

CONNECTING SHEFFIELD

Better travel choices

Journey Times –
Bannerdale Road / Sheldon
Road / Carter Knowle Road
Section 8 of 9

Nether Edge Active Neighbourhood

Traffic Monitoring Data



Bannerdale Road / Sheldon Road / Carter Knowle Road journey times - 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 Nether Edge 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 Nether Edge Active Neighbourhood measures were put in place.

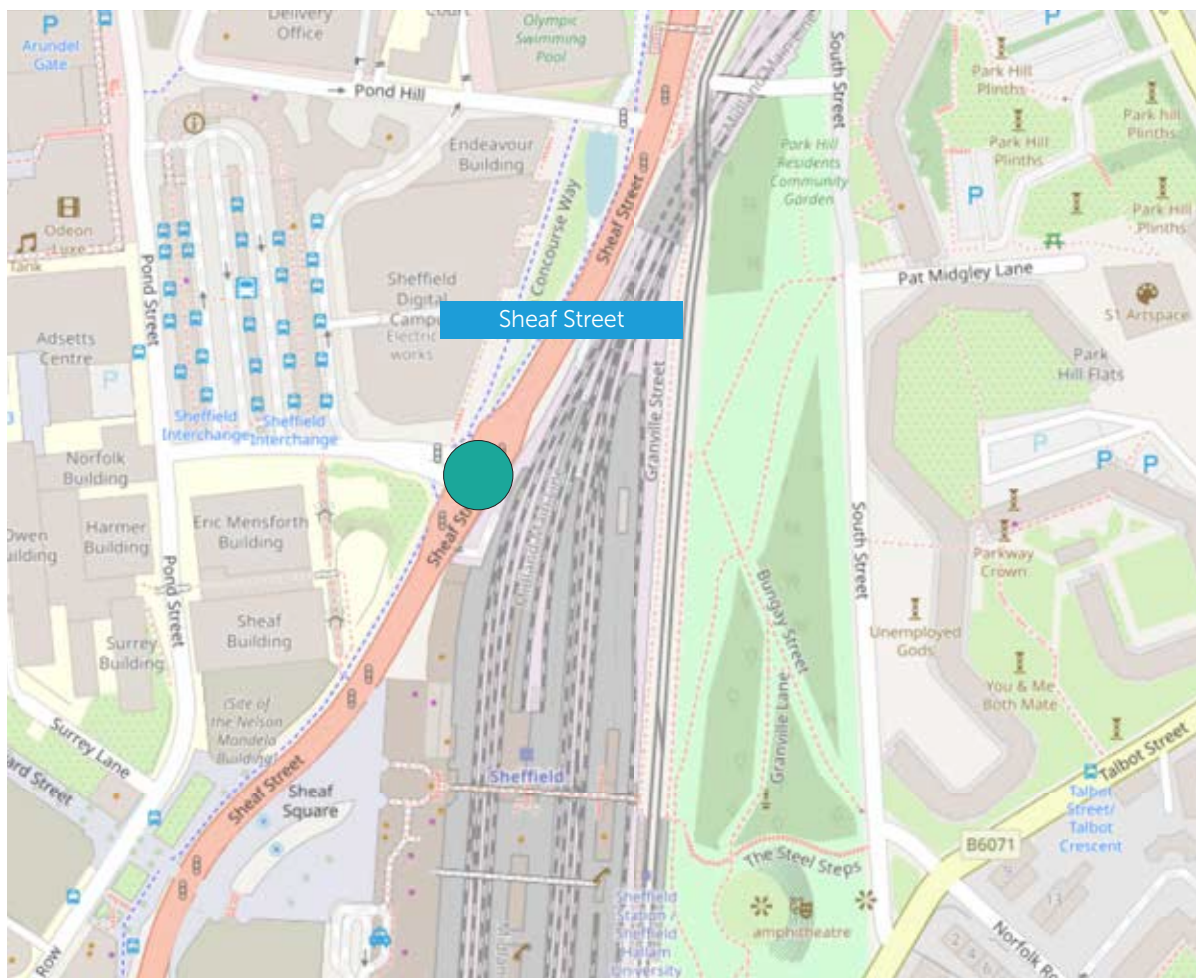
Data was gathered over a period of 2-3 months on two separate occasions before and after the measures were put in place. The data gathering prior to the Active Neighbourhood coming into effect took place in September-November 2021 and March-April 2022, while the data gathering after the Active Neighbourhood 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 Bannerdale Road, Sheldon Road and Carter Knowle Road. Each route will be split into two slides, the first showing the map of the route, and the second showing the data in a table.

These documents have been created to illustrate changes in travel before and after the Nether Edge Active Neighbourhood 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 Active Neighbourhood.

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 Active Neighbourhood measures were put in.

Key

 Location of traffic control site on Sheaf Street

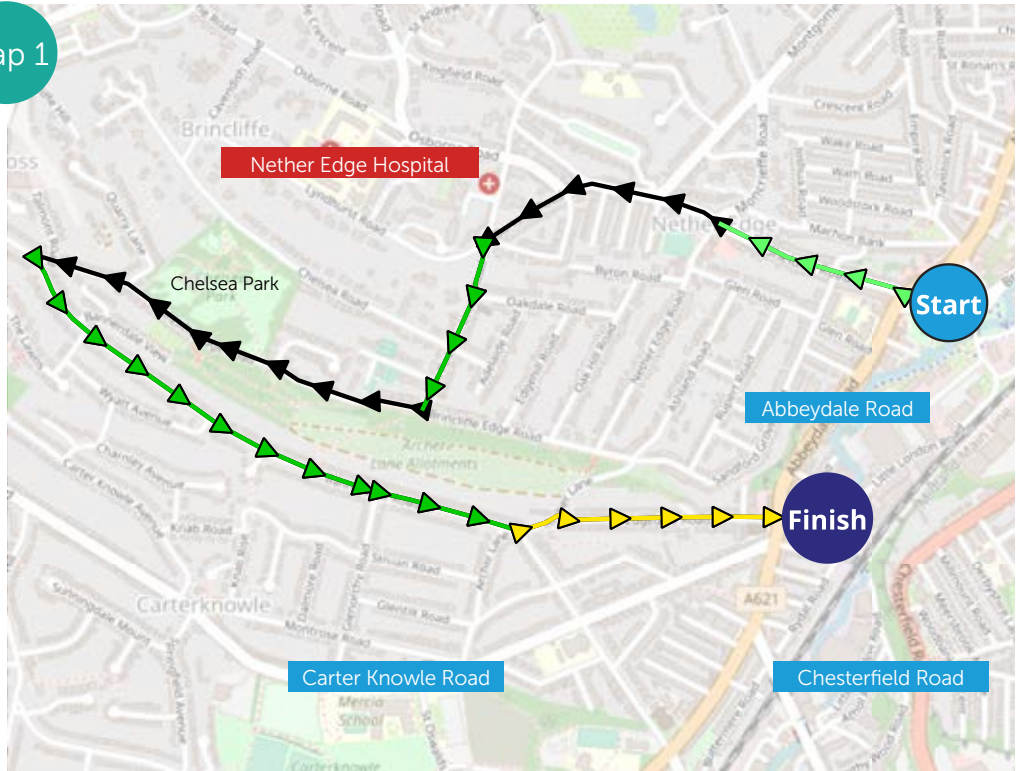
Control site –daily traffic counts taken at the same time periods as the journey time data

	Sep – Nov 2021	Sep – Nov 2022	% change	Mar – Apr 2022	Mar – Apr 2023	% change
Total	40,558	39,852	-2%	38,823	39,743	2%

Sheldon Road to Bannerdale Road

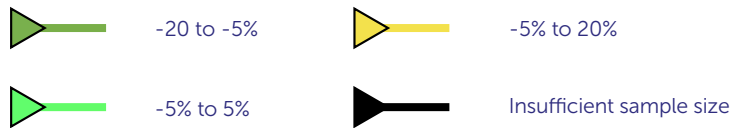
September - November 2021 to 2022

Map 1



Key

Sep-Nov average journey change 2021 to 2022 (%)

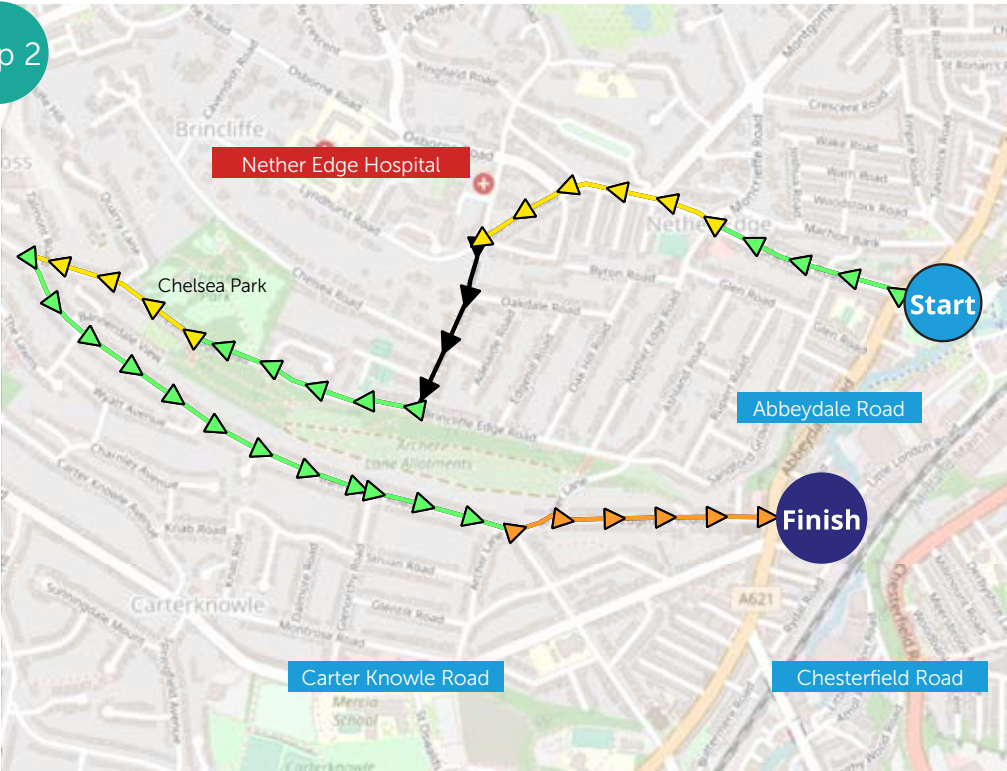


Sep - Nov 2021 avg total journey time (mm:ss)
Mapped Route - 05:11

Sep - Nov 2022 avg total journey time (mm:ss)
Mapped Route - 05:05 (**2% decrease**)

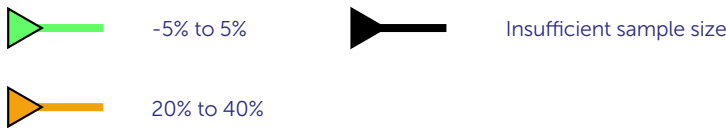
March - April 2022 to 2023

Map 2



Key

Mar-Apr average journey change 2022 to 2023 (%)



Mar - Apr 2022 avg total journey time (mm:ss)
Mapped Route - 06:34

Mar - Apr 2023 avg total journey time (mm:ss)
Mapped Route - 07:06 (**8% increase**)

* These maps show the change in journey times for vehicles travelling from Sheldon Road to Bannerdale Road between September to November 2021 and 2022, and March to April 2022 and 2023. The arrows show changes to the average journey time at each stage of the route. Data and an explanation can be found on the next page.

Sheldon Road to Bannerdale Road - Journey times

The change in journey times heading from Sheldon Road to Bannerdale Road in September-November and March-April can be seen here. We analysed data from two separate times either side of the Active Neighbourhood changes coming into effect, to show the change in journey times for journeys from Sheldon Road to Bannerdale Road since the changes were implemented. Looking at two different points in the year helps to mitigate potential margins of error arising from the impacts of seasonal variance on journey times.

The average journey time fluctuated throughout the year, with journeys in September-November months decreasing by 2% after the Active Neighbourhood measures were put in place, but increasing by 8% in March-April.

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

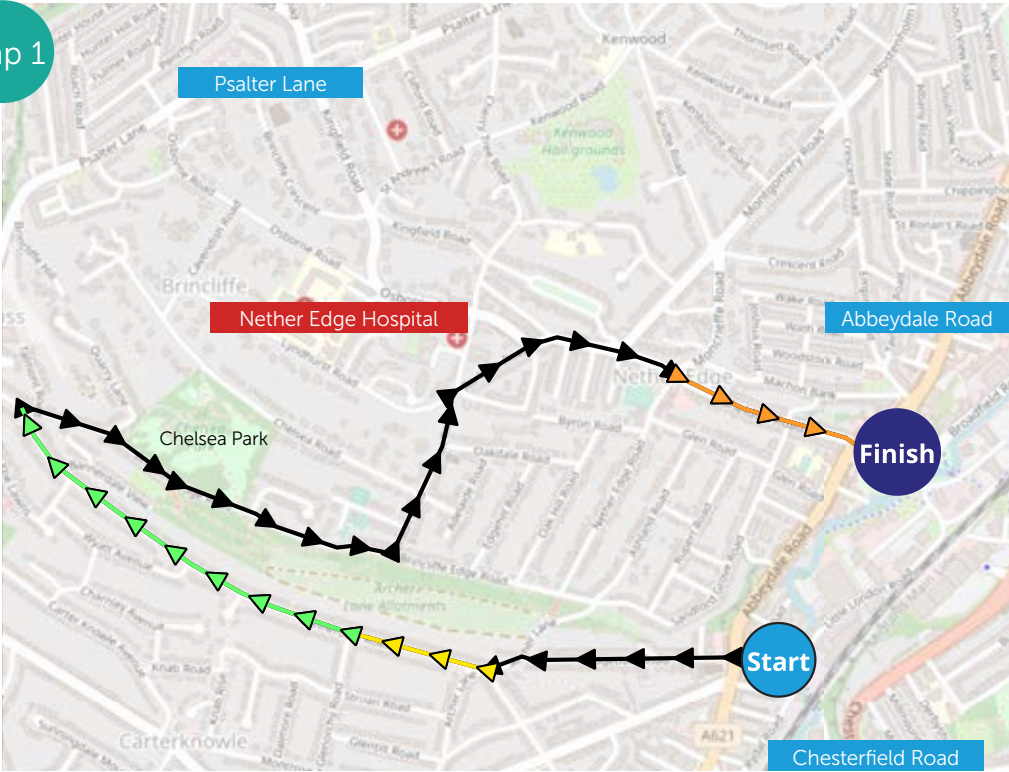
The top 10% shortest journey times increased throughout the year, increasing by 3% in September-November and by 8% in March-April. The top 10% longest journeys fluctuated, decreasing by 4% in September-November but increasing by 12% in March-April.

Journey time (mm:ss)	Sep-Nov 2021	Sep-Nov 2022	% change	Mar-Apr 2022	Mar-Apr 2023	% change
Average	05:11	05:05	-2%	06:34	07:06	+8%
10% shortest	04:01	04:08	+3%	05:25	05:50	+8%
10% longest	07:06	06:48	-4%	08:24	09:23	+12%

Bannerdale Road to Sheldon Road

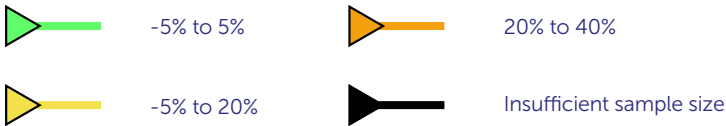
September - November 2021 to 2022

Map 1



Key

Sep-Nov average journey change 2021 to 2022 (%)

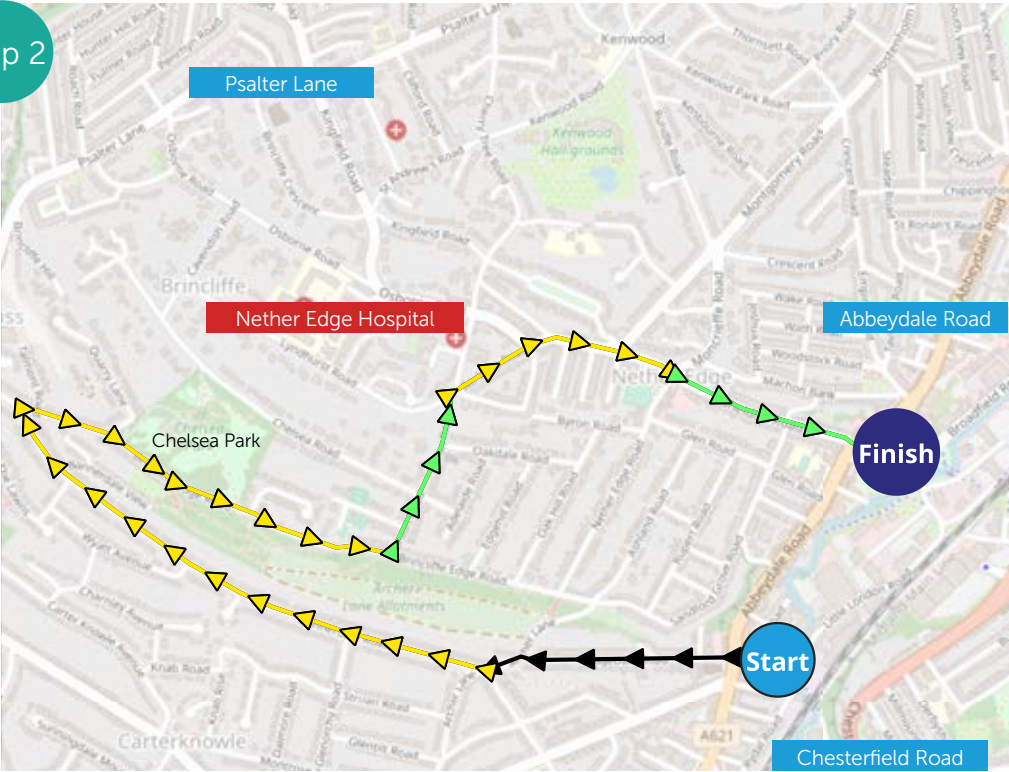


Sep - Nov 2021 avg total journey time (mm:ss)
Mapped Route - 03:27

Sep - Nov 2022 avg total journey time (mm:ss)
Mapped Route - 03:53 **(13% increase)**

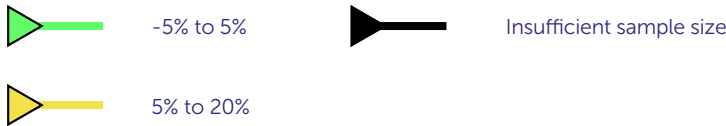
March - April 2022 to 2023

Map 2



Key

Mar-Apr average journey change 2022 to 2023 (%)



Mar - Apr 2022 avg total journey time (mm:ss)
Mapped Route - 06:51

Mar - Apr 2023 avg total journey time (mm:ss)
Mapped Route - 07:23 **(8% increase)**

*These maps show the change in journey times for vehicles travelling from Bannerdale Road to Sheldon Road between September to November 2021 and 2022, and March to April 2022 and 2023. The arrows show changes to the average journey time at each stage of the route. Data and an explanation can be found on the next page.

Bannerdale Road to Sheldon Road - Journey times

The change in journey times heading from Bannerdale Road to Sheldon Road in September-November and March-April can be seen here. We analysed data from two separate times either side of the Active Neighbourhood changes coming into effect, to show the change in journey times for journeys from Bannerdale Road to Sheldon Road since the changes were implemented. Looking at two different points in the year helps to mitigate potential margins of error arising from the impacts of seasonal variance on journey times.

The average journey time increased throughout the year, increasing by 13% in September-November and by 8% in March-April.

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

The top 10% shortest journey times fluctuated, decreasing by 3% in September-November, while increasing by 3% in March-April. The top 10% longest journeys saw enormous increases in time, with journey times rising by 41% in September-November and by 25% in March-April.

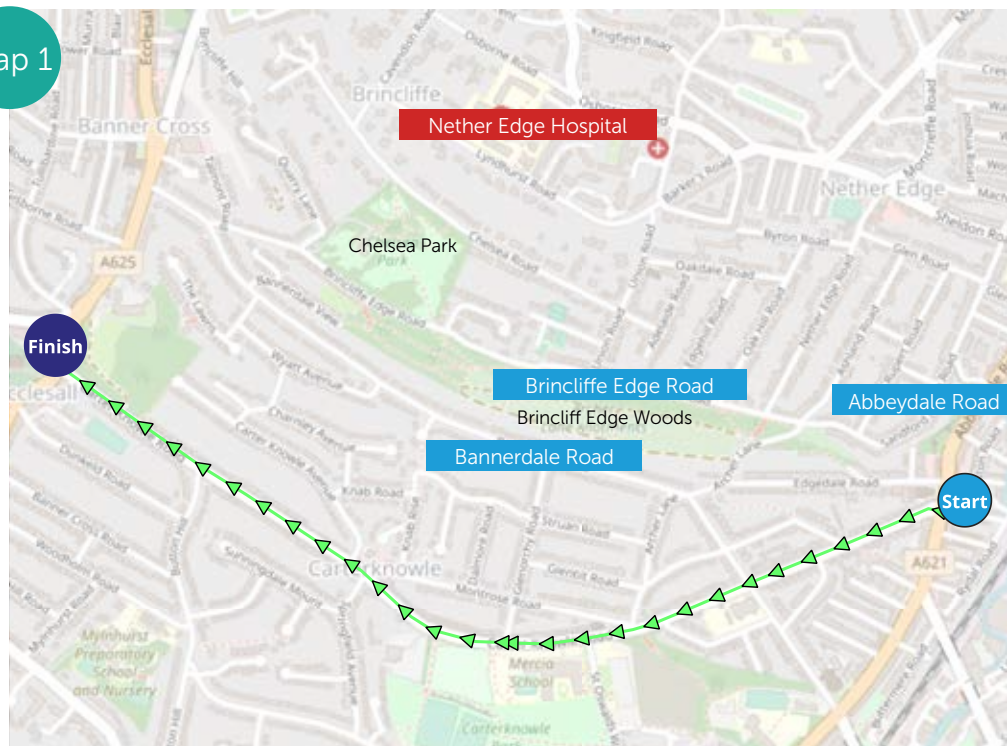
Journey time (mm:ss)	Sep-Nov 2021	Sep-Nov 2022	% change	Mar-Apr 2022	Mar-Apr 2023	% change
Average	03:27	03:53	+13%	06:51	07:23	+8%
10% shortest	02:31	02:27	-3%	05:21	05:31	+3%
10% longest	05:31	07:45	+41%	09:20	11:39	+25%

Carter Knowle Road westbound

September - November 2021 to 2022

March - April 2022 to 2023

Map 1



Key

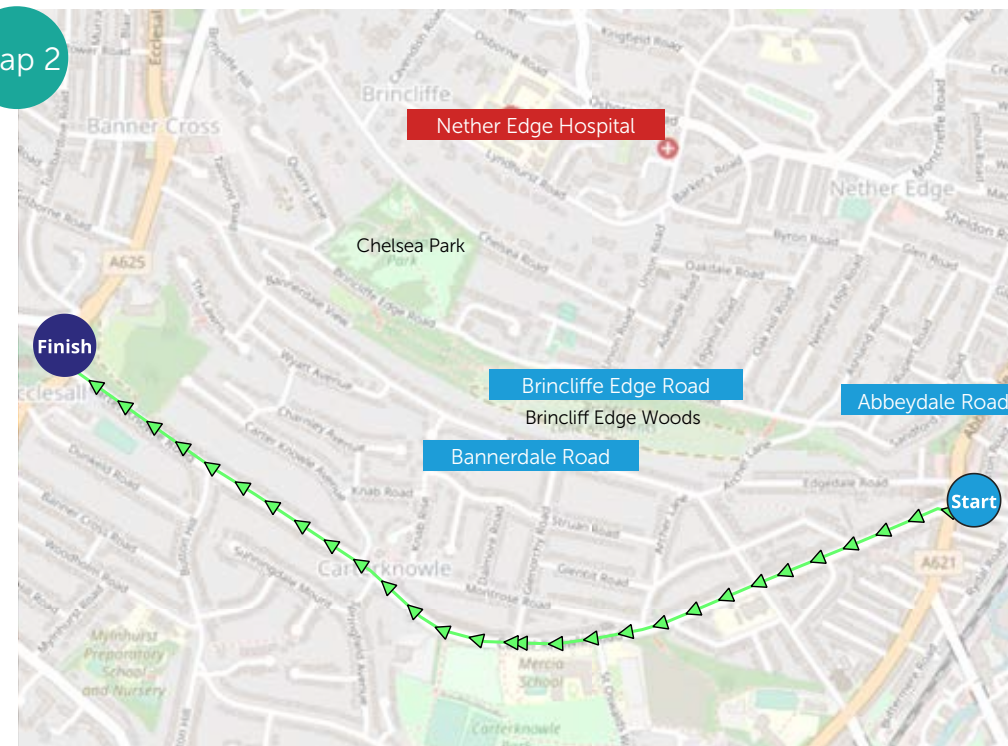
Sep-Nov average journey change 2021 to 2022 (%)



Sep - Nov 2021 avg total journey time (mm:ss)
Carter Knowle - 03:34

Sep - Nov 2022 avg total journey time (mm:ss)
Carter Knowle - 03:32 **(1% decrease)**

Map 2



Key

Mar-Apr average journey change 2022 to 2023 (%)



Mar - Apr 2022 avg total journey time (mm:ss)
Carter Knowle - 03:28

Mar - Apr 2023 avg total journey time (mm:ss)
Carter Knowle - 03:31 **(1% increase)**

*These maps show the change in journey times for vehicles travelling westbound along Carter Knowle Road between September to November 2021 and 2022, and March to April 2022 and 2023. The arrows show changes to the average journey time at each stage of the route. Data and an explanation can be found on the next page.

Carter Knowle Road westbound - Journey times

The change in journey times heading westbound along Carter Knowle Road in September-November and March-April can be seen here. We analysed data from two separate times either side of the Active Neighbourhood changes coming into effect, to show the change in journey times on westbound journeys on Carter Knowle Road since the changes were implemented. Looking at two different points in the year helps to mitigate potential margins of error arising from the impacts of seasonal variance on journey times.

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

The top 10% shortest journey times also fluctuated, decreasing by 3% in September-November, while increasing by 5% in March-April. The top 10% longest journeys fluctuated as well, decreasing by 7% in September-November, but remaining unchanged in March-April.

The average journey time saw some small fluctuations, with journeys in September-November decreasing by 1% after the Active Neighbourhood measures were put in place, but increasing by 1% between years in March-April.

Journey time (mm:ss)	Sep-Nov 2021	Sep-Nov 2022	% change	Mar-Apr 2022	Mar-Apr 2023	% change
Average	03:34	03:32	-1%	03:28	03:31	+1%
10% shortest	02:57	02:51	-3%	02:48	02:56	+5%
10% longest	05:08	04:47	-7%	04:29	04:31	<1%

Carter Knowle Road eastbound

September - November 2021 to 2022

March - April 2022 to 2023

Map 1

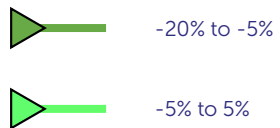


Map 2



Key

Sep-Nov average journey change 2021 to 2022 (%)

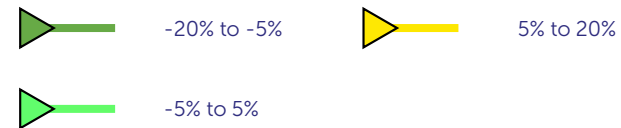


Sep - Nov 2021 avg total journey time (mm:ss)
Carter Knowle - 02:46

Sep - Nov 2022 avg total journey time (mm:ss)
Carter Knowle - 02:41 (**3% decrease**)

Key

Mar-Apr average journey change 2022 to 2023 (%)



Mar - Apr 2022 avg total journey time (mm:ss)
Carter Knowle - 02:41

Mar - Apr 2023 avg total journey time (mm:ss)
Carter Knowle - 02:39 (**1% decrease**)

*These maps show the change in journey times for vehicles travelling eastbound along Carter Knowle Road between September to November 2021 and 2022, and March to April 2022 and 2023. The arrows show changes to the average journey time at each stage of the route. Data and an explanation can be found on the next page.

Carter Knowle Road eastbound - Journey times

The change in journey times heading eastbound along Carter Knowle Road in September-November and March-April can be seen here. We analysed data from two separate times either side of the Active Neighbourhood changes coming into effect, to show the change in journey times on eastbound journeys on Carter Knowle Road since the changes were implemented. Looking at two different points in the year helps to mitigate potential margins of error arising from the impacts of seasonal variance on journey times.

The average journey time saw a small decrease throughout the year, with journeys in September-November decreasing by 3% after the Active Neighbourhood measures were put in place, and by 1% in March-April.

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

The top 10% shortest journey times saw differing results throughout the year, remaining unchanged in September-November, while increasing by 5% in March-April. The top 10% longest journeys saw a general increase in time, increasing by 5% in September-November, and by 6% in March-April.

Journey time (mm:ss)	Sep-Nov 2021	Sep-Nov 2022	% change	Mar-Apr 2022	Mar-Apr 2023	% change
Average	02:46	02:41	-3%	02:41	02:39	-1%
10% shortest	02:13	02:13	0%	02:10	02:17	+5%
10% longest	03:36	03:47	+5%	03:33	03:45	+6%