Sydney Road, traffic flows were 20 motor vehicles per day in June 2024, rising to 145 vehicles per day in July 2024, decreasing to 91 motor vehicles per day in November 2024, and decreasing further to 21 motor vehicles per day in June 2025. The traffic flows generally comprised of motorcycles and cars / light vans.

3.2.13 The A36 Beckford Road was used by 10,476 motor vehicles per day in June 2024, reducing to 10,168 in July 2024, reducing slightly further to 10,070 motor vehicles per day in November 2024., 10,756 motor vehicles per day were recorded in June 2025.

3.2.14 To the east of Cleveland Walk, Bathwick Hill was used by 4,303 motor vehicles per day in June 2024, increasing to 5,021 in July 2024, and further increasing to 5.030 in November 2024 4,340 in June 2025. Between the Bathwick Hill Roundabout and Raby Place, Bathwick Hill was used by 6,464 motor vehicles per day in June 2024, 6,307 motor vehicles per day in July 2024, 6,275 motor vehicles per day in November 2024, and 5,320 motor vehicles per day in June 2025.

3.2.15 North Road, to the east of Cleveland Walk, was used by 2,593 motor vehicles per day in June 2024, decreasing to 1,935 per day in July 2024, increasing to 2,846 per day in November 2024, then decreasing again to 2,321 per day in June 2025. To the west of King Edward's School, North Road carried 3,309 motor vehicles per day in June 2024, reducing to 2,331 in July 2024, increasing to 3,660 in November 2024, then decreasing to 3,185 in June 2025.

3.2.16 Cleveland Walk was used by 696 to 706 motor vehicles per day in June 2024, with 429 to 481 in July 2024, 671 to 721 in November 2024, and 651 to 712 in June 2025. Sham Castle Lane was trafficked by 174 motor vehicles per day in June 2024, 173 motor vehicles per day in July 2024, and 172 motor vehicles per day in November 2024 and June 2025.

3.2.17 It should be noted that the reduction in July 2024 on roads surrounding King Edward School is likely as a result of King Edward School holidays. See Section 2.3 About the Monitoring for more information.

3.2.18 St Anns Way carried 280 motor vehicles per day in June 2024, reducing to 235 per day in July 2024, then increasing slightly to 239 per day in November 2024 and 250 in June 2025. Sutton Street carried 796 motor vehicles per day in June 2024, 857 motor vehicles per day in July 2024, 805 motor vehicles per day in November 2024, and 797 motor vehicles in June 2025.

3.2.19 For most roads, the directional split of motor vehicle traffic was circa 50:50 during all in-trial periods. However, on Sutton Street, 75% of motor vehicles travelled westbound in both June 2024 and July 2024, reducing to 70% westbound in November 2024, increasing to 74% in June 2025. On Sydney Road at the through-traffic restriction, 94% of motor vehicles travelled northbound in July 2024 and November 2024.

3.2.20 It is also noted that on Bathwick Hill, east of Cleveland Walk, the majority of motor vehicle traffic travelled north-westbound during all in-trial periods, whilst on Sham Castle Lane, the majority of motor vehicle traffic headed northbound.

## Comparison of Results

3.2.21 Absolute and percentage changes in motor vehicle traffic flows between the baseline and in-trial survey periods are tabulated in Table 6.

3.2.22 Absolute changes in motor vehicle traffic flows between the baseline and June 2024 / July 2024 / November 2024 / June 2025 are mapped in Figure 8, Figure 9, Figure 10 and Figure 11.

3.2.23 Percentage changes in motor vehicle traffic flows between the baseline and June 2024 / July 2024 / November 2024 / June 2025 in Figure 12, Figure 13, Figure 14 and Figure 15 respectively.

*Table 6: Absolute and Percentage Changes in 7-Day Average Motor Vehicle Traffic Flows (across both directions)*

| Road | Count No. | Absolute Change in Traffic Flows Baseline to June 2024 | Absolute Change in Traffic Flows Baseline to July 2024 | Absolute Change in Traffic Flows Baseline to November 2024 | Absolute Change in Traffic Flows Baseline to June 2025 | Percentage Change in Traffic Flows Baseline to June 2024 | Percentage Change in Traffic Flows Baseline to July 2024 | Percentage Change in Traffic Flows Baseline to November 2024 | Percentage Change in Traffic Flows Baseline to June 2025 |
|---|---|---|---|---|---|---|---|---|---|
| A36 Beckford Road, between Bathwick Street and Warminster Road | L4 | 3,006 | 2,697 | 2,599 | 3,285 | 40% | 36% | 35% | 44% |
| A36 Darlington Street, between Bathwick Hill Roundabout and New Sydney Place | L13 | -1,200 | -1,278 | -1,311 | -735 | -7% | -8% | -8% | -4% |
| Bathwick Hill, east of Cleveland Walk | L9 | -1,131 | -413 | -404 | -1,094 | -21% | -8% | -7% | -20% |
| Bathwick Hill, between Bathwick Hill Roundabout and Raby Place | L10 | -121 | -278 | -310 | -1,265 | -2% | -4% | -5% | -19% |
| Cleveland Walk, northeast of Bathwick Hill | L8 | 72 | -153 | 87 | 79 | 11% | -24% | 14% | 12% |
| Cleveland Walk, south of North Road | L7 | 124 | -143 | 99 | 80 | 22% | -25% | 17% | 14% |
| North Road, east of Cleveland Walk | L6 | 286 | -372 | 538 | 14 | 12% | -16% | 23% | 1% |
| North Road, west of King Edward's School | L5 | 90 | -887 | 441 | -33 | 3% | -28% | 14% | -1% |
| Sham Castle Lane, south of Vellore Lane | L12 | 45 | 45 | 43 | 43 | 35% | 35% | 33% | 34% |
| St Anns Way, south of Sham Castle Lane | L11 | 95 | 50 | 54 | 65 | 52% | 27% | 29% | 35% |
| Sutton Street, between A36 Sydney Place and Henrietta Gardens | L14 | 19 | 80 | 28 | 20 | 2% | 10% | 4% | 3% |
| New Sydney Place, east of A36 Darlington Street | L3 | -3,781 | -3,825 | -4,027 | -3,927 | -85% | -86% | -90% | -88% |
| Sydney Road, between New Sydney Place and Sham Castle Lane | L1 | -4,750 | -4,625 | -4,679 | -4,749 | -100% | -97% | -98% | -100% |
| Sydney Road, south of A36 Beckford Road | L2 | -3,226 | -3,146 | -3,166 | -3,100 | -70% | -68% | -69% | -67% |

*Figure 8: Absolute Changes in 7-Day Average Motor Vehicle Traffic Flows between Baseline and June 2024*

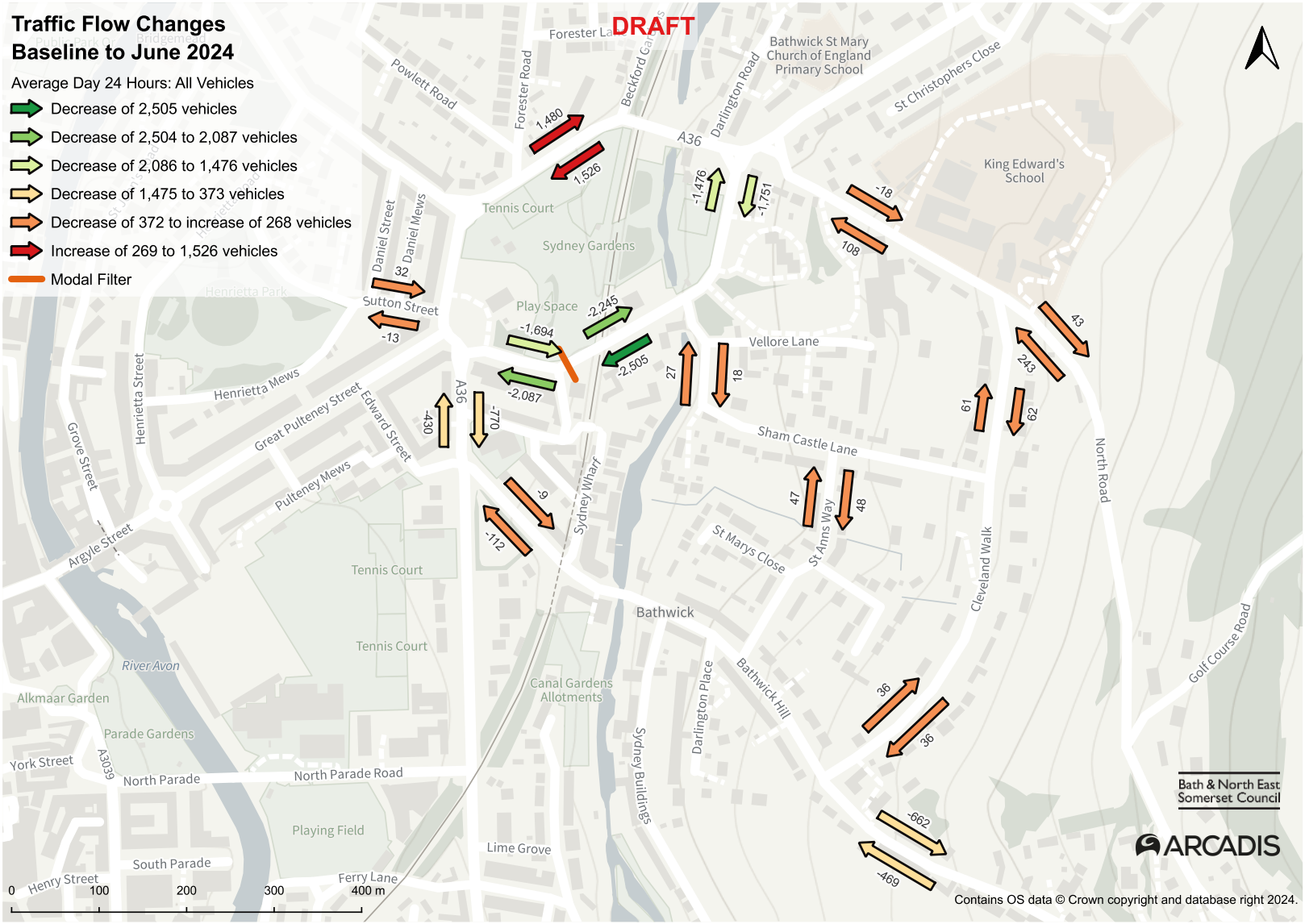


*Figure 9: Absolute Changes in 7-Day Average Motor Vehicle Traffic Flows between Baseline and July 2024*

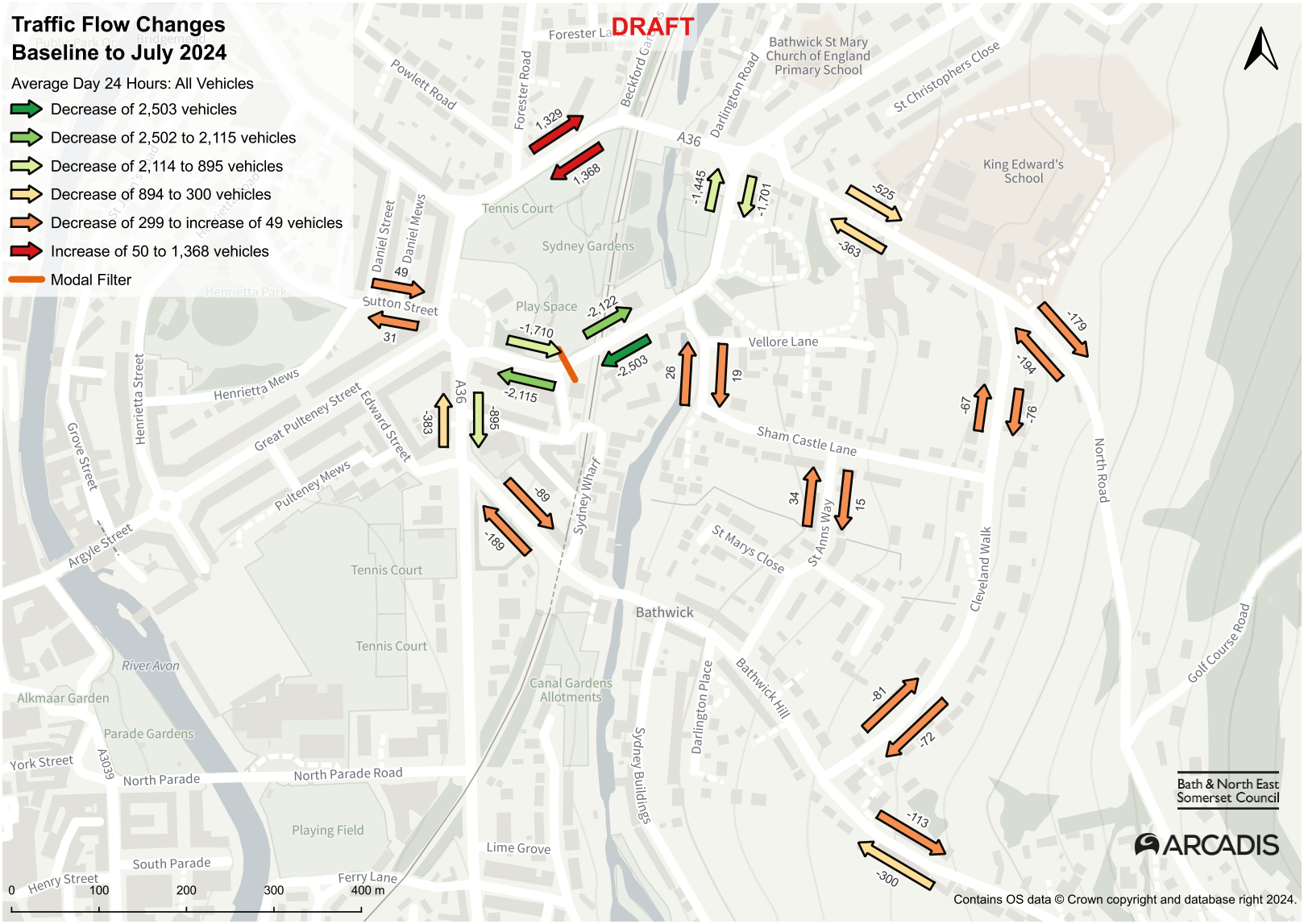


*Figure 10: Absolute Changes in 7-Day Average Motor Vehicle Traffic Flows between Baseline and November 2024*

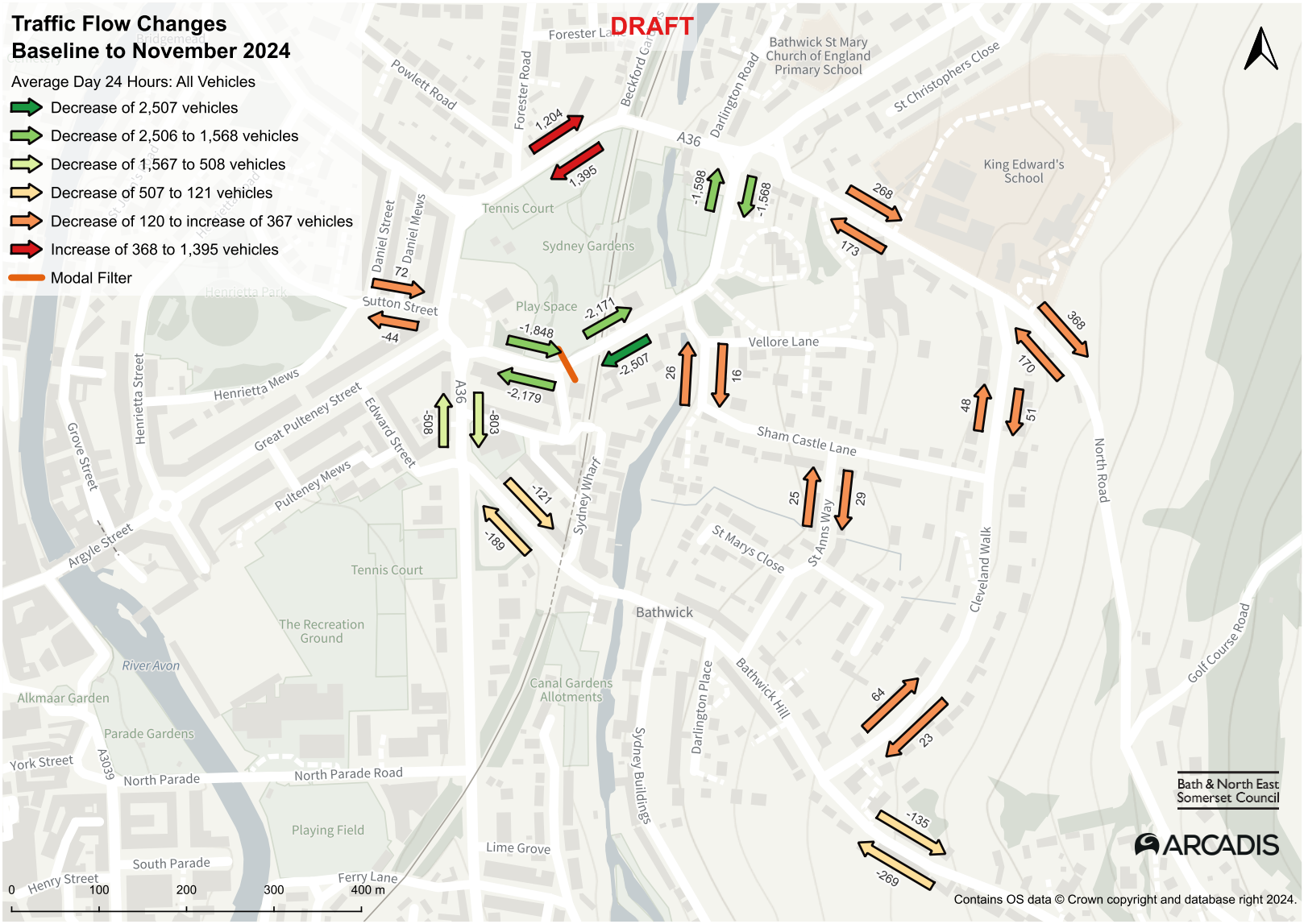


*Figure 11: Absolute Changes in 7-Day Average Motor Vehicle Traffic Flows between Baseline and June 2025*

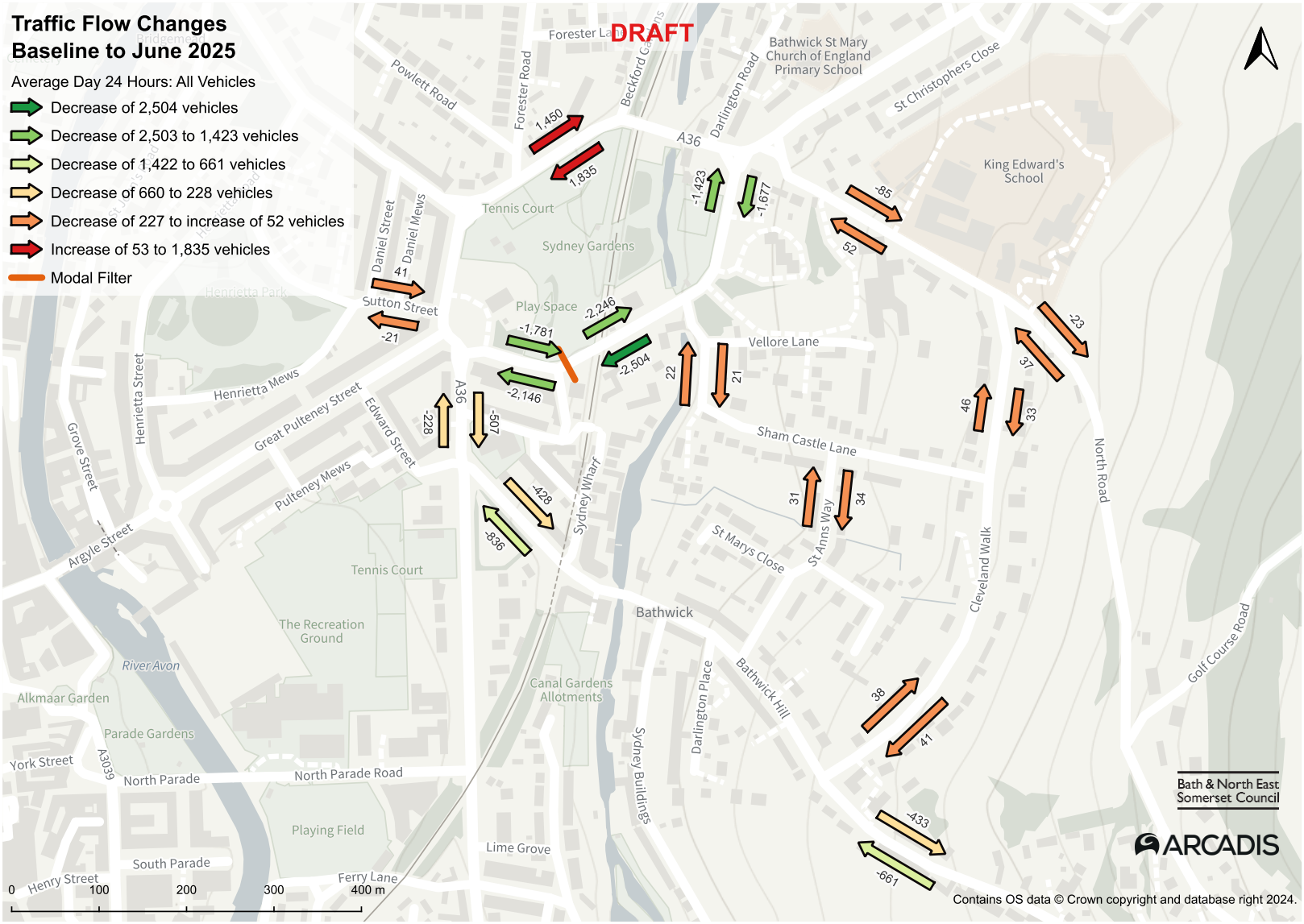


*Figure 12: Percentage Changes in 7-Day Average Motor Vehicle Traffic Flows between Baseline and June 2024*

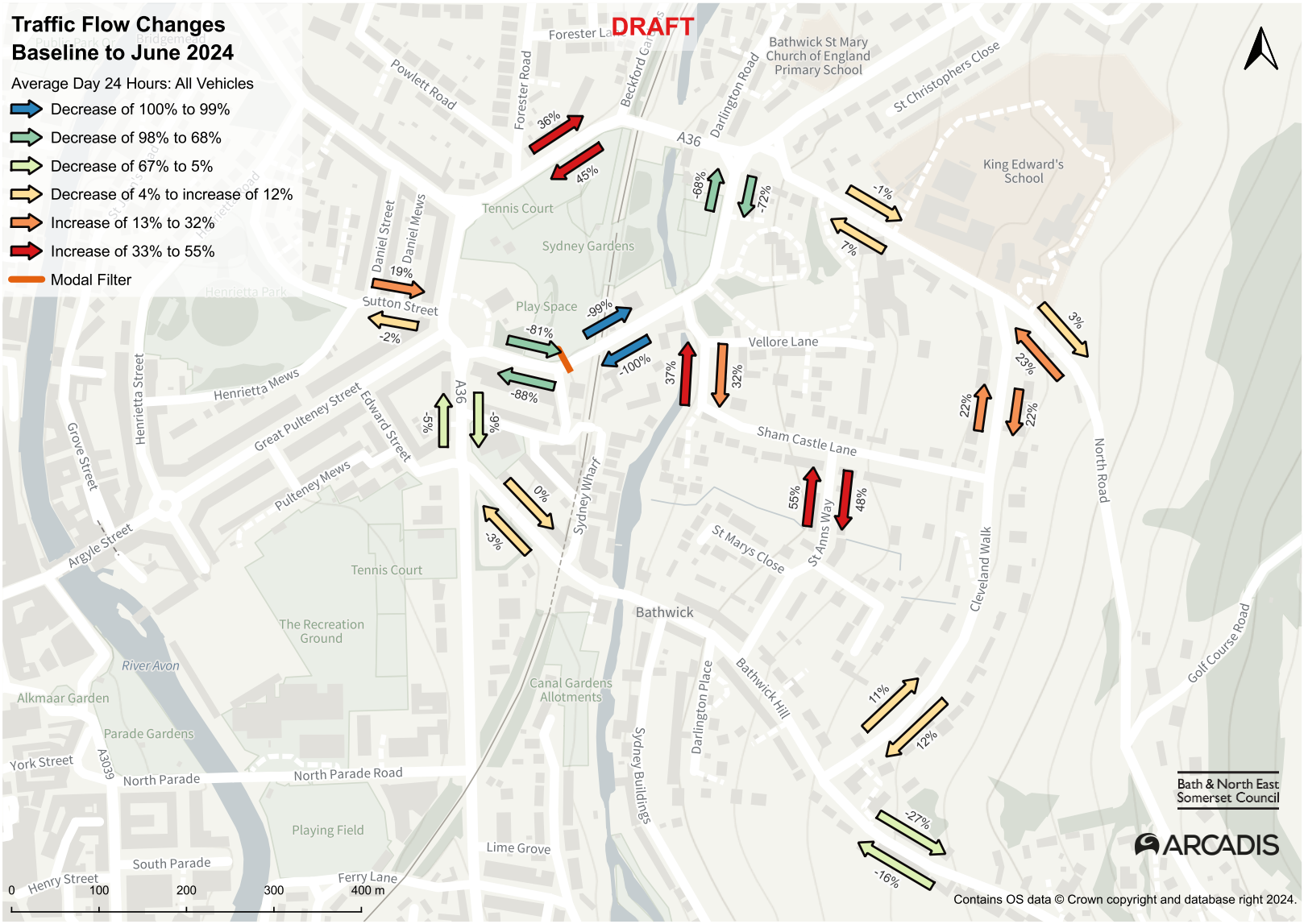


*Figure 13: Percentage Changes in 7-Day Average Motor Vehicle Traffic Flows between Baseline and July 2024*

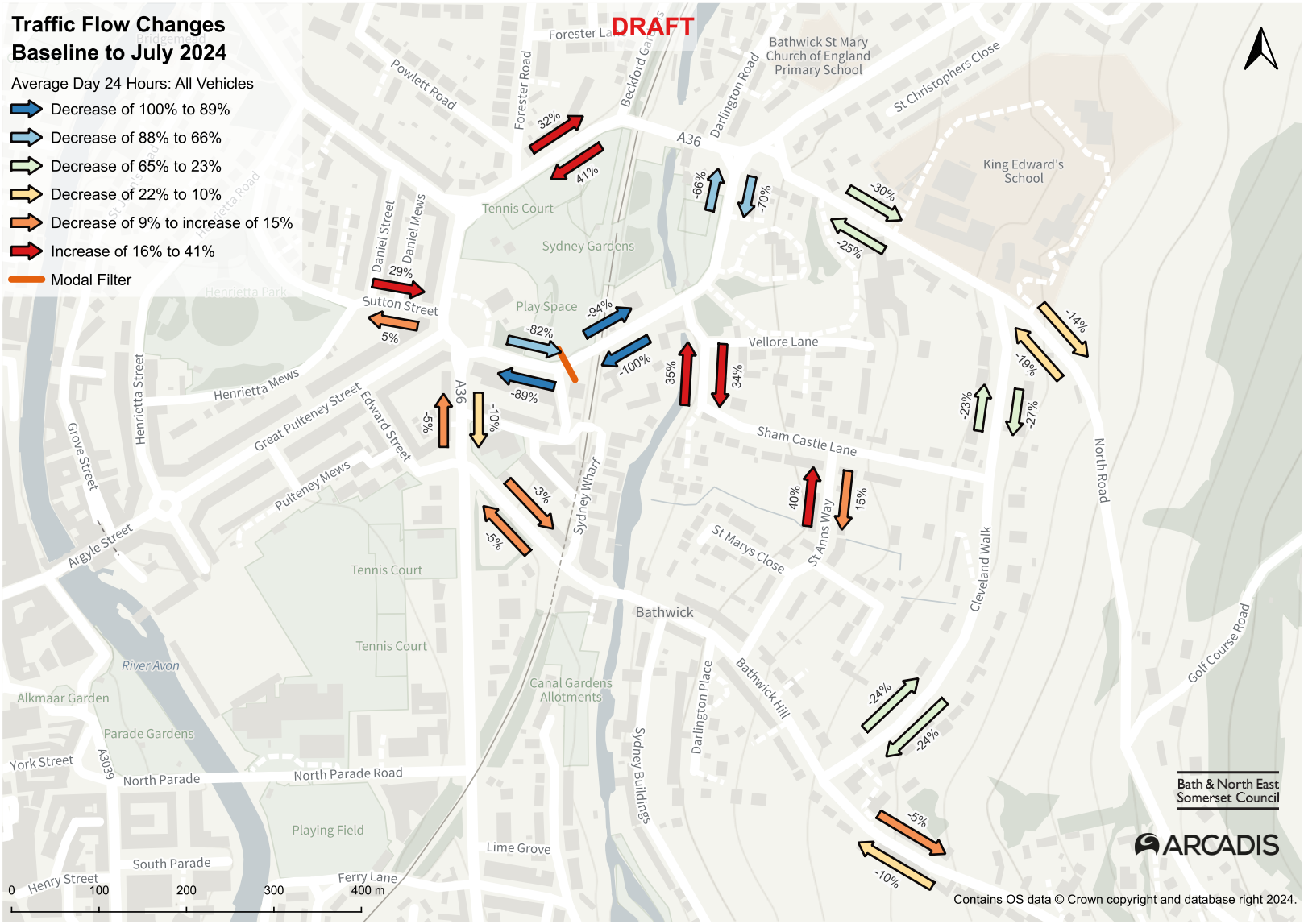


*Figure 14: Percentage Changes in 7-Day Average Motor Vehicle Traffic Flows between Baseline and November 2024*

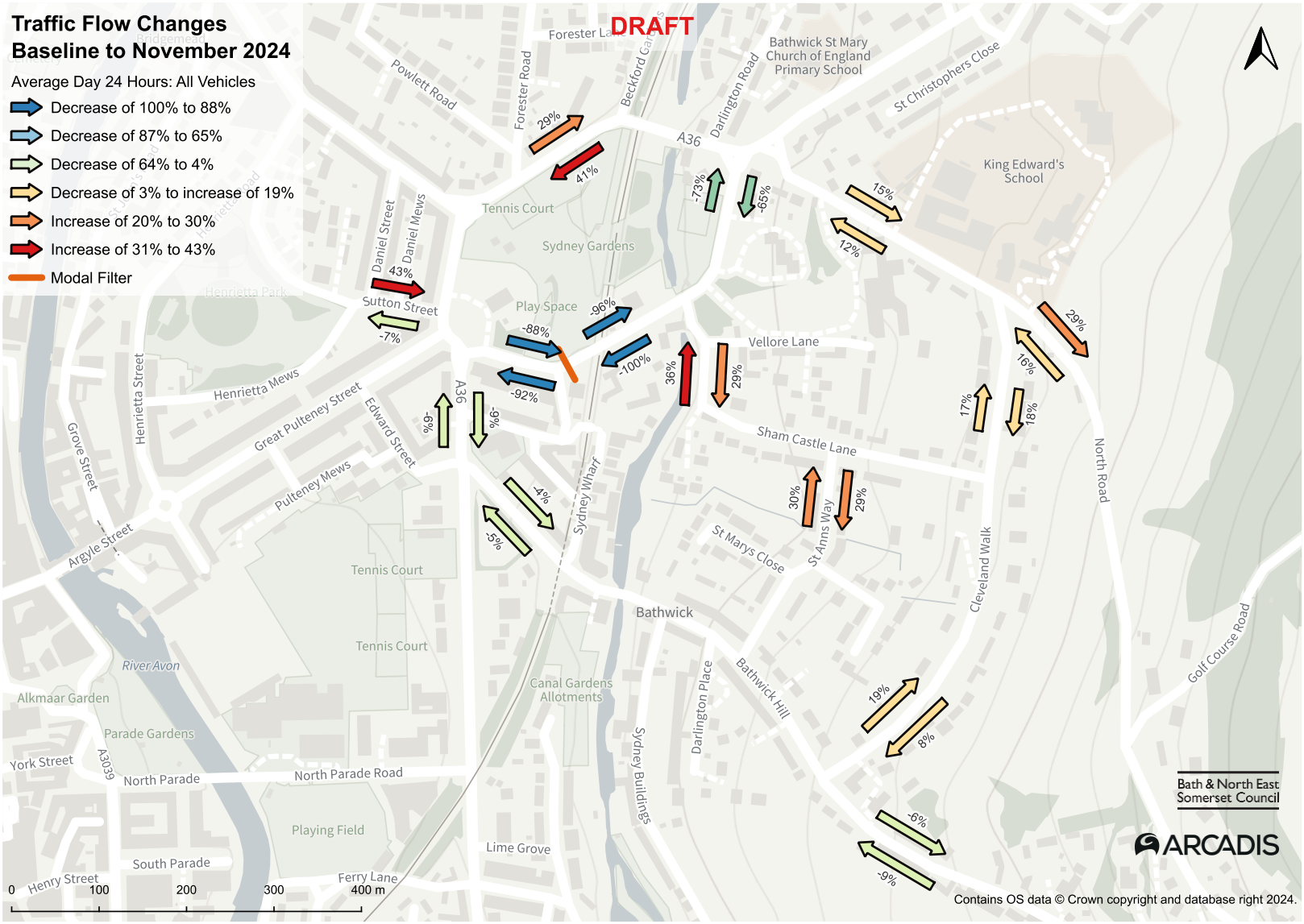
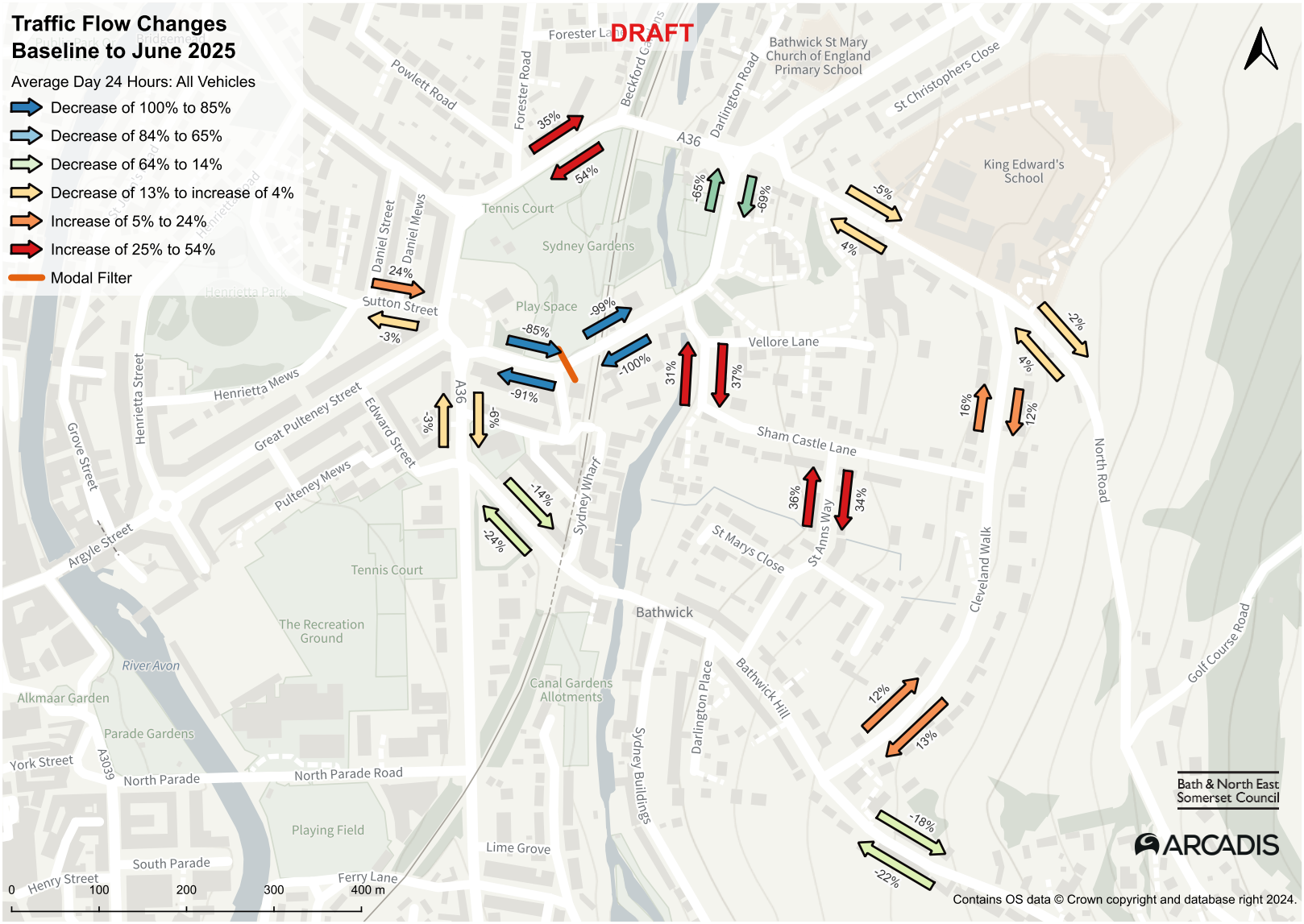


*Figure 15: Percentage Changes in 7-Day Average Motor Vehicle Traffic Flows between Baseline and June 2025*



3.2.24 Considering the absolute changes in motor vehicle traffic flows between the baseline and the in-trial periods, on average the largest decrease in traffic flows in June 2024, July 2024, November 2024 and June 2025 was on Sydney Road, at the location of the through-traffic restriction, with a decrease of 4,750 vehicles per day in June 2024, 4,625 vehicles per day in July 2024, 4,679 vehicles per day in November 2024, and 4,749 vehicles per day in June 2025.

3.2.25 The second largest decrease was found on New Sydney Place, east of the A36 Darlington Street, with a reduction of 3,781 vehicles per day in June 2024, a reduction of 3,825 vehicles per day in July 2024, a reduction of 4,027 vehicles per day in November 2024, and a reduction of 3,927 vehicles per day in June 2025.

3.2.26 This was followed by Sydney Road, south of the A36 Beckford Road, with a decrease of 3,226 vehicles per day in June 2024, 3,146 vehicles per day in July 2024, 3,166 vehicles per day in November 2024, and 3,100 vehicles per day in June 2025.

3.2.27 The largest increase in motor vehicle traffic flows was observed on the A36 Beckford Road, with an increase of 3,006 vehicles per day in June 2024, 2,697 vehicles per day in July 2024, 2,599 vehicles per day in November 2024, and 3,285 vehicles per day in June 2025. On average, 10,070 to 10,756 vehicles per day used the A36 Beckford Road during the in-trial monitoring periods, compared with 7,471 vehicles per day during the baseline.

3.2.28 Considering the percentage changes in motor vehicle traffic flows between the baseline and the in-trial periods, the greatest decrease in June 2024 was a reduction of 100% on Sydney Road, at the location of the through-traffic restriction. This was followed by New Sydney Place, east of the A36 Darlington Street, with a reduction of 85%, and Sydney Road, south of the A36 Beckford Road, with a reduction of 70%.

3.2.29 In June 2024, the greatest percentage increase in motor vehicle traffic flows was found on St Anns Way, with a 52% increase (albeit equating to 95 vehicles per day, or less than four per hour), followed by the A36 Beckford Road, with a 40% increase.

3.2.30 Across all roads in the study area, the overall 7-day average change in motor vehicle traffic flows between the baseline and June 2024 was a reduction of 18%.

3.2.31 The greatest percentage decrease between the baseline and July 2024 was a reduction of 97% on Sydney Road, at the location of the through-traffic restriction, followed by a reduction of 86% on New Sydney Place, east of the A36 Darlington Street, and a reduction of 68% on Sydney Road, south of the A36 Beckford Road.

3.2.32 In July 2024, the greatest percentage increase in motor vehicle traffic flows was found on the A36 Beckford Road, with an increase of 36%, followed by Sham Castle Lane, with an increase of 35% (albeit equating to 45 vehicles per day, or circa two per hour).

3.2.33 Across all roads in the study area, the overall 7-day average change in motor vehicle traffic flows between the baseline and July 2024 was a reduction of 21%.

3.2.34 The greatest percentage decrease between the baseline and November 2024 was a reduction of 98% on Sydney Road, at the location of the through-traffic restriction. This was followed by a reduction of 90% on New Sydney Place, east of the A36 Darlington Street, and a reduction of 69% on Sydney Road, south of the A36 Beckford Road.

3.2.35 In November 2024, the greatest percentage increase in motor vehicle traffic flows was found on the A36 Beckford Road, with an increase of 35%, followed by Sham Castle Lane, with an increase of 33% (albeit equating to 43 vehicles per day, or circa two per hour).

3.2.36 Across all roads in the study area, the overall 7-day average change in motor vehicle traffic flows between the baseline and November 2024 was a reduction of 17%.

3.2.37 The greatest percentage decrease between the baseline and June 2025 was a reduction of 100% on Sydney Road, at the location of the through-traffic restriction. This was followed by a reduction of 88% on New Sydney Place, east of the A36 Darlington Street, and a reduction of 67% on Sydney Road, south of the A36 Beckford Road.

3.2.38 In June 2025, the greatest percentage increase in motor vehicle traffic flows was found on the A36 Beckford Road, with an increase of 44%, followed by St Anns Way, with an increase of 35% (albeit equating to 65 vehicles per day, or circa two per hour).

3.2.39 Across all roads in the study area, the overall 7-day average change in motor vehicle traffic flows between the baseline and June 2025 was a reduction of 20%.

## Active Travel Flows

### Baseline

3.2.40 Baseline (25 September 2023 to 01 October 2023) active travel flows on Sydney Road (adjacent to the bridge over the railway line), per average day across the 7 days, are presented in a graph in Figure 16 and set out in Table 7.

*Figure 16: Baseline Active Travel Flows (7-Day Average)*

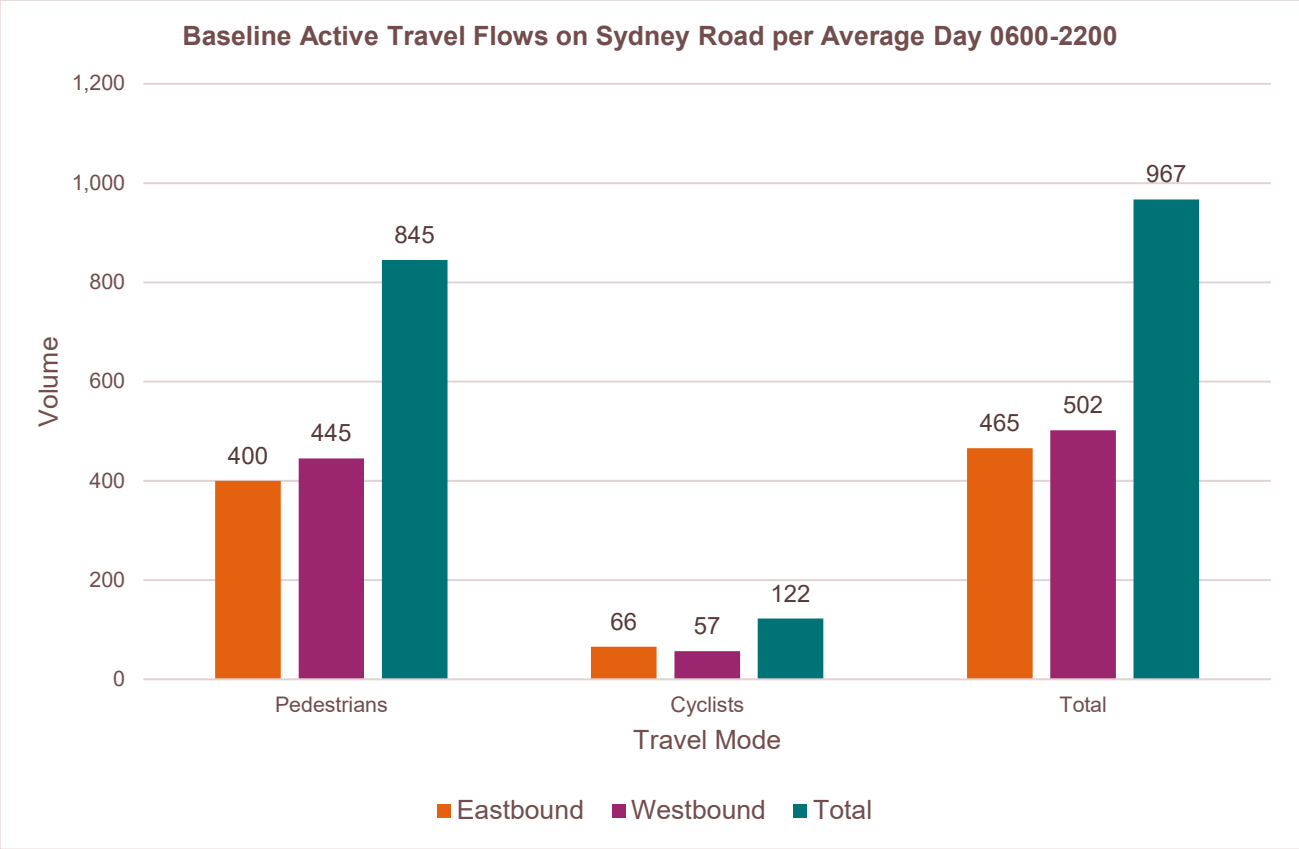



*Table 7: Baseline Active Travel Flows (7-Day Average 0600-2200)*

| Mode | Eastbound | Westbound | Total |
|---|---|---|---|
| Pedestrians | 405 | 445 | 845 |
| Cyclists | 66 | 57 | 122 |
| Total | 465 | 502 | 967 |

3.2.41 The data shows that Sydney Road was used by 967 active travel users per average day in the baseline, of which 87% (845) were pedestrians and 13% (122) were cyclists. The flows were broadly similar per direction, with a slightly higher proportion of pedestrians travelling westbound a slightly higher proportion of cyclists travelling eastbound.

## In-Trial

3.2.42 In-trial active travel flow data is set out below in the form of a graph and table for each of the three monitoring periods, followed by a comparison with the baseline data in section 3.2.45.

3.2.43 In-trial active travel flows monitored in the same position on Sydney Road (adjacent to the bridge over the railway line), per average day across the 7 days, are presented in a graph in Figure 17, Figure 18, Figure 19 and Figure 20 for June 2024 (03 June 2024 to 09 June 2024), July 2024 (13 July 2024 to 19 July 2024), November 2024 (02 November 2024 to 08 November 2024) and June 2025 (16 June 2025 to 22 June 2025) respectively and set out in Table 8.

*Figure 17: June 2024 In-Trial Active Travel Flows (7-Day Average)*

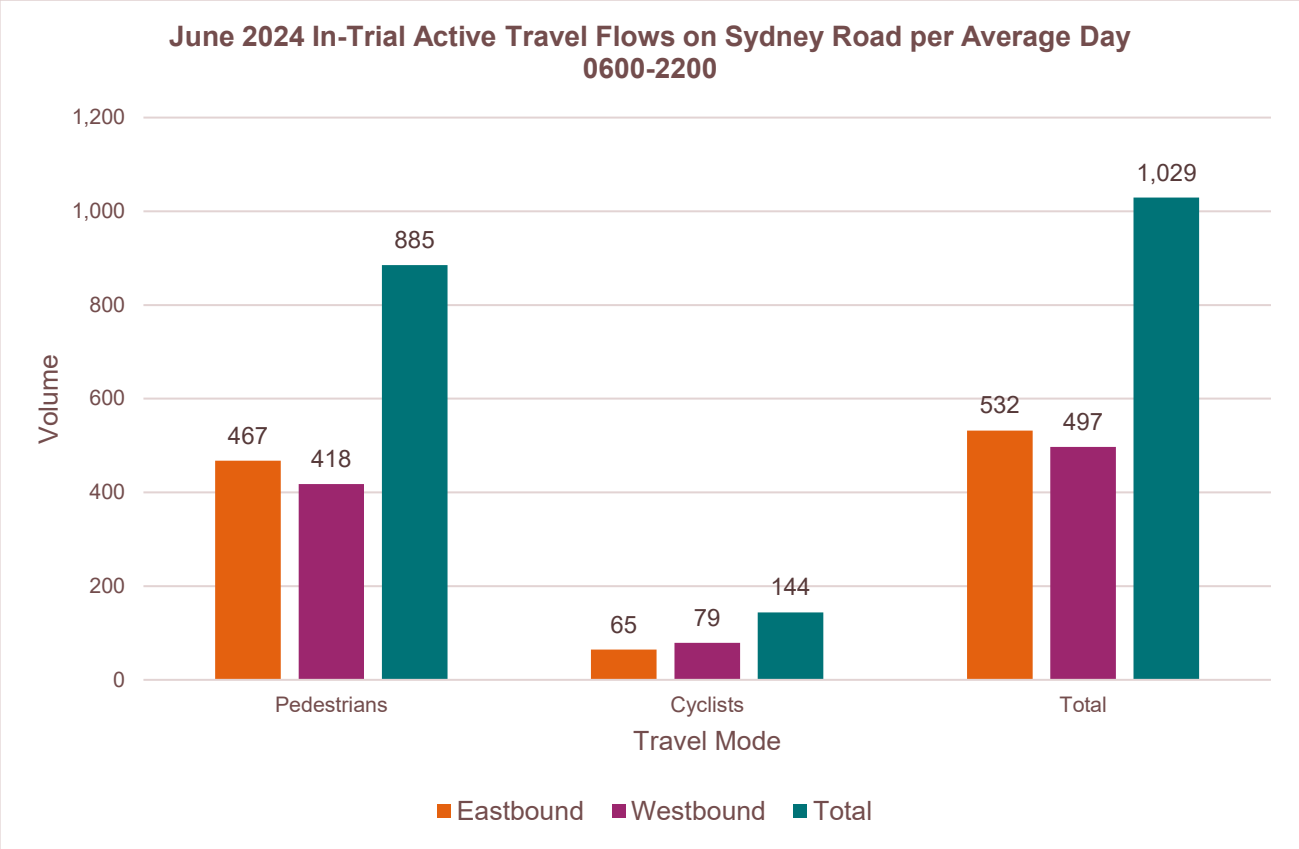



*Figure 18: July 2024 In-Trial Active Travel Flows (7-Day Average)*

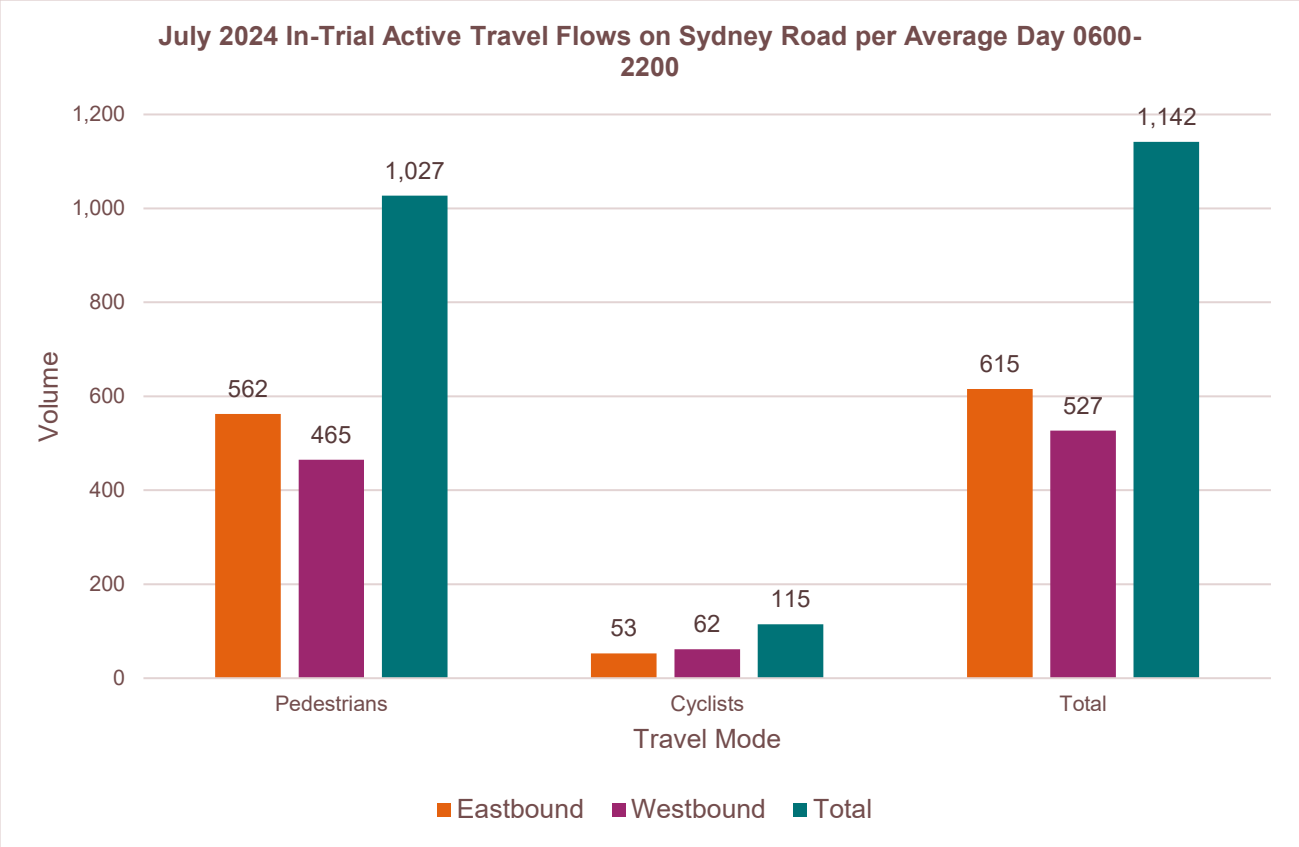


*Figure 19: November 2024 In-Trial Active Travel Flows (7-Day Average)*

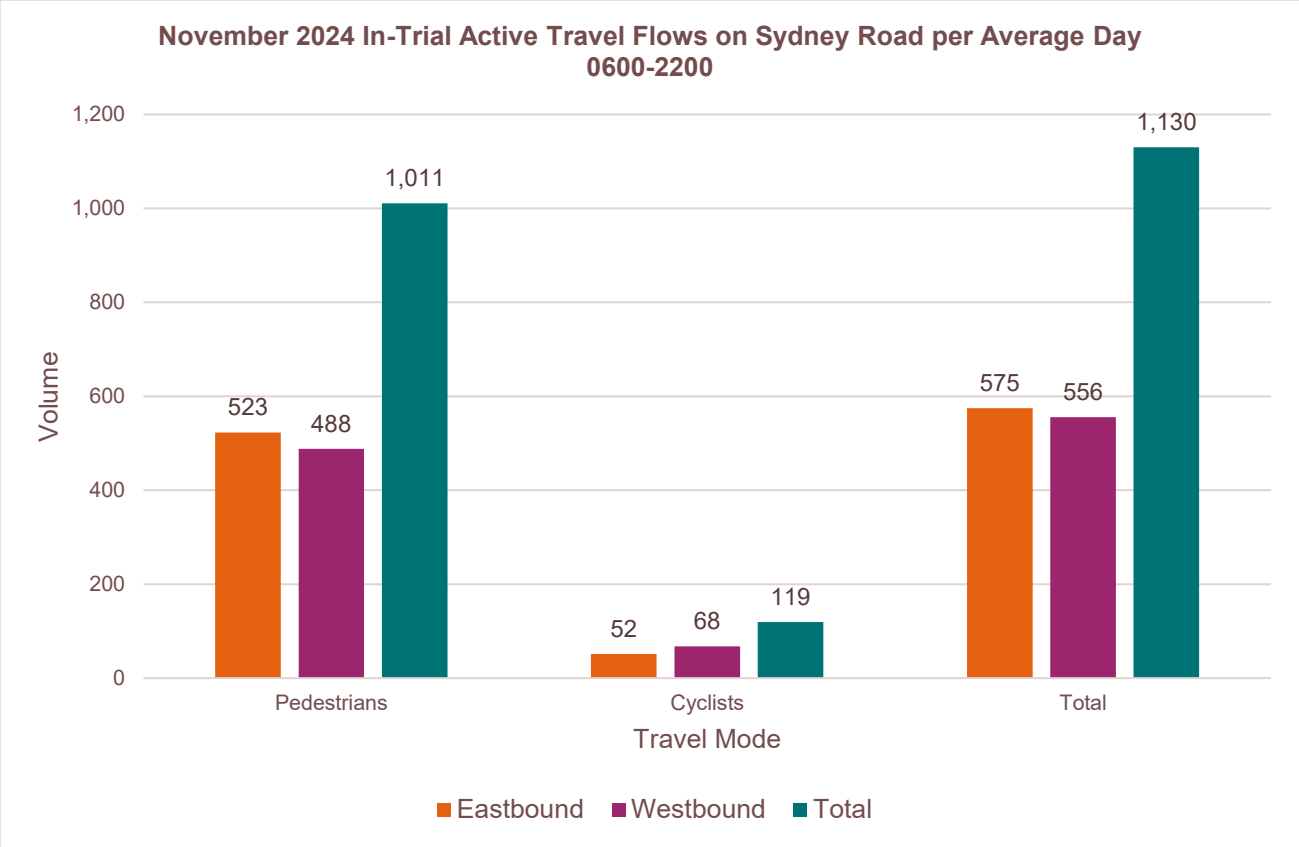



*Figure 20: June 2025 In-Trial Active Travel Flows (7-Day Average)*

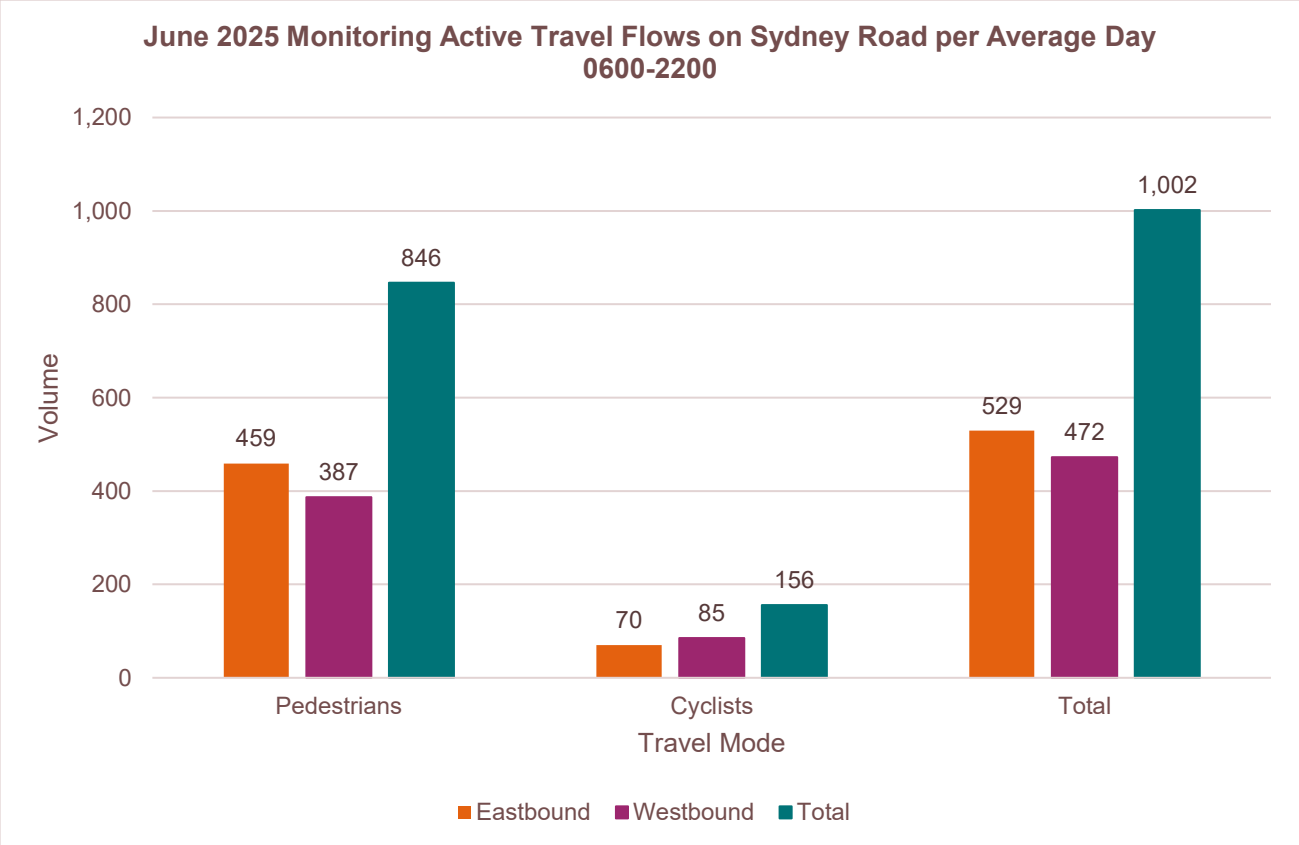


*Table 8: In-Trial Active Travel Flows (7-Day Average)*

| Mode | June 2024 Eastbound | June 2024 Westbound | June 2024 Total | July 2024 Eastbound | July 2024 Westbound | July 2024 Total | November 2024 Eastbound | November 2024 Westbound | November 2024 Total | June 2025 Eastbound | June 2025 Westbound | June 2025 Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pedestrians | 467 | 418 | 885 | 562 | 465 | 1,027 | 523 | 488 | 1,011 | 459 | 387 | 846 |
| Cyclists | 65 | 79 | 144 | 53 | 62 | 115 | 52 | 68 | 119 | 70 | 85 | 156 |
| Total | 532 | 497 | 1,029 | 615 | 527 | 1,142 | 575 | 556 | 1,130 | 529 | 472 | 1,002 |

3.2.44 The data shows that, per average day, Sydney Road was used by 1,029 active travellers in June 2024, 1,142 in July 2024, 1,130 in November 2024, and 1,002 in June 2025. The number of pedestrians increased between June 2024 and July 2024 whereas the number of cyclists decreased. The number of pedestrians decreased between July 2024 and November 2024 whereas the number of cyclists increased. The number of pedestrians decreased between November 2024 and June 2025 whereas the number of cyclists increased. During all in-trial periods, there were more eastbound active travellers than westbound.

## Comparison of Results

3.2.45 A comparison of 7-day average active travel flows on Sydney Road between the baseline and two in-trial periods is presented in a graph in Figure 21 and set out in Table 9.

*Figure 21: Comparison of Active Travel Flows on Sydney Road (7-Day Average)*

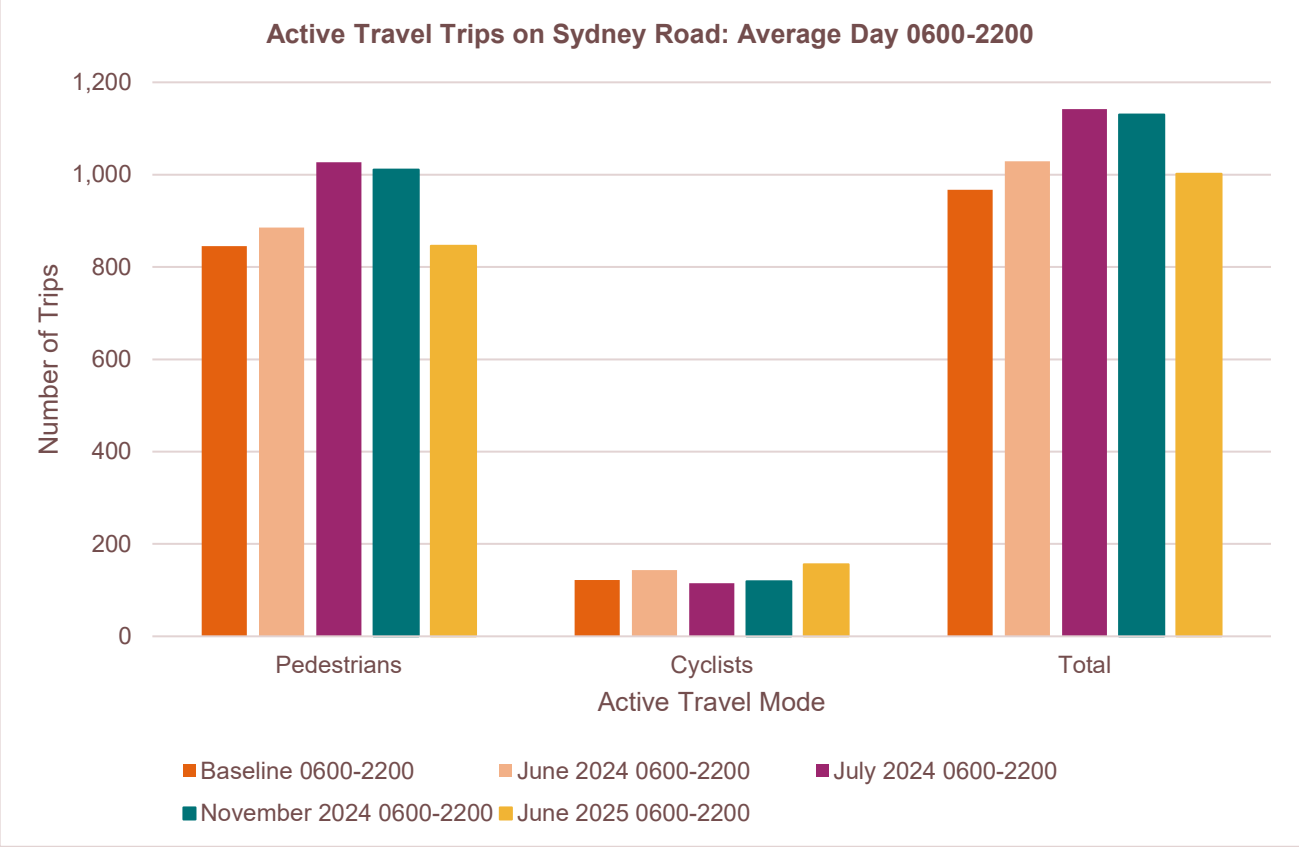



*Table 9: Comparison of Active Travel Flows on Sydney Road (7-Day Average)*

| Mode | Baseline | June 2024 | July 2024 | November 2024 | June 2025 |
|---|---|---|---|---|---|
| Pedestrians | 845 | 885 | 1,027 | 1,011 | 846 |
| Cyclists | 122 | 144 | 115 | 119 | 156 |
| Total | 967 | 1,029 | 1,142 | 1,130 | 1,002 |

3.2.46 The comparison of active travel flows on Sydney Road shows that the number of active travellers per average day increased from 967 in the baseline to 1,029 in June 2024, 1,142 in July 2024, and 1,130 in November 2024. The number of active travellers per average day decreased to 1,002 in June 2025.

3.2.47 Compared with the baseline, pedestrian flows increased by 40 pedestrians per day in June 2024; by 182 per day in July 2024; by 166 per day in November 2024, and by 1 in June 2025. Cyclist flows increased from the baseline by 22 cyclists per day in June 2024. In July 2024, cyclist flows decreased by 7 cyclists per day, when compared with the baseline, and in November 2024, cyclist flows decreased by 3 cyclists per day when compared with the baseline. In June 2025, cyclist flows increased from the baseline by 34 cyclists per day.

3.2.48 Overall, the number of active travellers (pedestrians and cyclists) per day was higher than the baseline during all four in-trial monitoring periods.

## Origin Destination Data

### Baseline

3.2.49 The ANPR survey on New Sydney Place and Sydney Road, as set out in Table 1, matched an average of 3,711 motor vehicles between 0600-2200 per average day across the 7 days, i.e. individual vehicles that were recorded both entering and leaving during the survey period of 25 September 2023 to 01 October 2023. On average, 4,357 vehicles per day passed through each of the survey sites, giving a match rate of 85%.

3.2.50 Of the matched vehicles, 3,259 per day passed between New Sydney Place and Sydney Road with a journey time of less than three minutes. This means that 88% of matched vehicles passed through New Sydney Place and Sydney Road in less than three minutes, thereby using these streets as a through route. Of all vehicles travelling along New Sydney Place and Sydney Road, 75% were matched as passing through with a journey time of less than three minutes.

3.2.51 A further 93 vehicles per day entered and departed from the same point with a journey time of less than three minutes, i.e. vehicles dropping off or picking up.

## Queue Lengths

### Baseline

3.2.52 Baseline (19 March 2024 and 26 March 2024) queue lengths in PCUs, as defined in Chapter 2, at the key junctions within the study area, as set out in Table 1, are summarised in Table 10.

*Table 10: Baseline Queue Lengths (Average Weekday 0700-0900 & 1400-1730)*

| Arm | Ref. | Mean | Median | Max |
|---|---|---|---|---|
| **A36 Beckford Road / A36 Warminster Road / Sydney Road** | | | | |
| A36 Warminster Road NE | Q1<br>Q2 | 1.0 | 0.0 | 8.3 |
| Sydney Road S | Q10 | 0.9 | 0.0 | 6.0 |
| A36 Beckford Road W | Q3 | 2.2 | 0.3 | 14.2 |
| **A36 Bathwick Street / A36 Beckford Road / A36 Sydney Place** | | | | |
| A36 Beckford Road NE | Q4<br>Q5 | 1.8 | 0.0 | 10.5 |
| A36 Sydney Place S | Q6<br>Q7 | 2.1 | 0.0 | 13.2 |
| **A36 Darlington Street / A36 Sydney Place / New Sydney Place** | | | | |
| New Sydney Place E | Q9 | 0.4 | 0.0 | 4.5 |
| A36 Darlington Street S | Q8 | 0.3 | 0.0 | 3.5 |

3.2.53 The data shows that mean and median queues were negligible across the study area, with mean queue lengths typically being less than 2.0 PCUs and median queue lengths typically being zero, meaning that typically two or fewer vehicles were queuing.

3.2.54 Maximum queue lengths varied across the study area, with the highest recorded queue length of 14.2 PCUs (around 14 cars) recorded on the A36 Beckford Road SW arm at junction of the A36 Beckford Road / A36 Warminster Road / Sydney Road.

3.2.55 The data suggests that the maximum queue lengths were generally short lived as the mean and median queue lengths were significantly less than the maximum. For example, on the A36 Beckford Road SW, the maximum queue length was 14.2 PCUs (around 14 cars) however the mean and median were only 2.2 PCUs (around 2 cars) and 0.3 PCUs (no queue) respectively.

### In-Trial

3.2.56 In-trial (05 June 2024, 06 June 2024 and 17 July 2024) queue lengths in PCUs (as defined in Chapter 2) at the key junctions within the study area are summarised in Table 11.

*Table 11: In-Trial Queue Lengths (Average Weekday 0700-0900 & 1400-1730)*

| Arm | Ref. | Mean | Median | Max |
|---|---|---|---|---|
| **A36 Beckford Road / A36 Warminster Road / Sydney Road** | | | | |
| A36 Warminster Road NE | Q1 Q2 | 1.6 | 0.0 | 13.1 |
| Sydney Road S | Q10 | 0.1 | 0.0 | 1.3 |
| A36 Beckford Road W | Q3 | 2.6 | 0.2 | 18.4 |
| **A36 Bathwick Street / A36 Beckford Road / A36 Sydney Place** | | | | |
| A36 Beckford Road NE | Q4 Q5 | 3.4 | 0.0 | 17.2 |
| A36 Sydney Place S | Q6 Q7 | 3.3 | 0.2 | 17.4 |
| **A36 Darlington Street / A36 Sydney Place / New Sydney Place** | | | | |
| New Sydney Place E | Q9 | 0.0 | 0.0 | 0.7 |
| A36 Darlington Street S | Q8 | 0.1 | 0.0 | 1.7 |

3.2.57 The data shows that median queue lengths were negligible across the study area, whilst mean queue lengths were typically around 3 PCUs or less, i.e. around three cars or less.

3.2.58 Maximum queue lengths varied across the study area, with the highest recorded queue length of 18.4 PCUs (around 18 cars) recorded on the A36 Beckford Road SW arm of the A36 Beckford Road / A36 Warminster Road / Sydney Road junction. Maximum queue lengths of around 17 PCUs (circa 17 cars) were also recorded on the A36 Beckford Road NE and A36 Sydney Place S arms of the A36 Bathwick Street / A36 Beckford Road / A36 Sydney Place junction.

3.2.59 As with the baseline data, the in-trial results suggest that the maximum queue lengths were generally short lived as the mean and median queue lengths were significantly less than the maximum. For example, on the A36 Sydney Place S, the maximum queue length was 17.4 PCUs (around 17 cars) however the mean and median were only 3.3 PCUs (around 3 cars) and 0.2 PCUs (no queue) respectively

## Comparison

3.2.60 The change in queue lengths (in PCUs) between the baseline and the in-trial periods is set out in Table 12.

*Table 12: Change in Queue Lengths (Average Weekday 0700-0900 & 1400-1730)*

| Arm | Ref. | Mean | Median | Max |
|---|---|---|---|---|
| **A36 Beckford Road / A36 Warminster Road / Sydney Road** | | | | |
| A36 Warminster Road NE | Q1 Q2 | 0.6 | 0.0 | 4.8 |
| Sydney Road S | Q10 | -0.8 | 0.0 | -4.7 |
| A36 Beckford Road W | Q3 | 0.3 | -0.1 | 4.3 |
| **A36 Bathwick Street / A36 Beckford Road / A36 Sydney Place** | | | | |
| A36 Beckford Road NE | Q4 Q5 | 1.6 | 0.0 | 6.7 |
| A36 Sydney Place S | Q6 Q7 | 1.3 | 0.2 | 4.3 |
| **A36 Darlington Street / A36 Sydney Place / New Sydney Place** | | | | |
| New Sydney Place E | Q9 | -0.3 | 0.0 | -3.8 |
| A36 Darlington Street S | Q8 | -0.2 | 0.0 | -1.8 |

3.2.61 The mean change in queue lengths ranged from an increase of 1.6 PCUs (around two cars) on the A36 Beckford Road NE to a decrease of 0.8 PCUs (around one car) on Sydney Road SE. Overall, the mean changes in queue lengths were negligible. Median changes in queue lengths were also negligible, with all changes being less than one PCU, or around one car.

3.2.62 The maximum increase in queue lengths was found on the A36 Beckford Road NE. However, the median change in queue lengths on this arm was zero, suggesting that the general operation of this arm did not significantly change.

3.2.63 The maximum decrease in queue lengths was found on the Sydney Road SE, with a reduction of 4.7 PCUs, or around five cars.

## Travel Times

### Journeys

3.2.64 Travel time data for journeys has been compared for two sets of time periods. Firstly, data is compared for the whole months of June 2023 (baseline), June 2024 (in-trial), November 2024 (in-trial) and June 2025 (in-trial). The travel time data is based on GPS tracking data, which does not involve physical surveying, therefore allowing a larger sample size to be collected.

3.2.65 Secondly, data is compared for one week in the baseline (25 September 2023 to 01 October 2023) and one week in-trial (03 June 2024 to 09 June 2024). These weeks correspond with the weeks of the motor vehicle traffic flow and active travel flow surveying, providing a complete dataset for these weeks.

3.2.66 North-eastbound journey times, for motor vehicle traffic between the A36 Darlington Street and the A36 Warminster Road via Beckford Road or Sydney Road, in June 2023 (baseline), and the in-trial months of June 2024, November 2024 and June 2025, are set out in Table 13. The calculated changes for journeys via Sydney Road assume that drivers rerouted via Beckford Road in June 2024, November 2024 and June 2025.

*Table 13: North-eastbound Journey Times between A36 Darlington Street and A36 Warminster Road (June 2023, June 2024, November 2024 and June 2025)*

| Period | Via Beckford Road | Via Beckford Road | Via Sydney Road | Via Sydney Road |
|---|---|---|---|---|
| | Mean Travel Time (secs) | Median Travel Time (secs) | Mean Travel Time (secs) | Median Travel Time (secs) |
| June 2023 (baseline) | 109.5 | 104.5 | 68.5 | 64.6 |
| June 2024 (in-trial) | 109.4 | 104.8 | - | - |
| November 2024 (in-trial) | 108.0 | 104.0 | - | - |
| June 2025 (in-trial) | 107.0 | 103.0 | - | - |
| Change June 2023 to June 2024 | -0.1 | 0.3 | 40.9 | 40.2 |
| Change June 2023 to November 2024 | -1.5 | -0.5 | 39.5 | 39.4 |
| Change June 2023 to June 2025 | -2.5 | -1.5 | 38.5 | 38.4 |

3.2.67 The data shows that, for north-eastbound motor vehicle traffic, average journey times between A36 Darlington Street and the A36 Warminster Road via Beckford Road were 105 to 110 seconds before the trial in June 2023, i.e. 1.7 to 1.8 minutes, and were broadly unchanged in June 2024 and November 2024, with mean and median journey time being roughly one second shorter or longer. In June 2025, journey times were slightly shorter than the June 2023 baseline, with a reduction of 2.5 seconds mean and 1.5 seconds median journey time.

3.2.68 Average journey times via Sydney Road were 65 to 69 seconds in June 2023 (i.e. just over a minute). On the assumption that drivers who previously travelled via Sydney Road in June 2023 instead rerouted via Beckford Road in June 2024, November 2024 and June 2025, these drivers would have experienced a 38 to 40 second increase in journey times on average.

3.2.69 South-westbound journey times, for motor vehicle traffic between the A36 Warminster Road and the A36 Darlington Street via Beckford Road or Sydney Road, in June 2023 (pre-trial) and the in-trial months of June 2024, November 2024 and June 2025, are set out in Table 14. The calculated changes for journeys via Sydney Road assume that drivers rerouted via Beckford Road in June 2024, November 2024 and June 2025.

*Table 14: South-westbound Journey Times between A36 Warminster Road and A36 Darlington Street (June 2023, June 2024, November 2024 and June 2025)*

| Period | Via Beckford Road Mean Travel Time (secs) | Via Beckford Road Median Travel Time (secs) | Via Sydney Road Mean Travel Time (secs) | Via Sydney Road Median Travel Time (secs) |
|---|---|---|---|---|
| June 2023 (pre-trial) | 88.5 | 81.8 | 62.6 | 59.3 |
| June 2024 | 89.5 | 83.0 | - | - |
| November 2024 | 93.0 | 84.0 | - | - |
| June 2025 | 90.0 | 83.0 | - | - |
| Change June 2023 to June 2024 | 1.0 | 1.3 | 27.0 | 23.7 |
| Change June 2023 to November 2024 | 4.5 | 2.2 | 30.4 | 24.7 |
| Change June 2023 to June 2025 | 1.5 | 1.2 | 27.4 | 23.7 |

3.2.70 The data shows that, for south-westbound motor vehicle traffic, average journey times via Beckford Road were 82 to 89 seconds in June 2023 (i.e. 1.36 to 1.48 minutes) and were broadly unchanged post-trial in June 2024 and June 2025, with a one to two second increase in mean and median journey times. They were slightly longer in November 2024, with a four second increase in mean journey times and a two second increase in median journey times.

3.2.71 Average journey times via Sydney Road were 59 to 63 seconds in June 2023. On the assumption that drivers who previously travelled via Sydney Road in June 2023 instead rerouted via Beckford Road in June 2024, November 2024 and June 2025, these drivers would have experienced a 23 to 30 second increase in journey times on average.

3.2.72 North-eastbound journey times for motor vehicle traffic between the A36 Darlington Street and the A36 Warminster Road via Beckford Road or Sydney Road, for the baseline survey period of 25 September 2023 to 01 October 2023, and the in-trial period of 03 June 2024 to 09 June 2024, are set out in Table 15. The calculated changes for journeys via Sydney Road assume that drivers rerouted via Beckford Road in June 2024.

*Table 15: North-eastbound Journey Times between A36 Darlington Street and A36 Warminster Road (25 September 2023 to 01 October 2023 & 03 June 2024 to 09 June 2024)*

| Period | Via Beckford Road Mean Travel Time (secs) | Via Beckford Road Median Travel Time (secs) | Via Sydney Road Mean Travel Time (secs) | Via Sydney Road Median Travel Time (secs) |
|---|---|---|---|---|
| Baseline | 107.2 | 101.7 | 69.9 | 65.1 |
| In-Trial | 109.4 | 104.3 | - | - |
| Change | 2.2 | 2.6 | 39.5 | 39.1 |

3.2.73 The data shows that north-eastbound journeys via Beckford Road had average journey times of 102-107 seconds (1.7 to 1.8 minutes) during this baseline (pre-trial) period, increasing by around two seconds during the in-trial survey period. Average journey times via Sydney Road were between 65 and 70 seconds during the baseline (pre-trial) period. On the assumption that drivers who previously travelled via Sydney Road during November 23 (pre-trial) instead rerouted via Beckford Road during the in-trial period, these drivers would have experienced a 39 to 40 second increase in journey times on average.

3.2.74 South-westbound journey times for motor vehicle traffic between the A36 Warminster Road and the A36 Darlington Street via Beckford Road or Sydney Road, for the baseline survey period of 25 September to 1 October 2023, and the in-trial period of 3 June to 9 June 2024, are set out in Table 16 below. The calculated changes for journeys via Sydney Road assume that drivers rerouted via Beckford Road in June 2024.

*Table 16: South-westbound Journey Times between A36 Warminster Road and A36 Darlington Street (25 September 2023 to 01 October 2023 & 03 June 2024 to 09 June 2024)*

| Period | Via Beckford Road Mean Travel Time (secs) | Via Beckford Road Median Travel Time (secs) | Via Sydney Road Mean Travel Time (secs) | Via Sydney Road Median Travel Time (secs) |
|---|---|---|---|---|
| Baseline | 88.4 | 79.7 | 66.0 | 61.5 |
| In-Trial | 88.6 | 83.5 | - | - |
| Change | 0.2 | 3.8 | 22.7 | 22.0 |

3.2.75 The data shows that south-westbound journeys via Beckford Road had average journey times of 80 to 88 seconds (1.3 to 1.46 minutes) during this baseline (pre-trial) period, increasing by between zero and four seconds during the in-trial survey period. Average journey times via Sydney Road were between 62 and 66 seconds in the baseline. On the assumption that drivers who previously travelled via Sydney Road in the baseline instead rerouted via Beckford Road during the in-trial period, these drivers would have experienced a 22 to 23 second increase in journey times on average.

## Roads – Monthly Analysis

3.2.76 Travel times for motor vehicle traffic on roads in June 2023 (baseline), June 2024, November 2024 and June 2025[1] (in-trial) are set out in Table 17. This data represents the average of all vehicles at all times of the day and days of the month.

[1] The travel times for November 2024 are based on data from 02 November 2024 to 08 November 2024. This is due to the reclosure of the A36 at Limpley Stoke and the consequential impacts on traffic on the A36.

*Table 17: Travel Times on Roads (June 2023, June 2024, November 2024 & June 2025)*

| Road | Direction | June 2023 Baseline | June 2023 Baseline | June 2024 In-Trial | June 2024 In-Trial | November 2024 In-Trial | November 2024 In-Trial | June 2025 In-Trial | June 2025 In-Trial | Change June 2023 to June 2024 | Change June 2023 to June 2024 | Change June 2023 to November 2024 | Change June 2023 to November 2024 | Change June 2023 to June 2025 | Change June 2023 to June 2025 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mean Travel Time (secs) | Median Travel Time (secs) | Mean Travel Time (secs) | Median Travel Time (secs) | Mean Travel Time (secs) | Median Travel Time (secs) | Mean Travel Time (secs) | Median Travel Time (secs) | Mean Travel Time (secs) | Median Travel Time (secs) | Mean Travel Time (secs) | Median Travel Time (secs) | Mean Travel Time (secs) | Median Travel Time (secs) |
| A36 Bathwick Street | Eastbound | 28.6 | 21.8 | 32.6 | 23.5 | 38.0 | 29.0 | 33.0 | 24.0 | 3.9 | 1.8 | 9.4 | 7.2 | 4.4 | 2.2 |
| A36 Bathwick Street | Westbound | 35.9 | 19.1 | 46.6 | 20.9 | 49.0 | 23.0 | 38.0 | 20.0 | 10.7 | 1.8 | 13.1 | 3.9 | 2.1 | 0.9 |
| A36 Beckford Road | Eastbound | 43.2 | 39.6 | 42.5 | 37.3 | 50.0 | 44.0 | 43.0 | 38.0 | -0.6 | -2.4 | 6.9 | 4.4 | -0.1 | -1.6 |
| A36 Beckford Road | Westbound | 55.7 | 49.7 | 55.6 | 46.8 | 60.2 | 53.7 | 55.7 | 47.7 | -0.1 | -2.9 | 4.5 | 4.0 | -0.1 | -2.0 |
| A36 Darlington Street | Northbound | 23.7 | 18.9 | 26.5 | 20.7 | 27.1 | 24.0 | 26.0 | 21.0 | 2.8 | 1.8 | 3.4 | 5.1 | 2.4 | 2.1 |
| A36 Darlington Street | Southbound | 18.1 | 15.0 | 18.0 | 14.6 | 22.0 | 17.0 | 18.0 | 15.0 | -0.1 | -0.4 | 3.9 | 2.0 | -0.1 | 0.0 |
| A36 Sydney Place | Northbound | 41.7 | 33.6 | 48.1 | 38.5 | 48.8 | 42.1 | 45.0 | 37.8 | 6.4 | 4.9 | 7.1 | 8.5 | 3.3 | 4.2 |
| A36 Sydney Place | Southbound | 21.1 | 16.4 | 23.7 | 18.1 | 27.0 | 22.0 | 23.0 | 18.0 | 2.6 | 1.8 | 5.9 | 5.7 | 1.9 | 1.7 |
| A36 Warminster Road | Eastbound | 27.6 | 25.8 | 27.3 | 25.6 | 29.0 | 27.0 | 28.0 | 26.0 | -0.2 | -0.2 | 1.4 | 1.2 | 0.4 | 0.2 |
| A36 Warminster Road | Westbound | 38.8 | 35.4 | 38.0 | 32.6 | 40.0 | 36.1 | 38.0 | 33.1 | -0.8 | -2.8 | 1.2 | 0.7 | -0.8 | -2.3 |
| New Sydney Place | Eastbound | 14.3 | 12.9 | 24.3 | 18.3 | 26.0 | 19.0 | 22.0 | 16.0 | 10.0 | 5.4 | 11.7 | 6.1 | 7.7 | 3.1 |

| Road | Direction | June 2023 Baseline | June 2023 Baseline | June 2024 In-Trial | June 2024 In-Trial | November 2024 In-Trial | November 2024 In-Trial | June 2025 In-Trial | June 2025 In-Trial | Change June 2023 to June 2024 | Change June 2023 to June 2024 | Change June 2023 to November 2024 | Change June 2023 to November 2024 | Change June 2023 to June 2025 | Change June 2023 to June 2025 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mean Travel Time (secs) | Median Travel Time (secs) | Mean Travel Time (secs) | Median Travel Time (secs) | Mean Travel Time (secs) | Median Travel Time (secs) | Mean Travel Time (secs) | Median Travel Time (secs) | Mean Travel Time (secs) | Median Travel Time (secs) | Mean Travel Time (secs) | Median Travel Time (secs) | Mean Travel Time (secs) | Median Travel Time (secs) |
| New Sydney Place | Westbound | 21.4 | 17.8 | 25.1 | 20.2 | 24.0 | 22.0 | 23.0 | 19.0 | 3.6 | 2.4 | 2.6 | 4.2 | 1.6 | 1.2 |
| Sydney Road | Northbound | 48.0 | 43.9 | 56.5 | 50.9 | 71.0 | 57.0 | 55.0 | 50.0 | 8.5 | 7.1 | 23.0 | 13.2 | 7.0 | 6.2 |
| Sydney Road | Southbound | 29.8 | 27.9 | 36.7 | 32.4 | 43.0 | 38.0 | 40.0 | 35.0 | 6.9 | 4.5 | 13.2 | 10.1 | 10.2 | 7.1 |

3.2.77 The data shows that changes in travel times between June 2023 and June 2024 were generally minimal across the roads within the study area, with no roads having a travel time change of more than ten seconds. The greatest increase in mean travel time was 10.7 seconds per vehicle on the A36 Bathwick Street eastbound, whilst the greatest decrease in mean travel time was 0.8 seconds per vehicle on the A36 Warminster Road westbound.

3.2.78 The greatest increase in median travel time during June 2024 was 7.1 seconds per vehicle on Sydney Road northbound, whilst the greatest decrease in median travel time was 2.9 seconds per vehicle on the A36 Beckford Road eastbound.

3.2.79 The greatest change in mean travel times between June 2023 and November 2024 was an increase in mean travel times on Sydney Road northbound of 23.0 seconds. This was followed by a mean increase of 13.2 seconds on Sydney Road southbound. No decreases in mean travel times were observed between June 2023 and November 2024.

3.2.80 The greatest increase in median travel time during November 2024 was 13.2 seconds on Sydney Road northbound, followed by 10.1 seconds on Sydney Road southbound. No decreases in median travel times were observed in November 2024.

3.2.81 The greatest change in mean travel times between June 2023 and June 2025 was an increase in mean travel times on Sydney Road southbound of 10.2 seconds. This was followed by a mean increase of 7.7 seconds on New Sydney Place eastbound. The greatest decrease in mean travel time was 0.8 seconds per vehicle on A36 Warminster Road westbound.

3.2.82 The greatest increase in median travel time during June 2025 was 7.1 seconds on Sydney Road southbound, followed by 6.2 seconds on Sydney Road northbound. The greatest decrease in median travel time was 2.3 seconds per vehicle on A36 Warminster Road westbound.

3.2.83 The changes in travel times on Sydney Road are to be expected because it can no longer be used as a through route. Vehicles using Sydney Road during the in-trial monitoring periods would generally be accessing local properties and therefore would be expected to be travelling at slower speeds than vehicles that were previously using the road as a through route.

3.2.84 Excluding the roads that fall within the New Sydney Place and Sydney Road Liveable Neighbourhood, the greatest increase in mean travel times in November 2024 was 13.1 seconds on the A36 Bathwick Street westbound, followed by 9.4 seconds on the A36 Bathwick Street eastbound. In June 2025, excluding the same roads within New Sydney Place and Sydney Road Liveable Neighbourhood the greatest increase in mean travel times were 4.4 seconds on the A36 Bathwick Street eastbound, following by 3.3 seconds on the A36 Sydney Place northbound.

## Roads – Peak Period Analysis

3.2.85 Travel times for motor vehicle traffic on roads during the hours of 0700-0900 and 1400-1800 (peak hours) on 19 March 2024 & 26 March 2024 (baseline, pre-trial) and 05 June 2024 & 06 June 2024 (in-trial) are set out in Table 18. These dates and times correspond with the queue length surveys, the results of which are considered at 3.2.52 to 3.2.63.

*Table 18: Travel Times on Roads during peak hours (19 March 2024 & 26 March 2024 and 05 June 2024 & 06 June 2024: 0700-0900 & 1400-1800)*

| Road | Direction | 19 March 2024 & 26 March 2024 | 19 March 2024 & 26 March 2024 | 05 June 2024 & 06 June 2024 | 05 June 2024 & 06 June 2024 | Change | Change |
|---|---|---|---|---|---|---|---|
| | | Mean Travel Time (secs) | Median Travel Time (secs) | Mean Travel Time (secs) | Median Travel Time (secs) | Mean Travel Time (secs) | Median Travel Time (secs) |
| A36 Bathwick Street | Eastbound | 33.4 | 26.1 | 39.5 | 30.4 | 6.1 | 4.3 |
| A36 Bathwick Street | Westbound | 44.6 | 24.4 | 96.1 | 73.5 | 51.5 | 49.1 |
| A36 Beckford Road | Eastbound | 46.3 | 44.0 | 47.2 | 43.8 | 0.9 | -0.2 |
| A36 Beckford Road | Westbound | 58.1 | 53.7 | 70.8 | 58.5 | 12.7 | 4.7 |
| A36 Darlington Street | Northbound | 25.3 | 22.0 | 32.6 | 26.7 | 7.3 | 4.7 |
| A36 Darlington Street | Southbound | 24.2 | 18.6 | 24.5 | 17.7 | 0.4 | -0.9 |
| A36 Sydney Place | Northbound | 44.7 | 38.3 | 72.2 | 57.8 | 27.6 | 19.5 |
| A36 Sydney Place | Southbound | 25.8 | 20.0 | 29.1 | 23.8 | 3.2 | 3.8 |
| A36 Warminster Road | Eastbound | 28.8 | 26.8 | 28.6 | 26.3 | -0.2 | -0.4 |
| A36 Warminster Road | Westbound | 43.1 | 40.3 | 40.9 | 36.4 | -2.2 | -3.9 |

| Road | Direction | 19 March 2024 & 26 March 2024 Mean Travel Time (secs) | 19 March 2024 & 26 March 2024 Median Travel Time (secs) | 05 June 2024 & 06 June 2024 Mean Travel Time (secs) | 05 June 2024 & 06 June 2024 Median Travel Time (secs) | Change Mean Travel Time (secs) | Change Median Travel Time (secs) |
|---|---|---|---|---|---|---|---|
| New Sydney Place | Eastbound | 14.6 | 13.3 | 23.1 | 19.2 | 8.5 | 5.9 |
| New Sydney Place | Westbound | 28.9 | 21.6 | 25.3 | 23.9 | -3.6 | 2.2 |
| Sydney Road | Northbound | 54.9 | 51.1 | 54.00 | 54.9 | -0.9 | 3.8 |
| Sydney Road | Southbound | 33.2 | 30.2 | 44.7 | 37.1 | 11.5 | 6.9 |

3.2.86 The greatest change in mean travel time for motor vehicles travelling during peak hours was recorded on the A36 Bathwick Street westbound, with an increase of 52 seconds per vehicle. This was followed by travel during peak hours on the A36 Sydney Place northbound, with an increase of 28 seconds per vehicle. Reductions in mean travel time (during peak hours) were recorded on the A36 Warminster Road eastbound; the A36 Warminster Road westbound; New Sydney Place westbound; and Sydney Road northbound.

3.2.87 The greatest change in median travel time for motor vehicles travelling during peak hours was recorded on the A36 Bathwick Street westbound, with an increase of 49 seconds per vehicle. This was followed by the A36 Sydney Place northbound, with a peak-time journey increase of 20 seconds per vehicle. Reductions in median travel time were recorded on the A36 Beckford Road eastbound; the A36 Darlington Street southbound; the A36 Warminster Road eastbound; and the A36 Warminster Road westbound.

# 4 Summary and Conclusions

## 4.1 Summary

4.1.1 This report has been prepared by Arcadis on behalf of B&NES. It has set out the findings of traffic monitoring undertaken in association with the introduction of a through-traffic restriction on Sydney Road to discourage through-traffic from using New Sydney Place and Sydney Road.

4.1.2 The purpose of the monitoring has been to understand changes in motor vehicle and active travel flows since the implementation of the through traffic restriction. Baseline traffic data was collected in September 2023, February 2024, and March 2024 and comprised ATC data, temporary camera surveys, ANPR data, and queue length data. Additionally travel time data was obtained for both these periods and June 2023. In-trial data comprised ATC data, temporary camera surveys, queue length data and travel time data. In-trial data was collected in June 2024, July 2024, and November 2024 to assess the initial impacts of the scheme. This data informed the decision by the Cabinet Member of Resources to proceed with making the scheme permanent, subject to the outcomes of the formal TRO. Further monitoring data was collected in June 2025, after the decision to make the scheme permanent had been made but while the scheme remains in its trial phase and the TRO process is still ongoing.

4.1.3 The analysis of baseline motor vehicle traffic flow data found that the A36 Darlington Street carried the highest traffic flows in the baseline, with a 7-day average of 16,529 vehicles per day. In the baseline, New Sydney Place and Sydney Road were used by 4,466 to 4,770 motor vehicles per day

4.1.4 The origin destination data for New Sydney Place and Sydney Road found that of all vehicles travelling along the two streets per day, 75% were matched as passing through with a journey time of less than three minutes. This equated to 3,259 through vehicular movements per day who did not appear to have a trip attractor or generator in the area.

4.1.5 During the in-trial surveys in June 2024, July 2024, November 2024 and June 2025, the A36 Darlington Street once again carried the most vehicles. Traffic flows on Sydney Road, at the location of the through-traffic restriction, reduced to 20 motor vehicles per day in June 2024, and increased to 145 vehicles per day in July 2024, reduced to 91 vehicles per day in November 2024, and reduced further to 21 motor vehicles per day in June 2025.

4.1.6 Considering changes to 7-day average traffic flows between the baseline and in-trial periods, the largest decrease in traffic flows was found on Sydney Road, at the through-traffic restriction, followed by New Sydney Place, east of the A36 Darlington Street, and Sydney Road, south of the A36 Beckford Road. The largest increase in motor vehicle traffic flow was observed on the A36 Beckford Road, with an increase of 3,006 vehicles per day in June 2024, 2,697 vehicles per day in July 2024, 2,599 vehicles per day in November 2024, and 3,285 vehicles per day in June 2025. This is 279 more vehicles, on average per day, than during the trial in June 2024.

4.1.7 When considering changes in 7-day average motor vehicle traffic flows in percentage terms, decreases of between -97% and -100% were observed on Sydney Road, at the through-traffic restriction, with corresponding reductions of 85% to 90% on New Sydney Place, east of the A36 Darlington Street, and 67% to 70% on Sydney Road, south of the A36 Beckford Road. When compared with the baseline, traffic flows on the A36 Beckford Road increased by 40% in June 2024, by 36% in July 2024, by 35% in November 2024, and by 44% in June 2025.

4.1.8 Small increases in motor vehicle traffic flows were recorded on Sham Castle Lane and St Anns Way in June 2024, July 2024, November 2024 and June 2025, however these were limited to less than 100 vehicles (circa four per hour) per day.

4.1.9 The analysis of active travel flows on Sydney Road found that the number of pedestrians and cyclists increased between the baseline and in-trial periods. The number of pedestrians increased by 182 per day between the baseline and July 2024. The number of cyclists increased to 144 in June 2024 but then decreased to slightly below the baseline in July 2024 and November 2024, however then increased to 156 in June 2025.

4.1.10 The comparison of queue length data before and after the implementation of the through traffic restriction found that average changes in queue lengths were negligible during the peak periods of 0700-0900 and 1400-1730. The greatest change in mean queue lengths during these peak times was less than two PCUs (or around two cars), whilst the greatest change in median queue lengths was less than one PCU (or around one car).

4.1.11 When considering changes in journey times between the A36 Warminster Road and A36 Darlington Street, it was found that when considering the months of June 2023 (pre-trial), June 2024, November 2024 and June 2025, mean and median journey times via Beckford Road in both directions were broadly unchanged, with average increases of less than five seconds. For drivers who previously routed via Sydney Road, assuming they rerouted via Beckford Road in June 2024, November 2024 and June 2025, these drivers would have experienced an increase in average journey times of 24-40 seconds when considering both directions.

4.1.12 Travel times on roads generally increased by ten seconds or less when comparing June 2023 with June 2024, with a number of roads showing decreases in average travel times. When comparing June 2023 with November 2024, and June 2023 with June 2025, the majority of roads again had an increase in average travel times of less than ten seconds.

4.1.13 When considering changes in travel times during peak periods, the greatest change was observed on the A36 Bathwick Street westbound, with a mean increase of 51.5 seconds and a median increase of 49.1 seconds, or less than one minute. It should be noted that this travel time is for vehicles travelling away from the New Sydney Place and Sydney Road area (west of the A36 Beckford Road/Bathwick Street junction) and therefore is unlikely to be related to the trial through-traffic restriction.

4.1.14 The second greatest change in travel times during peak periods was observed on the A36 Sydney Place northbound, with a mean increase of 27.6 seconds and a median increase of 19.5 seconds, or less than half a minute on average.

## 4.2 Conclusions

4.2.1 In overall summary, the survey data shows that the introduction of the through-traffic restriction has reduced motor vehicle traffic flows on New Sydney Place and Sydney Road, with decreases of up to 100% at the through-traffic restriction and decreases of around 85% to 90% on New Sydney Place and 70% on Sydney Road. It would be expected that some vehicles would continue to use New Sydney Place and Sydney to access local properties, whilst some vehicles might continue onto Sham Castle Lane or Sydney Mews.

4.2.2 Smaller increases in traffic flows on the A36 Beckford Road were recorded, with increases of around 30 to 44% when compared with the baseline.

4.2.3 Walking and cycling generally increased, with the number of pedestrians and cyclists increasing by 18% when comparing July 2024 with the baseline. Although the number of cyclists slightly reduced in July 2024 and November 2024, the number of cyclists increased by 27% when comparing June 2025 with baseline data.

4.2.4 Mean changes in average weekday queue lengths were negligible, with median changes in queue lengths also negligible.

4.2.5 Travel time changes following the implementation of the liveable neighbourhood have been minimal. Journey times for vehicles travelling between the A36 Warminster Road and the A36 Darlington Street via the A36 Beckford increased by an average of five seconds in June 2024, November 2024 and June 2025.

4.2.6 During peak times compared with baseline data, the greatest increase in travel times on roads was recorded in June 2024 on the A36 Bathwick Street westbound, however this could be attributed to a number of factors, including operational incidents and traffic management. Travel time changes on the A36 Sydney Place during peak times in June 2024 were, on average, less than half a minute more, whilst travel time changes during peak times on the A36 Beckford Road were, on average, less than thirteen seconds more than was recorded during baseline.

Arcadis Consulting (UK) Limited

2 Glass Wharf
Bristol
BS2 0FR

T: +44 (0)117 372 1200

arcadis.com