

# CONNECTING SHEFFIELD

Better travel choices

Journey Times -  
Chesterfield Road  
Section 8 of 9

# Sheaf Valley Cycle Route

## Traffic Monitoring Data



## | Journey times: Chesterfield Road – Introduction

Alongside the traffic monitoring surveys, we also looked at journey time data sourced by The Flow, who specialise in black-box telematics data, to better understand motor vehicle movement in the Sheaf Valley area. These surveys may be useful in supporting conclusions drawn from the wider traffic monitoring surveys.

Journey time data was taken from black-box equipped motor vehicles as they travelled along the route, before and after the Sheaf Valley Cycle Route measures were put in place.

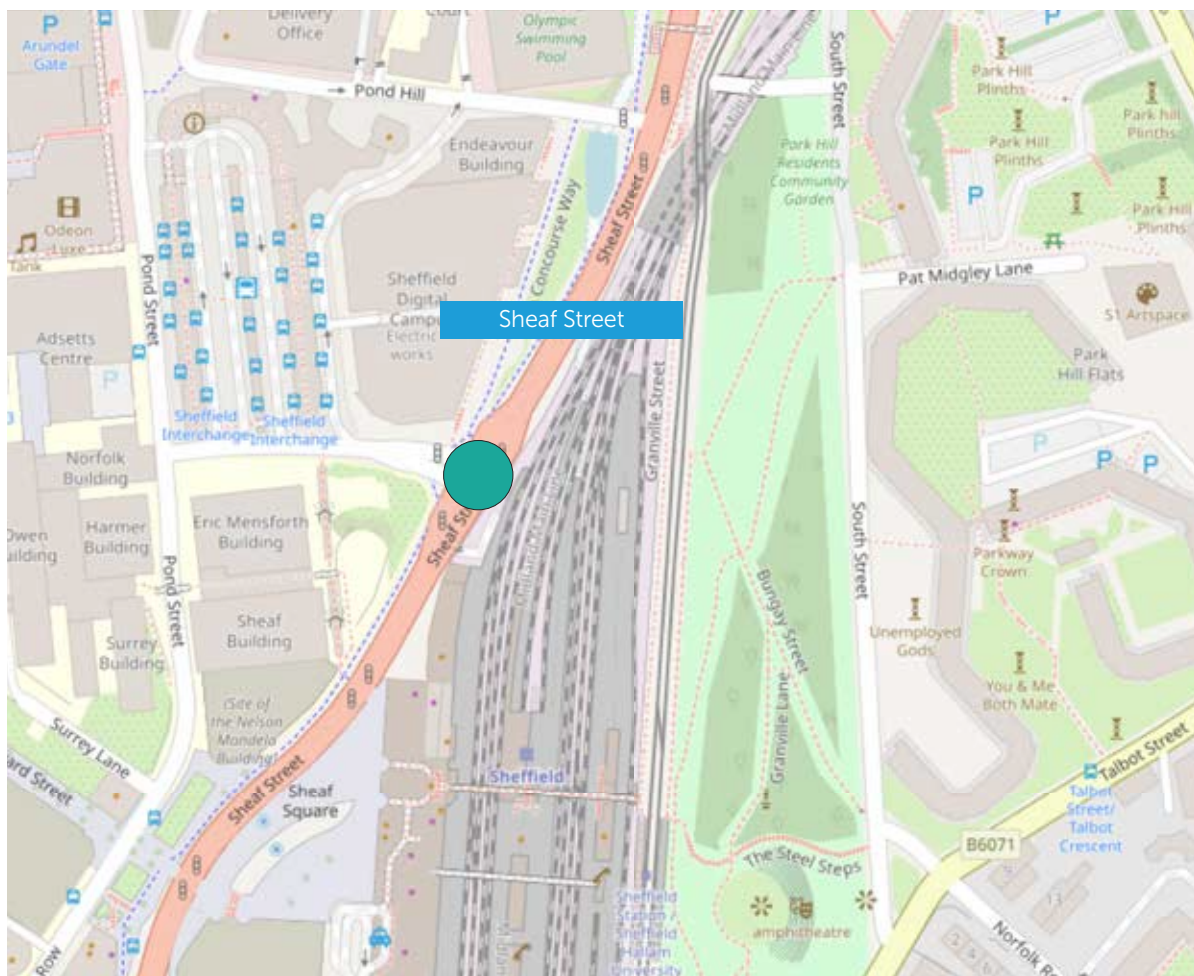
Data was gathered over a period of 2-3 months on two separate occasions before and after the measures were put in place. The data gathering prior to the Cycle Route coming into effect took place in September-November 2021 and March-April 2022, while the data gathering after the Cycle Route changes came into effect took place in September-November 2022, and March-April 2023.

Journey time data is based on a sample of journeys along the route, presented in the maps below. As well as these average journey times, we also looked at the 10th and 90th percentile journey times from the sample. These have been defined as the 10% shortest journeys and 10% longest journeys for simplicity.

This is document 8 of 9, and provides an overview of the changes in journey times for motor vehicles travelling along Chesterfield Road.

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 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.

We looked at the Sheaf Street control site again, taking 12 hour traffic counts here alongside the journey time surveying on Abbeydale Road, both before and after the Cycle Route measures were put in.

Key



Location of traffic control site on Sheaf Street

Control site –daily traffic counts taken at the same time periods as the journey time data

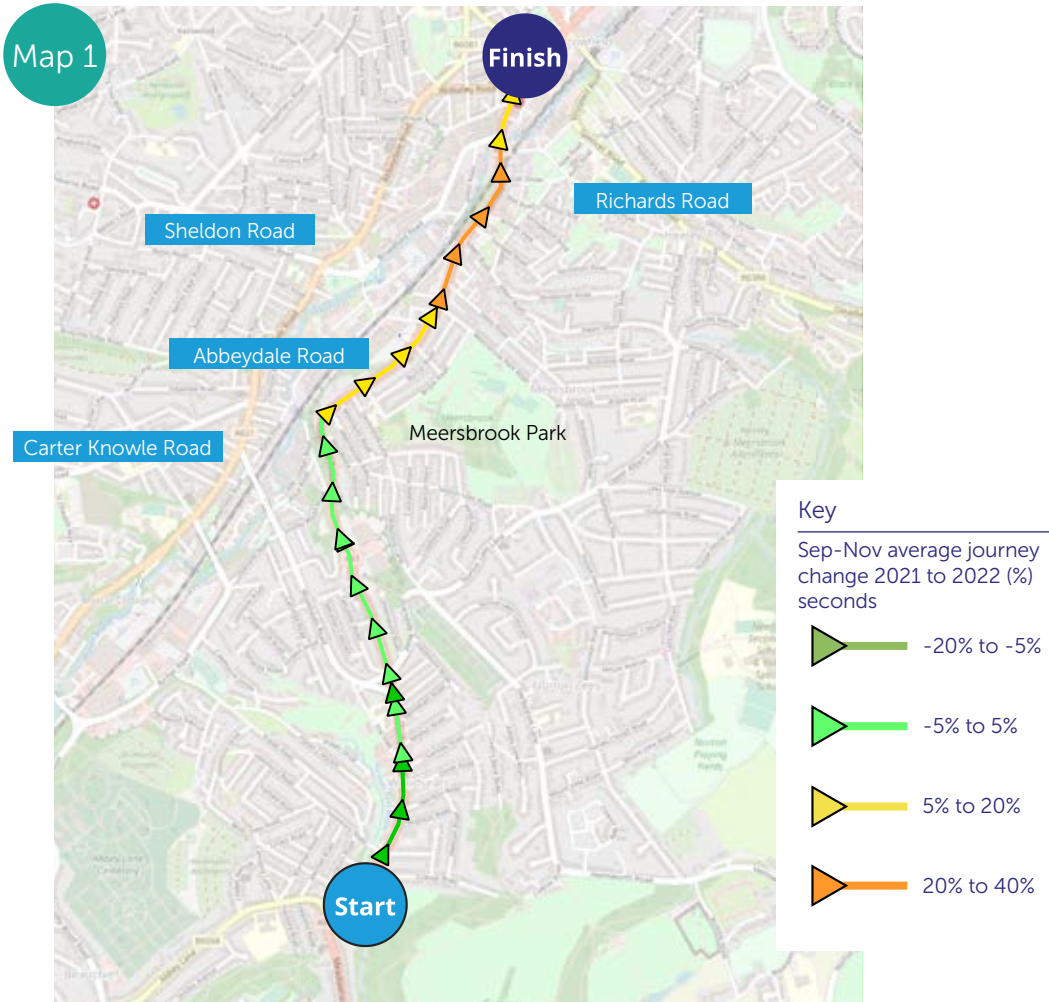
	Sep – Nov 2021	Sep – Nov 2022	% change	Mar – Apr 2022	Mar – Apr 2023	% change
Total (number of motor vehicles)	40,558	39,852	-2%	38,823	39,743	2%

# Chesterfield Road northbound

September - November 2021 to 2022

March - April 2022 to 2023

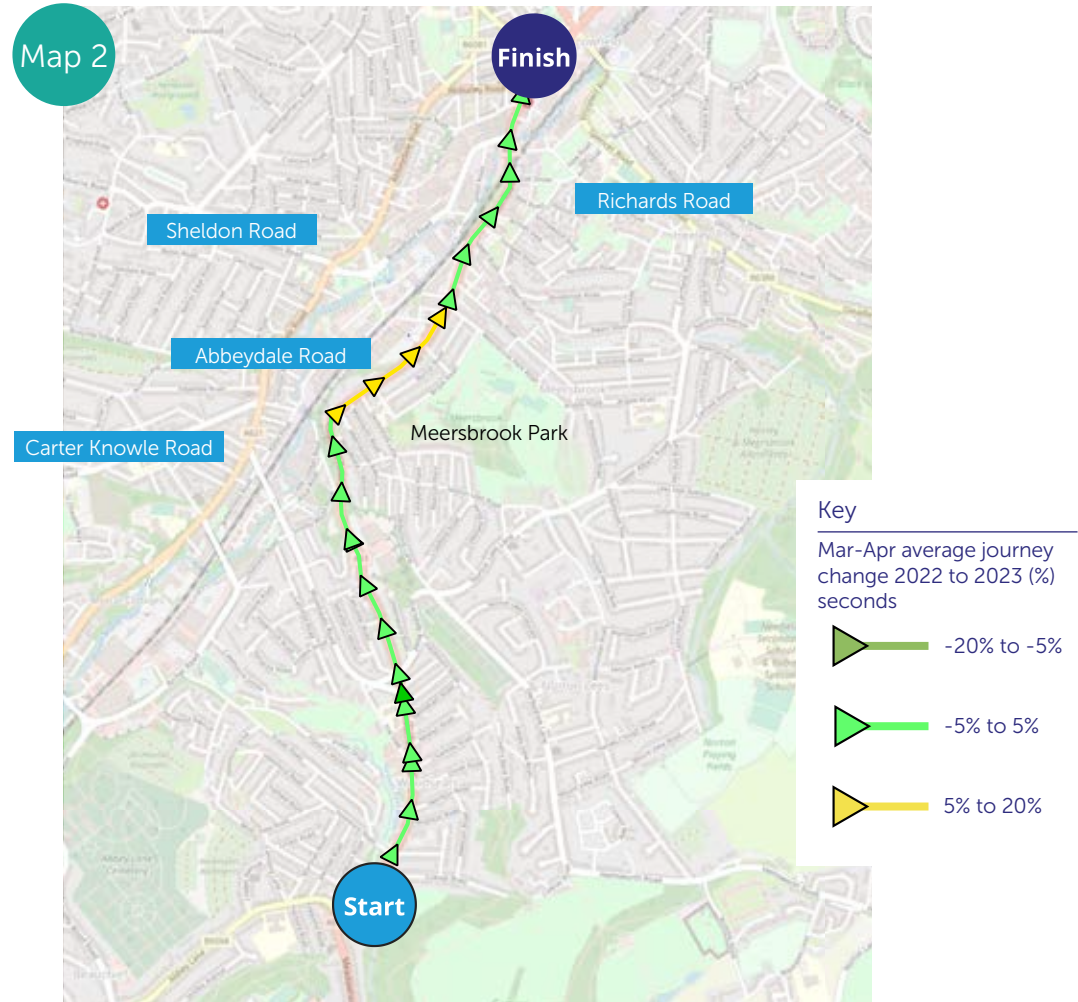
Map 1



Sep - Nov 2021 avg total journey time (mm:ss)  
Chesterfield Road - 06:10

Sep - Nov 2022 avg total journey time (mm:ss)  
Chesterfield Road - 06:34 **(6% increase)**

Map 2



Mar - Apr 2022 avg total journey time (mm:ss)  
Chesterfield Road - 05:49

Mar - Apr 2023 avg total journey time (mm:ss)  
Chesterfield Road - 06:02 **(4% increase)**

\*These maps show the change in journey times for vehicles travelling northbound on Chesterfield Road between September to November 2021 and 2022, and March to April 2022 and 2023. The multi-coloured arrows show changes to the average journey time at each stage of the route. Data and an explanation can be found on the following page.

# Chesterfield Road northbound - Journey times

We analysed data from two points before and after the Sheaf Valley Cycle Route came into effect in May 2022. This data shows the change in journey times for northbound journeys on Chesterfield Road. Looking at data from different times of the year helps to reduce the impacts of seasonal variance on journey times.

After the Sheaf Valley Cycle Route measures were put in place, the average journey time increased throughout the year, rising by 6% in the September-November months, and by 4% in the March-April months.

We also looked at changes in the top 10% longest and the top 10% shortest journeys to see how travel times changed for the longest and shortest journeys along the route.

The changes in both the top 10% longest and shortest journeys also rose. The 10% longest journey times increased by 39% in September-November and by 18% in March-April. The 10% shortest journey times increased by 1% in September-November and by 5% in March-April.

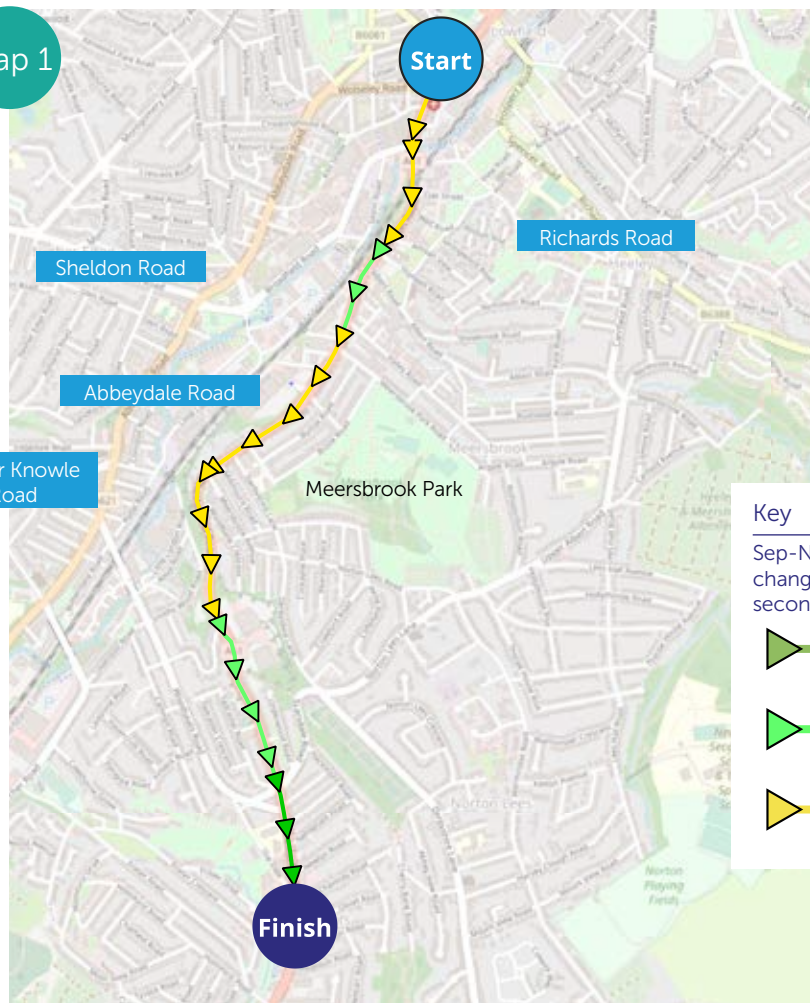
Journey time (mm:ss)	Sep-Nov 2021	Sep-Nov 2022	% change	Mar-Apr 2022	Mar-Apr 2023	% change
Average	06:10	06:34	+6%	05:49	06:02	+4%
10% shortest	04:29	04:32	+1%	04:10	04:23	+5%
10% longest	09:28	13:07	+39%	08:44	10:17	+18%

# Chesterfield Road southbound

September - November 2021 to 2022

March - April 2022 to 2023

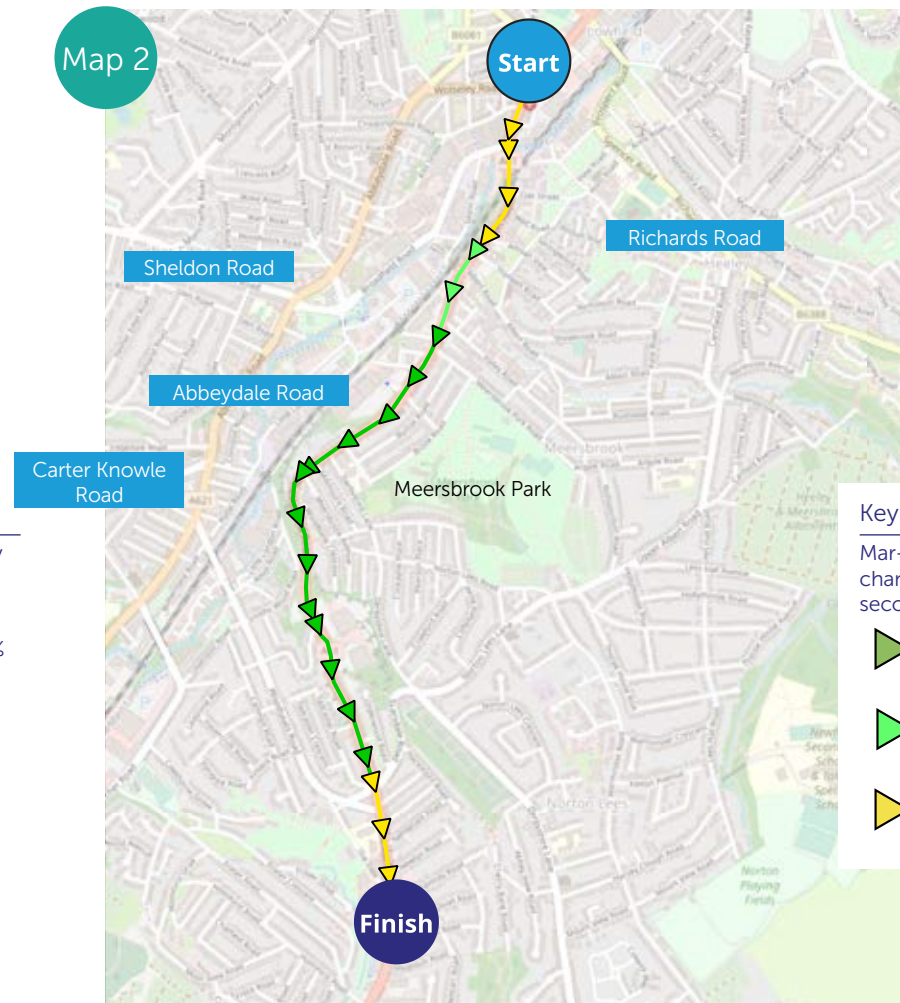
Map 1



Sep - Nov 2021 avg total journey time (mm:ss)  
Chesterfield Road - 05:50

Sep - Nov 2022 avg total journey time (mm:ss)  
Chesterfield Road - 06:12 **(6% increase)**

Map 2



Mar - Apr 2022 avg total journey time (mm:ss)  
Chesterfield Road - 05:56

Mar - Apr 2023 avg total journey time (mm:ss)  
Chesterfield Road - 05:48 **(2% decrease)**

\*These maps show the change in journey times for vehicles travelling southbound on Chesterfield Road between September to November 2021 and 2022, and March to April 2022 and 2023. The multi-coloured arrows show changes to the average journey time at each stage of the route. Data and an explanation can be found on the following page.

## Chesterfield Road southbound - Journey times

We analysed data from two points before and after the Sheaf Valley Cycle Route came into effect in May 2022. This data shows the change in journey times for southbound journeys on Chesterfield Road. Looking at data from different times of the year helps to reduce the impacts of seasonal variance on journey times.

After the Sheaf Valley Cycle Route measures were put in place, the average journey time fluctuated throughout the year, rising by 6% in the September-November months, but decreasing by 2% in the March-April months.

We also looked at changes in the top 10% longest and the top 10% shortest journeys to see how travel times changed for the longest and shortest journeys along the route.

The changes in both the top 10% longest and shortest journeys also fluctuated. The 10% longest journey times increased by 55% in September-November, but fell by 14% in March-April. The 10% shortest journey times increased by 5% in September-November, but remained unchanged in the March-April.

Journey time (mm:ss)	Sep-Nov 2021	Sep-Nov 2022	% change	Mar-Apr 2022	Mar-Apr 2023	% change
Average	05:50	06:12	+6%	05:56	05:48	-2%
10% shortest	03:54	04:06	+5%	03:55	03:55	0%
10% longest	09:06	14:05	+55%	11:50	10:10	-14%