

# Sheaf Valley Cycle Route

## Traffic Monitoring Data



## | Vehicle count overview – Introduction

In order to monitor and evaluate the success of the Sheaf Valley Cycle Route, we have conducted a range of traffic monitoring surveys at a number of locations across Sheaf Valley and the surrounding areas.

These surveys capture the movements of motor vehicles, cyclists and pedestrians. We surveyed key roads and junctions where we anticipated a potential change in travel as a result of the scheme, including areas of traffic displacement.

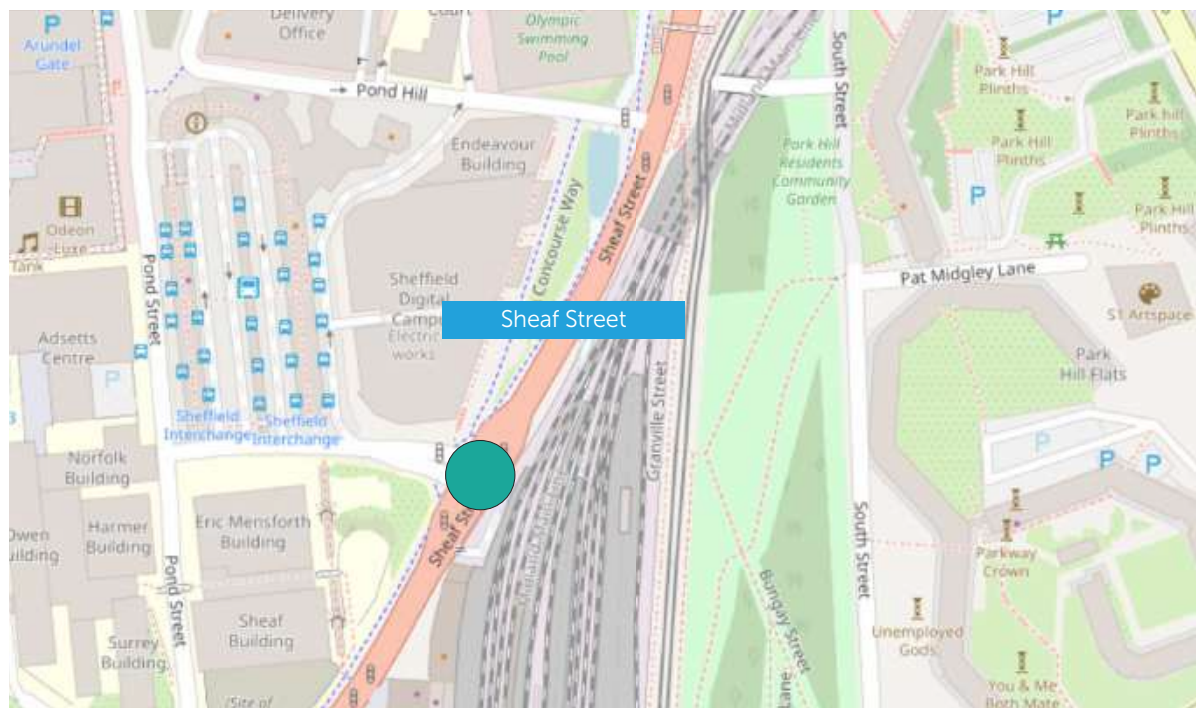
Changes to motor vehicle counts were calculated by conducting surveys before and after the measures were put in place. The surveys prior to the Cycle Route coming into effect took place in June and November 2021, while the surveys measuring traffic counts after the Cycle Route changes came into effect took place in November 2022 and June 2023.

The findings of all these surveys have been compiled and presented in 9 separate documents.

This is document 1 of 9, and provides an overview of the vehicles that we counted at various locations in the Sheaf Valley Cycle Route area via traffic monitoring surveys. As the first data surveys took place on a single day, we also looked at possible variation in the data from days around the 'after' surveys. Between weekdays, motor vehicle counts may vary by up to 6%.

These documents have been created to illustrate changes in travel before and after the Sheaf Valley Cycle Route scheme came into effect. The full committee report on the scheme will provide context to the data presented in this document, and how it informs the recommendations on the future of the scheme.

# | Change in motor vehicle count at city centre control site



We counted the number of motor vehicles passing through Sheaf Street before and after the implementation of the Sheaf Valley Cycle Route scheme.

Changes in motor vehicle traffic at a key central road or junction such as Sheaf Street are useful indicators of changes in motor vehicle trends on a city-wide level, serving as useful control test sites to compare local traffic trends with city-wide traffic trends.

The table below shows changes in general traffic at the Sheaf Street control site before and after the Sheaf Valley Cycle Route measures were put in place.

## Key



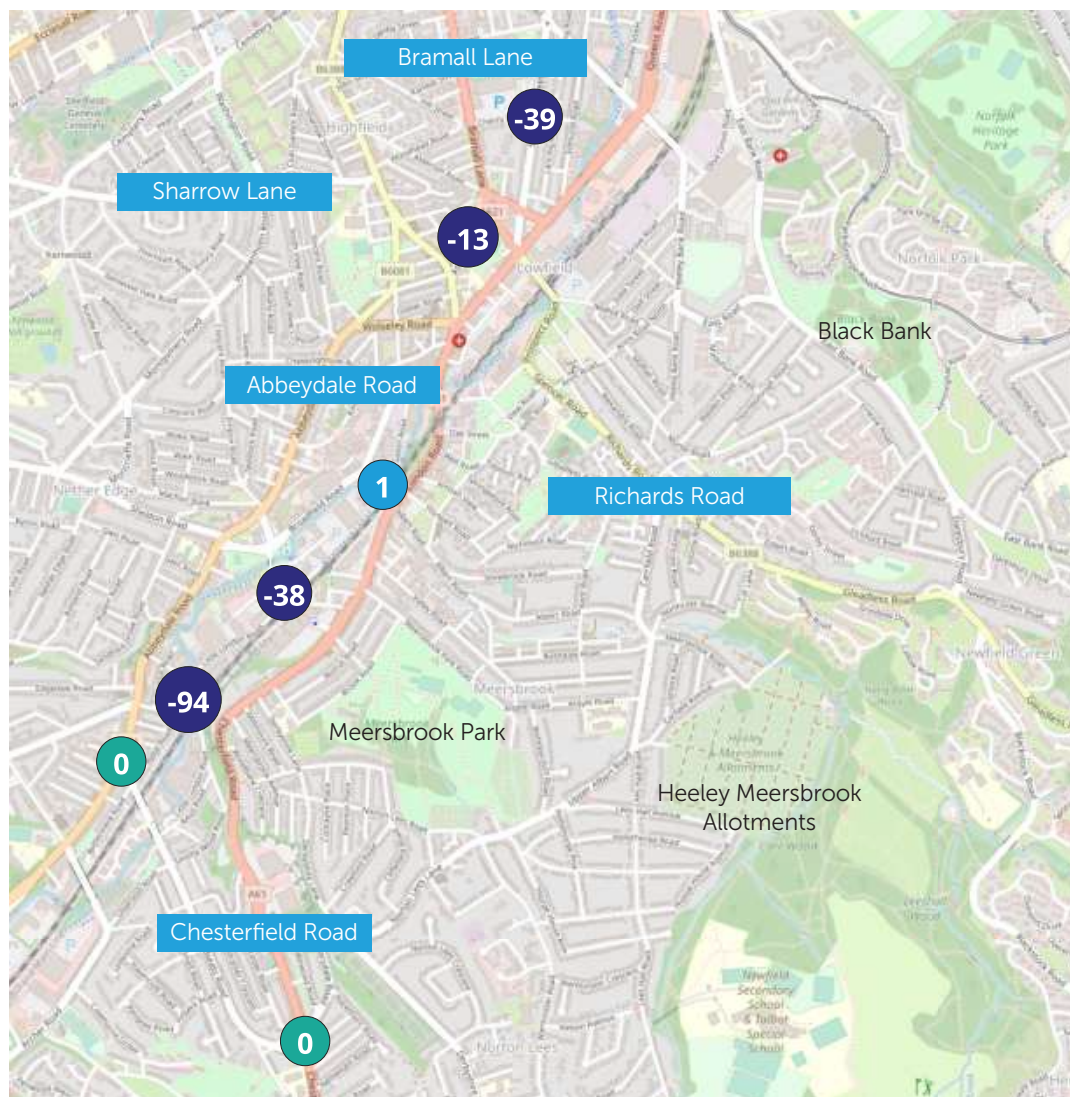
Location of traffic control site on Sheaf Street

Control sites - Daily Traffic

	8th June 2021	14th June 2023	% change	3rd November 2021	23rd November 2022	% change
Total (number of motor vehicles)	38,684	41,660	+8%	41,080	41,292	+1%

# Number of motor vehicles counted

(shown as a percentage change)



We counted the number of motor vehicles passing through the Sheaf Valley Cycle Route area.

The circles on this map show the locations where we conducted traffic counts.

The numbers in the circles indicate the percentage change of motor vehicles counted between June 2021 and June 2023, except the two southern-most counts on Chesterfield Road and Abbeydale Road, which were surveyed at a different time, showing the change in numbers of motor vehicles between November 2021 and November 2022.

Increases are shown in light blue. Decreases are shown in navy blue. No change is shown in green.

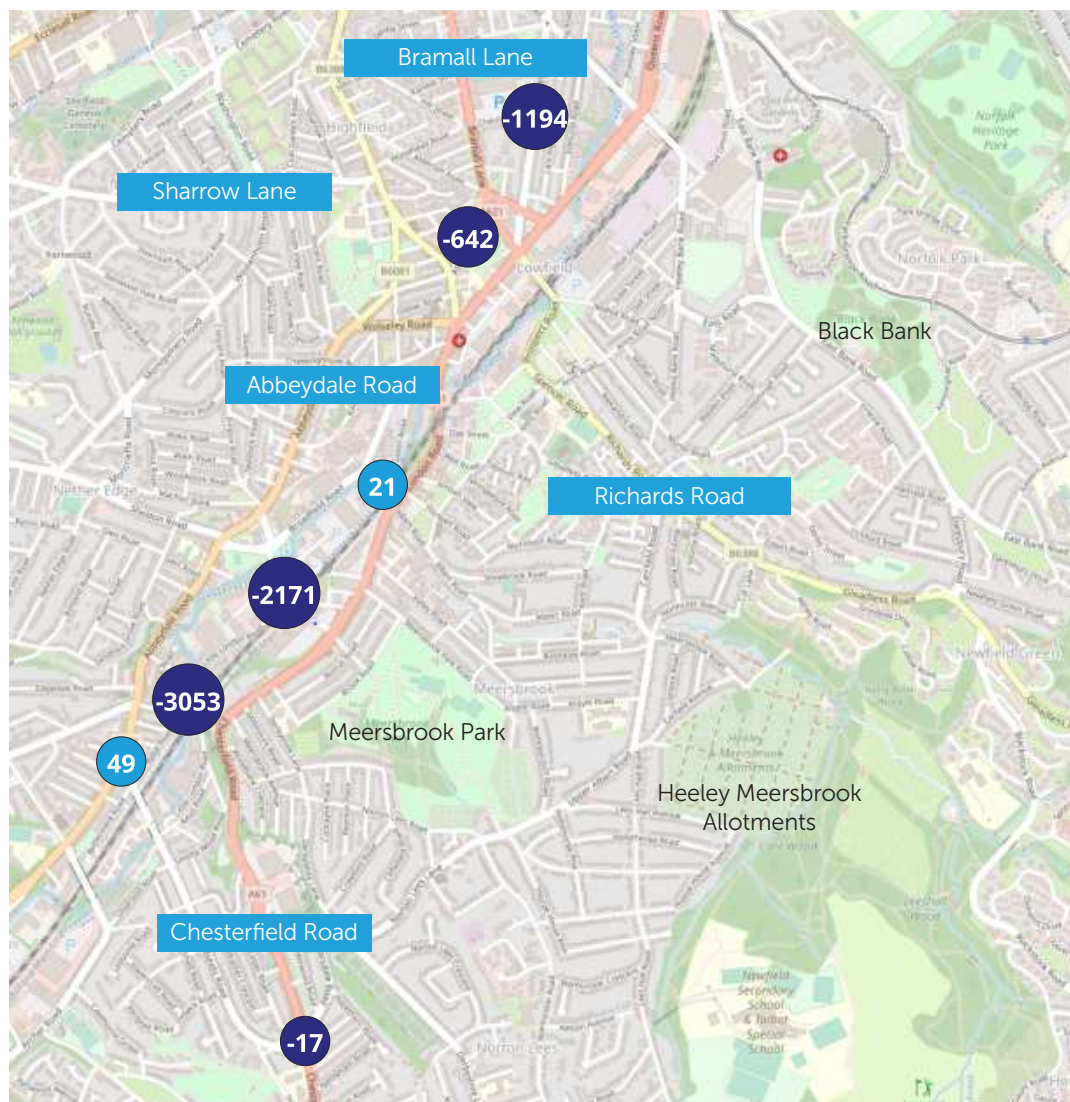
## Key

12 hour motor vehicle volume percentage change (7am to 7pm)





# Number of motor vehicles counted



## Key

12 hour motor vehicle volume change (7am to 7pm)



Decrease in number



No change



Increase in number

We counted the number of motor vehicles passing through the Sheaf Valley Cycle Route area.

The circles on this map show the locations where we conducted traffic counts.

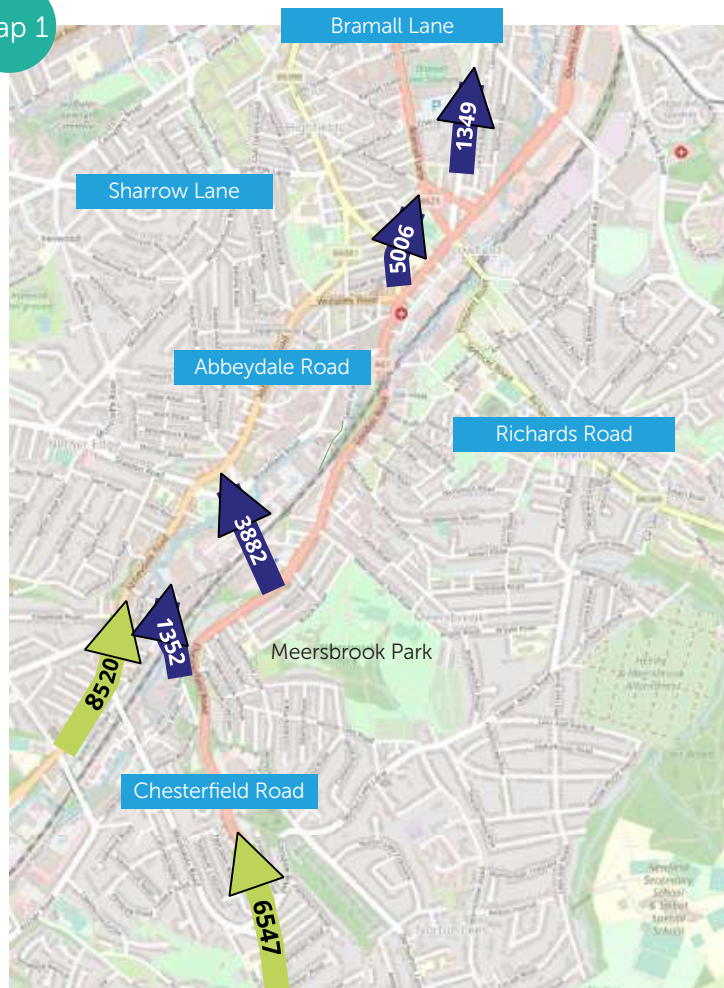
The numbers in the circles indicate the number change of motor vehicles counted between June 2021 and June 2023, except the two southern-most counts on Chesterfield Road and Abbeydale Road, which were surveyed at a different time, showing the change in numbers of motor vehicles between November 2021 and November 2022.

Increases are shown in light blue. Decreases are shown in navy blue. No change is shown in green. The most significant change was on Little London Road, as a result of the modal filter that was installed as part of the scheme.

All motor vehicle data is subject to a 6% possible variation.



# Number of motor vehicles travelling northbound

Map 1

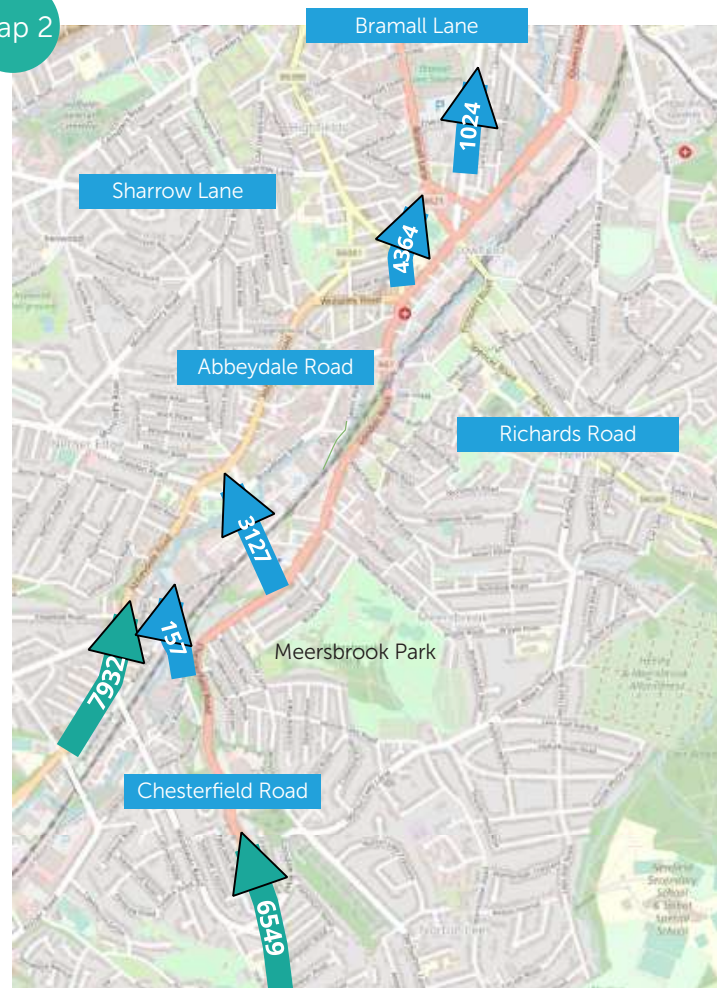


Northbound motor vehicle flow before scheme

Key



-  Motor vehicle flows over a 12 hour period in June 2021
-  Motor vehicle flows over a 12 hour period in November 2021

Map 2



Northbound motor vehicle flow after scheme

Key

-  Motor vehicle flows over a 12 hour period in June 2023
-  Motor vehicle flows over a 12 hour period in November 2022

We counted the number and direction of motor vehicles passing northbound through the Sheaf Valley Cycle Route area over a 12 hour period on two different occasions before and after the measures were put in place.

The number and direction of the arrows on the maps show the number and direction of vehicles counted passing through different points in the area of the Sheaf Valley Cycle Route.

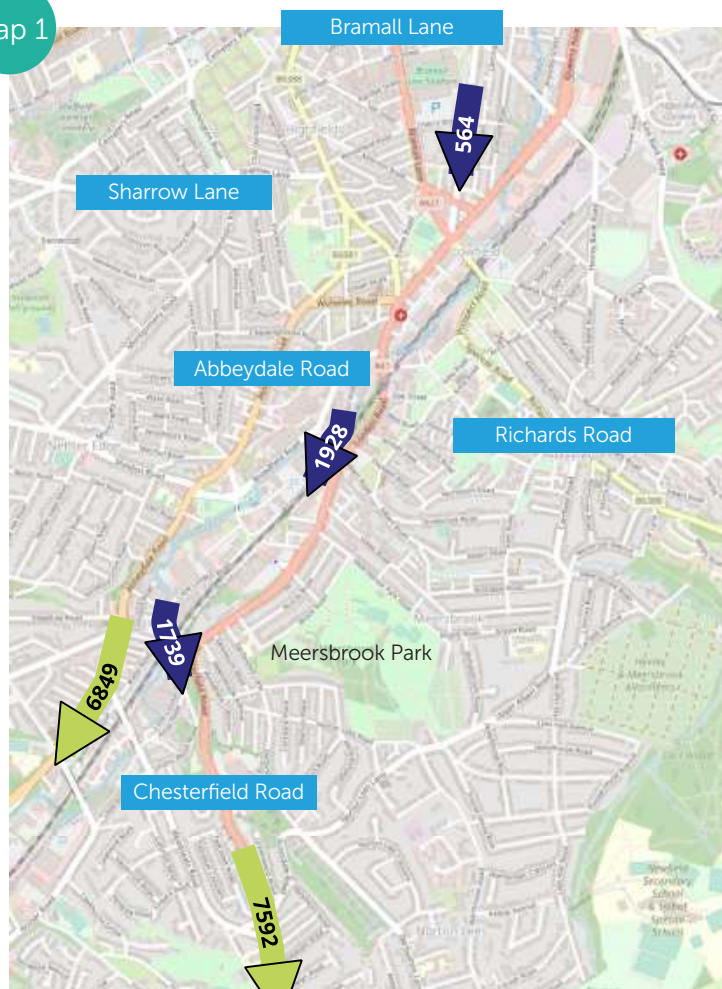
On Map 1, the navy blue arrows correspond to the vehicles counted in June 2021, while the green arrows correspond to the vehicles counted in November 2021.

On Map 2, the light blue arrows correspond to the vehicles counted in June 2023, while the light green arrows correspond to the vehicles counted in November 2022.





# Number of motor vehicles travelling southbound

Map 1

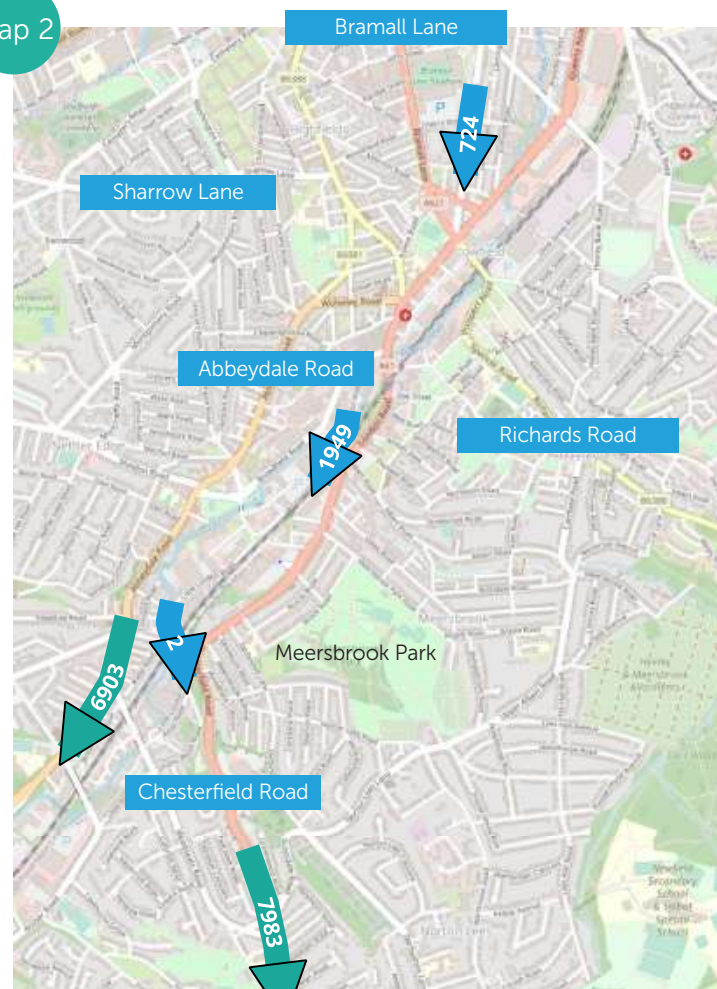


Southbound motor vehicle flow before scheme

Key



-  Motor vehicle flows over a 12 hour period in June 2021
-  Motor vehicle flows over a 12 hour period in November 2021

Map 2



Southbound motor vehicle flow after scheme

Key

-  Motor vehicle flows over a 12 hour period in June 2023
-  Motor vehicle flows over a 12 hour period in November 2022

We counted the number and direction of motor vehicles passing southbound through the Sheaf Valley Cycle Route area over a 12 hour period on two different occasions before and after the measures were put in place.

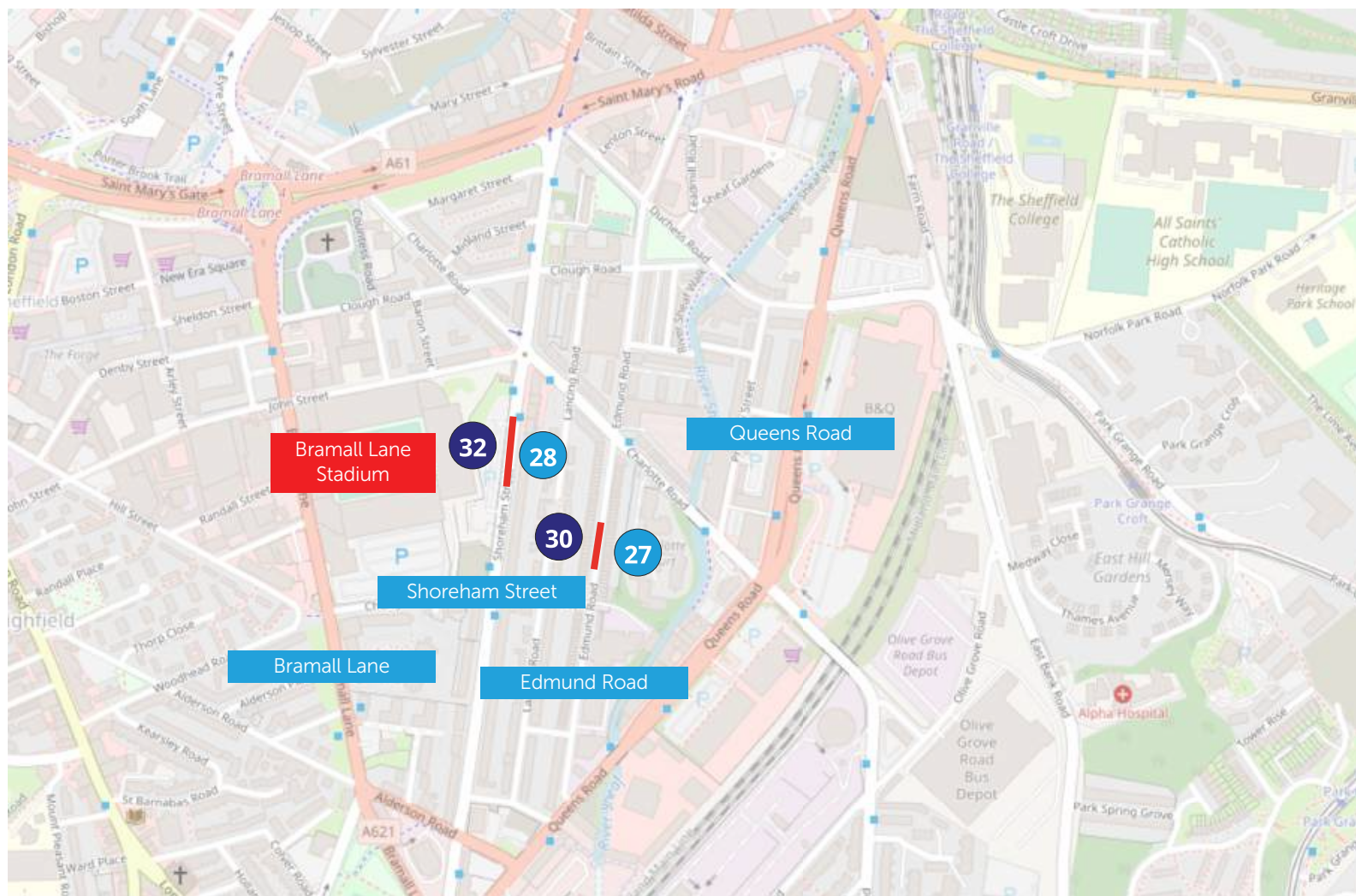
The number and direction of the arrows on the maps show the number and direction of vehicles counted passing through different points in the area of the Sheaf Valley Cycle Route.

On Map 1, the navy blue arrows correspond to the vehicles counted in June 2021, while the green arrows correspond to the vehicles counted in November 2021.

On Map 2, the light blue arrows correspond to the vehicles counted in June 2023, while the light green arrows correspond to the vehicles counted in November 2022.



# Speed surveys



## Key

Average speed of top 15% of motor vehicles in MPH



Before Sheaf Valley Cycle Route measures were introduced (June 2021)



After Sheaf Valley Cycle Route measures were introduced (May 2023)



Speed traps

We measured the speed of motor vehicles passing through two speed traps (speed camera areas) in the Sheaf Valley Cycle Route over 7 days before and after the measures were put in place.

The red line on the left shows the speed trap on Shoreham Street, while the red line on the right shows the speed trap on Edmund Road.

The two circles either side of the speed traps show the average speed of the top 15% of fastest motor vehicles passing through each trap before and after the Sheaf Valley Cycle route measures were put in place.