## Agenda Item 10



## **Report to Policy Committee**

## **Author/Lead Officer of Report:**

Dominic Qaiser-Sweeting, Senior Transport Planner

**Tel**: 01142 052 643

**Report of:** Executive Director of City Futures

**Report to:** Transport, Regeneration and Climate Policy

Committee

**Date of Decision:** 20<sup>th</sup> September 2023

Subject: Report objections to the Experimental Traffic Order

for the Sheaf Valley Cycle Route.

Has an Equality Impact Assessment (EIA) been undertaken? If YES, what EIA reference number has it been given? 949	Yes x No
Has appropriate consultation taken place?	Yes x No
Has a Climate Impact Assessment (CIA) been undertaken?	Yes x No
Does the report contain confidential or exempt information?	Yes No X

#### **Purpose of Report:**

Delivered in its entirety, the Sheaf Valley Cycle Route (SVCR), provides a safe, low-traffic, active travel route between Norton Hammer and Sheffield City Centre. This report sets out an analysis of the effect of an 18-month Experimental Traffic Order (ETO) used to implement specific interventions on the highway as part of the SVCR. The ETO and interventions were implemented in May 2022, with the ETO due to expire in November 2023.

This report directly relates to interventions being trialled through the ETO. It does not include other interventions already being implemented on a permanent basis (through separate traffic regulation orders) as part of the SVCR. Interventions being trialled through the ETO are:

- Cherry Tree St/Shoreham St modal filter and parking bay alterations.
- Saxon Rd parking restrictions.
- Little London Rd modal filter and parking restrictions.
- Rydal Rd modal filter.
- Hackthorn Rd/Scarsdale Rd no entry/one way filter. Note that this is the only intervention that does not directly link to the main SVCR.

The report includes the results of formal consultation, receipt of objections, along with feedback received pre and post formal consultation. The consultation has sought the views of residents, visitors to the area, businesses, local groups, institutions, and statutory groups. Further monitoring and evaluation of the scheme has been carried out to help quantity the outcomes of the scheme.

#### Recommendations:

It is recommended that the Transport, Regeneration and Climate Committee:

- Consider the objections to interventions delivered through the ETO, in terms
  of how they relate to the wider scheme, its overall aims and objectives and
  how they tie-in with wider Sheffield City Council strategies and policy.
- Consider the wider monitoring and evaluation of the scheme including current and potential future outcomes of the interventions delivered.
- Having considered the objections and outcomes of the scheme, approve the implementation of the SVCR in its entirety. In other words, agree that all interventions associated with the ETO should be made permanent.
- Note that the Council's Traffic Regulations team will inform all consultation respondents accordingly.
- Note that if recommendation to implement interventions on a permanent basis is approved, officers will write to all properties within the boundary of the initial larger consultation area to inform them. Information about the scheme will be included, but the Council will make it clear that this is not a further consultation exercise. The aim is to have this letter distributed within 2 weeks of the recommendations being taken forward.

Note: Should each temporary intervention delivered through the TRO become permanent, their permanent design, construction and level of public engagement involved in this process are subject to the identification of appropriate funding.

#### **Appendices**

Appendix A: Overview Map

**Appendix B:** Sketch plans of specific interventions

**Appendix C:** Permanent/Static Cycle Counts (Sheaf Valley) **Appendix D:** Permanent/Static Cycle Counts (City Wide)

**Appendix E:** Sharrow Vale Traffic Count Data Control Site **Appendix F:** Sheaf Street Traffic Count Data Control Site Data

**Appendix G:** Junction Traffic Count Data **Appendix H:** Bus Journey Time Data

**Appendix I:** Collision Data **Appendix J:** Air Quality Data

Appendix K: Pre-Delivery Consultation Postcard

Appendix L: Equalities Impact Assessment Appendix M: Climate Impact Assessment

**Appendix N:** Experimental Traffic Order Notice

Appendix O: Pre-Delivery Consultation Engagement Report

(Counter Context - October 2021)

Appendix P: Pre-Delivery Consultation Engagement Report Executive Summary

(Counter Context - October 2021)

Appendix Q: ETO Formal Feedback Analysis Report

(Counter Context - May 2023)

Appendix R: Post-Delivery Perception Surveys Report

(Enventure - August 2023)

Appendix S: Post-Delivery Online Perception Survey Report (Enventure - September 2023)

Appendix T: Traffic Monitoring Data Pack (Counter Context – September 2023)

Lea	nd Officer to complete:					
1	I have consulted the relevant departments in respect of any relevant implications indicated on the Statutory and Council	Finance: Damien Watkinson				
	Policy Checklist, and comments have been incorporated / additional forms	Legal: Richard Cannon				
		Equalities & Consultation: Ed Sexton				
		Climate: Kathryn Warrington				
	Legal, financial/commercial and equalities implications must be included within the report and the name of the officer consulted must be included above.					
2	SLB member who approved submission:	Kate Martin				
3	Committee Chair consulted:	Ben Miskell				
4	on the Statutory and Council Policy Checklis	en obtained in respect of the implications indicated st and that the report has been approved for ember indicated at 2. In addition, any additional as required at 1.				
	Lead Officer Name: Dominic Qaiser-Sweeting	<b>Job Title:</b> Senior Transport Planner				
	Date: 11.09.2023					

- 1. PROPOSAL
- 1.1 Setting the Scene
- 1.1.1 A climate emergency was declared by Sheffield City Council in February 2019 and a series of route maps outlining the Council's commitment to net zero by 2030, were agreed by committee in July 2023. It is essential to reduce carbon emissions to mitigate against the most serious impacts of climate change, whilst enabling Sheffield to thrive. Transport is one of the most significant contributors to carbon emissions in the city, and therefore it is imperative to encourage more people to use sustainable forms of travel including walking and cycling. 'Our Council and The Way We Travel Decarbonisation Routemaps' stated that 'everyone in the city will need to change the way that they live their lives in the coming years, both to minimise the harm that the climate emergency will lead to, and to adapt to a changing world.' Actions included in the report are grouped around six key objectives including, Improved walking, cycling and wheeling routes and facilities that enable safe and inclusive participation.
- 1.1.2 Sheffield's 2019 to 2035 Transport Strategy sets out the need to increase cycling and walking; the Move More Strategy highlights the car-centric nature of journeys currently in Sheffield; while the South Yorkshire Mayor's 'Vision for Transport' and Active Travel Implementation Plan aims to put pedestrians and cyclists at the heart of the South Yorkshire Mayoral Combined Authority's (SYMCA) transport plans to address carbon emissions. Nationally, the Department for Transport's 2020 paper Decarbonising Transport, Setting the Challenge establishes the aim for 'active travel' to become the country-wide norm.
- 1.1.3 One way of implementing local, regional and national policy agenda is by meeting designs standards as set out in the Department for Transport's 'Cycling Infrastructure Design Local Transport Note 1/20'

https://www.gov.uk/government/publications/cycle-infrastructure-design-ltn-120. LTN1/20 compliant infrastructure meets core design principles, in so far as active travel routes are coherent, direct, safe, comfortable, and attractive. In simple terms, these principles should make infrastructure accessible for anyone travelling independently from the age of 12 years old and upwards including the elderly or those with disabilities. It may also consider families with young children and people using adapted cycles. Arterial cycle routes such as the Sheaf Valley Cycle Route (SVCR) should also be well connected to people friendly, low-traffic streets or other off-road routes to form a comprehensive active travel network to wherever people need to go. The SVCR uses Active Travel Fund funding to empower more communities to enjoy the benefits of walking or cycling along the Sheaf Valley transport corridor.

- 1.1.4 The Active Travel Fund was launched in May 2020 by the Department for Transport (DfT) to specifically fund proposals that enable more journeys to be made on foot and by bicycle. The phase of funding appliable to this project is Tranche 2 which is for permanent projects, focused on reallocating road space in favour of active travel. Sheffield City Council secured £2,386,000 to put towards the interventions along Sheaf Valley Route. Further financial information related to the scheme is found in section 4.
- 1.1.5 The SVCR ties into a series of existing and planned high-quality cycle routes. This ensures that the city has a developing and appropriate cycling infrastructure network, which makes cycling a safe and convenient choice for all. Current and planned schemes include:
  - Grey to Green
  - City Centre-Attercliffe-Darnall
  - Nether Edge-City Centre project,
  - Nether Edge Active Travel Neighbourhood
  - Kelham and Neepsend
  - City Centre projects.
- 1.1.6 The SVCR is also complemented by Active Travel Neighbourhoods, which ensuring that people can reach major cycle route corridors safely by connecting to residential and commercial areas.
- 1.1.7 Proposed bus priority schemes planned along Abbeydale Rd, Chesterfield Rd and Ecclesall Rd, will also complement the SVCR and further support sustainable and active travel choices if they continue to progress and are supported by committee.
- Active travel schemes such as the SVCR, provide long term benefits to all road users by providing real travel choices minimising the risk of future traffic events. People feel compelled to drive short distances because of a lack of travel choices available to them. In Sheffield around 60% of commuter journeys are by car and 40% of journeys are within 1km; a distance that can be walked within 15 minutes or cycled with 5 minutes. The new draft Sheffield Local Plan expected growth and development across Sheffield, including an estimated 18,000 new homes within or near the city centre. A connected, safe, and attractive active travel network (along with improvements in public transport) increases the efficiency and resilience of the transport network both now and in the future.
- 1.1.9 The SVCR supports those that do not have access to a car or feel that the road network is too hostile or too dangerous to walk, wheel or ride. Local insight data from the 2021 census shows that the percentage of households without access to a car along the Sheaf Valley ranges from over 20% in parts of Woodseats and Meersbrook; 40% to 50% in parts of Lowfield and Highfield; and as high as nearly

75% in parts of the city centre. An inclusive active travel network supports parents that want to walk to school with their children; young people that want to independently access education, training and employment; people with health conditions and disabilities that are unable to drive; and many others that simply cannot afford the cost of motoring. This can help to combat transport poverty; increase levels of physical activity; reduce loneliness and isolation and improve mental wellbeing.

1.1.10 A truly multi-modal transport network that is built to a high standard, offers inclusive economic, social and environmental opportunities and benefits to everyone, regardless of their age, gender, ethnicity or background. Furthermore, safer, cleaner and lower traffic routes make the city a better place to live, work, learn and play.

#### 1.2 Details of the interventions

- 1.2.1 The proposed SVCR runs from Norton Hammer to the City Centre, via Shoreham Street and Little London Rd. The route connects:
  - Residential and commercial areas along the Sheaf Valley.
  - Transport hubs incl. Sheffield train station and bus interchange.
  - Sheffield Hallam University's city centre campus.
  - Colleges and schools.
  - Victoria Quays and West Bar.
  - Existing and planned cycle infrastructure

The overall route plan is provided in appendix A

1.2.2 This report directly relates to interventions being trialled through the ETO. It does not include other interventions already being implemented on a permanent basis along the SVCR. Interventions being trialled through the ETO are:

#### 1.2.3 Cherry Tree St/Shoreham St junction

Modal filter and parking bay alterations to reduce traffic volumes and vehicle movements on Shoreham St by eliminating through-traffic on Cherry Tree St (see sketch plan in appendix B). In this instance, modal filters or point closures involve using blocks, bollards or planters to stop motorised vehicle through-traffic, but retain through-routes for pedestrians, cycles and other micro-mobility vehicles. This prioritises active modes of travel over other modes on specific roads. Other examples include the use of cameras to enforce bus gates or initiatives such as 'School Streets'.

#### 1.2.4 Saxon Rd

Parking restrictions to support a clear cycle route.

#### 1.2.5 Little London Rd

Modal filter and parking restrictions to reduce traffic volumes by eliminating through traffic and providing a clear cycle route (see sketch plan in appendix B).

## 1.2.6 Rydal Rd

Modal filter to reduce traffic volumes and eliminate through traffic on Little London Rd (see sketch plan in appendix B).

#### 1.2.7 Hackthorn Rd/Scarsdale Rd junction

No entry/one way at Scarsdale Rd junction (one way exit only) designed to reduce through traffic avoiding the Chesterfield Rd signals (see sketch plan in appendix B). Note that this is the only intervention that does not directly link to the main SVCR.

1.2.8 The request to include Hackthorn Rd was made by colleagues at SYMCA following consultation with residents and politicians. Analysis between January and December 2019 (366 days) outlined the significance of through traffic on Hackthorn and adjoining residential streets. For example, on Nettleham Road, more than 87.5% of vehicle trips (at weekday am peak times) were classed as through because these vehicles did not stop to access properties.

#### 1.3 The ETO Process

- 1.3.1 An Experimental Traffic Order (ETO) is like a permanent Traffic Regulation Order it is a legal document which imposes traffic and parking restrictions. The benefit of an ETO is that it enables a scheme to be trialled without the commitment of it being permanent from the outset. Monitoring, evaluation, and consultation can assess the true impact of the scheme and assess support from community stakeholders, rather than relying on theoretical guesswork of what the outcome of a proposed scheme might have prior to delivery. The types of interventions being trialled using an ETO are designed to be relatively easy to modify or revoke if intended outcomes are not achieved. The ETO for the project is attached in appendix N.
- 1.3.2 An ETO can remain in place for up to 18 months but the formal period for objections to an order are made within the first six months. This process began as soon the ETO (and associated interventions) were implemented on the 16<sup>th</sup> of May 2022. The period when comments would be accepted for consideration was then extended until the 31<sup>st</sup> of December 2022 to give people more chance to comment. The analysis report of the ETO feedback was completed in May 2023, which can be found in appendix Q.
- 1.3.3 The 18-month experimental period will end in November 2023 and the Transport Regeneration and Climate Policy Committee must decide to make the interventions permanent before then if the interventions are to remain in place. Deciding not to make the interventions permanent

- or allowing the ETO to elapse in the absence of a decision being made, will result in the highway being returned to its former state.
- 1.3.4 In line with the statutory obligations associated with the ETO, street notices were placed on all affected streets and in the Sheffield, Telegraph advertised the proposed order. Ward Members were emailed details of the proposal 2 weeks in advance of residents receiving their letters (in case they had any comments).
- 1.3.5 The Council has a legal responsibility to comply with the Local Authorities' Traffic Orders (Procedure) (England and Wales) Regulations 1996. This states that "An objection [to the making of a Traffic Regulation Order] shall be made in writing".
- 1.3.6 The Traffic Order advertisements stated that objections could be made in writing, by email, or via the council's Consultation Hub webpage (sheffield.citizenspace.com).
- 1.3.7 The Regulations stipulate that "Any person may object to the making of an order by [...] the end of the period of 21 days beginning with the date on which the order making authority [publicises the order]." However, comments and objections received after the closing date were added to the collation of responses and duly considered.

## 1.4 Monitoring and Evaluation

- 1.4.1 This section uses various data sources to demonstrate how interventions associated with the ETO have contributed to the aims and objectives of the proposals and to the wider transport strategy. Data is also used to quantify and rationalise the most significant concerns that have been raised throughout the consultation process. These concerns are highlighted under key themes in section 3 of the report.
- 1.4.2 Monitoring and evaluation of the scheme is extensive. This section of the report highlights key themes and significant changes that may have come about because of the scheme. This involves using examples to underline key points rather than presenting all data in full. A more comprehensive and detailed presentation of the data is included in appendix T.
- 1.4.3 Interventions implemented through the SVCR ETO, were launched in conjunction with similar interventions being delivered as part of the Nether Edge Active Travel Neighbourhood. The two schemes will have cumulative impacts, particularly in relation to traffic flows along Abbeydale Rd. Therefore, it is not possible to attribute changes along this corridor to one specific scheme.

#### 1.4.4 **Monitoring Summary**

- 1.4.5 Monitoring data shows that the SVCR is achieving its intended outcomes despite some elements of the scheme still being under development (most notably the northern end of Shoreham Street and connections into the city centre). Permanent static counters show record numbers of cycle trips in June and July 2023, with increases in total cycle trips of between 62-67% since 2021.
- 1.4.6 Temporary counts show even greater increases of cycle trips on some of the route corridor, alongside relatively modest changes in walking rates overall. Changes in walking trips range from a reduction of 10% on Asline Rd to an increase of 39% along the Little London Rd/Saxon Rd walking and cycling route (June 2021 to June 2023). Increases in all forms of active travel is an intended outcome of the scheme and a key measure of its success.
- 1.4.7 The SVCR forms part of a multi-modal transport network; supporting a greater level of choice in the way people travel. Increasing rates of cycling, wheeling and walking is a key objective, but this should not disproportionally impact upon other modes of travel including public transport and private motorised vehicle journeys. Much of feedback from members of the public and elected members focuses on concerns about increased traffic congestion and journey times on or near the route. Monitoring motorised vehicle journey times is therefore vital.
- 1.4.8 Vehicle journey time data shows that there have been increases in some motorised vehicle journey times along roads surrounding the route. Average journey time delays tend to amount to seconds rather than minutes, but delays are more significant for the longest 10% of journeys (90th percentile), which are most likely to be at peak times. Increases in journey times are deemed small enough to justify making all interventions on the route permanent. As a city-wide network of active travel infrastructure is further developed, it is expected that modal shift away from private motorised vehicles and towards active modes will continue; thus reducing traffic volumes, congestion and journey times in future.
- 1.4.9 The most notable recorded delay is for the slowest 10% of journeys travelling southbound along Chesterfield Rd between Wolseley Rd and The Dale. This shows a 55% increase in journey times, which amounts to around 5 minutes over a 1.6-mile journey. This compares long term trends between September-November 2021 with September-November 2022.
- 1.4.10 Southbound vehicle flows along this corridor also show in increase in traffic flows of just over 5% between November 2021 and November 2022. This increase in traffic flow is higher than the 1% increase recorded over the same period at a control site on Sheaf St.

- 1.4.11 Although changes in overall traffic flows at key junctions remain relatively stable, movements across junctions have changed. This is evident from the traffic count data for the Abbeydale Rd, Sheldon Rd and Broadfield Rd junction where traffic counts have increased on Abbeydale Rd but reduced on Sheldon Rd and Broadfield Rd. This change is more significant at peak times.
- 1.4.12 The most significant increase in vehicle counts for this junction (16%) is travelling northbound on Abbeydale Rd between Glen Rd and Sheldon Rd (8am-9am).
- 1.4.13 Traffic volume increases and journey time increases tend to be isolated to specific junctions at specific times rather than being a network-wide issue. For example, vehicle counts on Abbeydale Rd between Archer Rd and Woodseats Rd, show a drop of 5.9% (total vehicle counts in both directions), highlighting that increased traffic counts are limited to a short section of Abbeydale Rd.
- 1.4.14 It is expected that issues related to congestions at signalised junctions will be alleviated (in part) by changes to traffic signals. These form part of the proposals included in the planned Southwest bus corridor schemes on Abbeydale Rd and Ecclesall Rd as well as the CRSTS bus improvement scheme on Chesterfield Rd.
- 1.4.15 Cycle and Pedestrian Trip Count Data
- 1.4.16 Two permanent static counters provide the most reliable data for the number of cycle trips along the SVCR. The counters show cycle trips have increased between 65% and 67% between June 2021 and June 2023, whilst the 12-month average for these two years show an increase in cycle trips of between 62% and 66%. This meets a key objective of the scheme which is to increase rates of cycling along the Sheaf Valley corridor.
- 1.4.17 June 2021 June 2023 Percentage Increase 8,468 13,948 +65%

Cycle counts, Chippinghouse Rd/Broadfield Rd (2-way) permanent counter

1.4.18 June 2021 June 2023 Percentage Increase 2,530 4,202 +67%

Cycle counts, Shoreham St/St Mary's Rd (northbound) permanent counter

1.4.19 2021 Monthly Av. 2023 Monthly Av. Percentage Increase 6,836 11,361 +66%

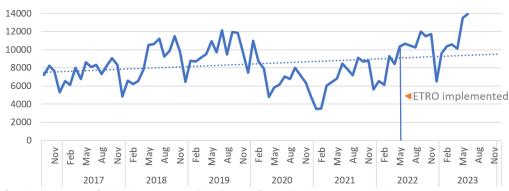
Cycle counts, Chippinghouse Rd/Broadfield Rd (2-way) permanent counter

1.4.20 2021 Monthly Av. 2023 Monthly Av. Percentage Increase 2,141 3,464 +62%

Cycle counts, Shoreham St/St Mary's Rd (northbound) permanent counter

- 1.4.21 Two permanent static counters have recorded a record number of cycle trips in May and June 2023 at the Chippinghouse Rd/Broadfield Rd counter (13,517 & 13,948 respectively).
- 1.4.22 The total number of cycle trips over a 12-month period before and after interventions were implemented show an increase of over 33% at Chippinghouse Rd/Broadfield Rd counter and a 35% increase at the Shoreham Street counter (near St Mary's Rd) since interventions were implemented in May 2022. This compares total annual trips between May 2021 and April 2022 with total annual trips between May 2022 and April 2023 at both counter points.
- 1.4.23 The permanent static counters show cycle trips have been steadily increasing since early 2021 following easing of travel restrictions associated with the Covid-19 pandemic.

# 1.4.24 Cycle Counts on Sheaf Valley Cycle Route Chippinghouse Rd-Broadfield Rd (two way counter)



Cycle counts, Chippinghouse Rd/Broadfield Rd (two-way) since counter was installed in September 2016.

## Cycle Counts on Sheaf Valley Cycle Route

1.4.25 Chippinghouse Rd-Broadfield Rd (two way counter)



Cycle counts, Chippinghouse Rd/Broadfield Rd (two-way) since January 2021.



Cycle counts Shoreham St/St Mary's Rd (northbound only) since counter was installed in September 2020.

- 1.4.27 Note: The two permanent static counters are unable to capture reliable pedestrian data.
- 1.4.28 Several temporary 1-day cycle and pedestrian counts were carried out at key junctions. These counts were carried out from 7am and 7pm in June 2021 and June 2023. Data below shows total pedestrian and cycle movements across these junctions over the 12-hour period.
- 1.4.29 Compared to the permanent static counters, the 1-day temporary counts show a greater increase in cycle trips across junctions on Little London Rd and Saxon Rd (between 71% and 80%) and a lower increase at junctions on Asline Rd and Shoreham St (51% and 56% respectively).
- 1.4.30 1-day pedestrian counts show that pedestrian trips are more variable along the route ranging from a decrease of 10% at Asline Rd and increase of 39% along the Little London Rd/Saxon Rd shared used footway between June 2021 and June 2023. However, the average across the route is an increase in walking trips of 15%, meeting another key objective of the scheme.
- 1.4.31 Table showing changes in Change in no. Percentage pedestrian & cycle trips at of trips Change locations along the SVCR. Jun 21-Jun 23 Jun 21-Jun 23 Cycles Peds Cycles Peds Little London Rd/Rydal Rd +8% 59 252 +78% Little London Rd/Broadfield Way -3 272 0% +77% Saxon Rd (south of Clyde Rd) 151 277 +35% 80% Little London Rd/Saxon Rd 174 +39% +71% 232 Asline Rd -173 +51% 151 -10% Shoreham St 206 159 +15% +56% +15% +69% **Average**

1.4.32 1-day counts focusing solely on northbound and southbound movements show significant increases in cycle trips along the SVCR, as well as reductions in cycle trips on Chesterfield Rd and Abbeydale Rd. Some cyclists will be using the SVCR rather than main roads. As cyclists move over to the safer provision, the risk of conflict between cyclists and motorised vehicles is reduced. Further benefits may be experienced in the form of reduced journey times for buses and private vehicles as cyclists tend to be using bus lanes and travel at a relatively slow pace outside of peak times.

1.4.33

Northbound cycle counts on the SVCR compare Jun 21 - Jun 23. Counts on	Change in cycle trips northbound only			
Chesterfield Rd and Abbeydale Rd compare Nov 21 -Nov 22.	Before	After	% Change	
Chesterfield Rd (nr Woodseats Rd) Nov 2021 – Nov 2022	64	49	-23%	
Abbeydale Rd (nr Woodseats Rd) Nov 2021 – Nov 2022	126	96	-24%	
Little London Rd (nr Rydal Rd) Jun 21 – Jun 23	89	273	+207%	
Little London Rd (nr Broadfield Way) Jun 21 – Jun 23	138	256	+86%	
Saxon Rd Jun 21 – Jun 23	170	308	+81%	
Asline Rd Jun 21 – Jun 23	159	237	+49%	
Shoreham St Jun 21 – Jun 23	137	206	+50%	

1.4.34

Southbound cycle counts on the SVCR compare Jun 21 - Jun 23. Counts on  Change in cycle southbound or			
Chesterfield Rd and Abbeydale Rd compare Nov 21 -Nov 22.	Before	After	% Change
Chesterfield Rd (nr Woodseats Rd) Nov 2021 – Nov 2022	54	40	-26%
Abbeydale Rd (nr Woodseats Rd) Nov 2021 – Nov 2022	87	127	+46%
Little London Rd (nr Rydal Rd) Jun 21 – Jun 23	118	190	+61%
Little London Rd (nr Broadfield Way) Jun 21 – Jun 23	162	288	+78%
Saxon Rd Jun 21 – Jun 23	175	314	+79%
Asline Rd Jun 21 – Jun 23	139	212	+53%
Shoreham St Jun 21 – Jun 23	102	171	+68%

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		Change in cycle trips (north and southbound)		
	Before	After	% Change	
Chesterfield Rd (nr Woodseats Rd) Nov 2021 – Nov 2022	118	89	-25%	
Abbeydale Rd (nr Woodseats Rd) Nov 2021 – Nov 2022	213	223	+5%	
Little London Rd (nr Rydal Rd) Jun 21 – Jun 23	207	463	+124%	
Little London Rd (nr Broadfield Way) Jun 21 – Jun 23	300	544	+81%	
Saxon Rd Jun 21 – Jun 23	345	622	+80%	
Asline Rd Jun 21 – Jun 23	298	449	+51%	
Shoreham St Jun 21 – Jun 23	239	377	+58%	

North/South cycle counts on the SVCR compare Jun 21 - Jun 23. Counts on Chesterfield Rd and Abbeydale Rd compare Nov 21 -Nov 22.

## 1.4.36 Cycle Counts on Chesterfield Rd.

A single count was carried out at the junction of Chesterfield Rd and Woodseats Rd showing a drop of 51 cycle trips or 34% across all arms of the junction between June 2021 and June 2023. It is likely that more cyclists are using the safer provision along Little London Rd and roads further north. This reduces the risk of conflict between different road users on Chesterfield Rd and may help to increase traffic flows and journey times, particularly for buses that tend to share lanes with slower moving cyclists.

#### 1.4.38 Cycle count control sites

- 1.4.39 There are 12 operational static cycle counters at locations across the city. The average increase in recorded cycle trips across the city is less than 16% (2021-2023) for the 10 counters that are not located on the SVCR.
- 1.4.40 Two permanent static counters on the SVCR show the most significant increase in cycling (over 62-66% increase comparing a 12-month average between 2021 and 2023). This highlights just how successful the SVCR, and interventions associated with the ETO, have been at increasing rates of cycling along this corridor.
- 1.4.41 Broomspring Ln and Moore St roundabout permanent static counters show significant increases in cycling between 2021 and 2023 (45% and 32% respectively). This increases the city-wide average increase in cycling rates across the 12 counters. Broomspring Ln and Moore St counters are in areas that have existing high-quality cycling infrastructure. They are also within proximity to the city centre, hospitals, universities etc, where there is likely to be a higher propensity to cycle. The Broomspring Ln counter is located at a modal filter/point closure like those being implanted through the ETO. It also

links to a high-quality parallel crossing at the ring road, which uses advanced technology to sense oncoming cyclists, and adjusts signal times based on approaching cyclists and vehicle flows along the ring road. Similarly, the Moor Street roundabout counter is at a location that benefits from shared used cycle lanes, underpasses that divert cyclists away from motorised vehicles, as well as new cycling infrastructure at Charter Square and Charter Row, which will be further improved by the proposed Nether Edge Wedge scheme. Details of data collected at permanent static cycle counters across the city can be found in appendix D.

#### 1.4.42 Journey Time Data

- 1.4.43 Journey time data largely shows that average journey times have only increased by seconds (up to a minute), since interventions were implemented. However, journey times have increased more significantly for the longest 10% of journeys (likely at peak times) by several minutes (5 minutes in the most significant case southbound journeys on Chesterfield Rd comparing September-November 2021 with September-November 2022). The interventions being implemented through the ETO are designed to favour walking and cycling over motorised vehicle journeys along the SVCR. It is positive that the impact on journey times on other roads appears minimal.
- 1.4.44 Journey times are highly variable along all routes, which highlights network vulnerability to traffic events. This is true both before and after interventions were implemented and demonstrates that journey times are impacted by external factors not related to this scheme.
- 1.4.45 The most notable increases in journey times are generally linked to short sections of road running up to signalised junctions, which is to be expected.
- 1.4.46 Signal alterations will help to alleviate issues at signalised junctions. These are planned as part of bus corridor improvement schemes (Southwest bus corridor improvement schemes and the A61 Chesterfield Rd CRSTS scheme) on Abbeydale Rd, Ecclesall Rd and Chesterfield Rd,
- 1.4.47 Changes in journey times have been calculated using telematics (black box) data. This uses data is collated over a 2–3-month period, comparing the same period between different years. It is the most reliable data used to show long-term changes in journey times and vehicle flows.
- 1.4.48 Telematic journey time data can show changes over very short section of highway to pinpoint issues at specific locations such as junctions. The data is more reliable with a larger data set and therefore works well on busier main roads. Data has been used to analyse journey

times on sections of the highway most closely linked and impacted upon by the Little London Rd modal filter. This includes:

- Woodseats Rd/Abbeydale Rd (northbound)
- Little London Rd/Broadfield Way/Rd/Abbeydale Rd (southbound)
- Chesterfield Rd (northbound) from The Dale to Wolseley Rd
- Chesterfield Rd (southbound) from Wolseley Rd to The Dale
- Broadfield Rd (northbound) from Abbeydale Rd to London Rd
- Broadfield Rd (southbound) from London Rd to Abbeydale Rd
- 1.4.49 Average journey times, as well as the 10<sup>th</sup> and 90<sup>th</sup> percentile of journeys have been considered (longest and shortest 10 percent of journeys). Data from September-November 2021 has been compared with September-November and data from March-April 2022 with March-April 2023.
- 1.4.50 Over any specific period, journey times are often two to three times longer when comparing the 10<sup>th</sup> and 90<sup>th</sup> percentiles (shortest and longest 10% of journeys). This is true both before and after interventions were implemented. For example, in March-April 2022, the 10<sup>th</sup> percentile of journeys on Chesterfield Rd was 4 minutes 20 seconds, whereas the 90<sup>th</sup> percentile was 12 minutes 40 seconds (a 271% increase). This was before the interventions were implemented.
- 1.4.51 The most notable increases in journey times are in the 90<sup>th</sup> percentile (top 10% of journey times) travelling southbound on Chesterfield Rd (between Wolseley Rd and The Dale), when comparing September-November 2021 with September-November 2022. This data shows a journey time increase of roughly 5 minutes (+55%) for a 1.6-mile journey.
- 1.4.52 Changes in journey times are generally negligible for the lowest 10% of journey times. This likely shows that journey times are only marginally affected during times of low traffic flows.
- Comparing data from March-April 2022 with data from March-April 2023, there has been some minor drops in journey times southbound on Chesterfield Rd (-2% from Wolseley Rd to The Dale) and northbound on Broadfield Rd (-5%).
- 1.4.54 Further details of all changes in journey times and maps of the routes assessed can be found in the traffic monitoring data pack in appendix T.

- 1.4.55 Traffic Count Data
- 1.4.56 Traffic Count Control sites
- 1.4.57 Vehicle counts have been carried out at several control sites in Sharrow Vale. This helps to isolate external factors influencing traffic counts with the impacts of interventions associated with the ETOs (for both the Nether Edge Active Travel Scheme and the SVCR). These counts show:
  - A 1% decrease in motorised traffic counts; and
  - A 3% decrease in active travel counts.
- 1.4.58 Further information related to the selection of this control site can be seen in appendix E.
- 1.4.59 Detailed traffic count data has also been gathered from Sheaf Street/Harmer Ln as an additional control site. Comparing June 2021 with June 2023 shows a traffic count increase of 8% at this location. Comparing November 2021 with November 2022 shows a 1% increase in traffic at this location.
- 1.4.60 Looking at overall annual traffic count data at Sheaf St, there has been roughly a 4.6-5.6% increase in traffic volumes from 2021 to 2022 and from 2022 to 2023. This is most likely due to traffic volumes increasing towards pre-pandemic levels following the easing of travel restrictions (associated with Covid-19) in 2021. Comparing 2021 to 2023 data this is roughly a 10.5-11% increase in traffic volumes overall (figures vary slightly depending on whether a 5 or a 7-day average is used see appendix F)
- 1.4.61 Traffic Count Sites along the Sheaf Valley (appendix T)
- 1.4.62 Vehicle traffic counts have been carried out at key junctions both before and after interventions associated with the ETO were introduced. Data largely focuses on counts carried out between June 2021 and June 2023. The Abbeydale Rd, Broadfield Rd and Sheldon Rd junction is covered in detail below. This has been used as a key example because Abbeydale Rd was mentioned 232 times in feedback gathered as part of the formal ETO consultation period. Only Little London Rd received more mentions. The roads receiving most mentions include London Road (287 mentions), Abbeydale Road (232 mentions), Woodseats Rd (105 mentions), Broadfield Road (67 mentions) and Chesterfield Road (59 mentions). Vehicle counts across other junctions are shown in appendix T.
- 1.4.63 Despite traffic trends continuing to rise following the restrictions implemented in response to the Covid-19 pandemic, overall changes in motorised vehicle counts at the Chesterfield Rd/Woodseats Rd and Abbeydale Rd/Woodseats Rd junctions are negligible between June 2021 and June 2023.

1.4.64 There have been significant decreases in motorised traffic movements at key locations along the SVCR due to interventions associated with the ETO. This is most notable on Little London Rd, where there has been a 94% reduction in vehicle counts overall between June 2021 and June 2023. Although there is a slight increase in traffic counts on Saxon Rd (1%), there is also a notable decrease in traffic (13%) on Asline Rd even though interventions here are not specifically designed to reduce traffic flows.

1.4.65

	Change in no. of vehicle trips Jun 21-Jun 23	Percentage Change Jun 21-Jun 23
Chesterfield Rd/Woodseats Rd	-17	0%
Abbeydale Rd/Woodseats Rd	49	0%
London Rd/Rydal Rd	-3,053	-94%
London Rd/Broadfield Way	-2,171	-38%
Saxon Rd	21	+1%
Asline Rd	-642	-13%
Shoreham St	-1,194	-39%

Total vehicle count changes across key junctions along the Sheaf Valley. This shows changes across all arms of each junction.

1.4.66 Northbound and southbound trips only have been identified in the vehicle counts taken between June 21 and June 22 as show in the tables below. Both southbound and northbound traffic counts have decreased on Abbeydale Rd, whilst southbound traffic has increased by just over 5% on Chesterfield Rd. southbound traffic has increased on Shoreham St by over 28% but northbound traffic has decreased by 24%.

1.4.67

	Change in Northbound vehicle trips			
	Before	After	% Change	
Chesterfield Rd (nr Woodseats Rd) Nov 2021 – Nov 2022	6,547	6,549	+0.03%	
Abbeydale Rd (nr Woodseats Rd) Nov 2021 – Nov 2022	8,481	7,932	-6.5%	
Little London Rd Jun 21 – Jun 23	1,352	157	-88.4%	
Broadfield Way Jun 21 – Jun 23	3,882	3,127	-19.4%	
Asline Rd Jun 21 – Jun 23	5,006	4,364	-12.8%	
Shoreham St Jun 21 – Jun 23	1,349	1,024	-24.1%	

Changes in northbound vehicle flows across key junctions along the Sheaf Valley.

1.4.68

	Change in Southbound vehicle trips			
	Before	After	% Change	
Chesterfield Rd (nr Woodseats Rd) Nov 2021 – Nov 2022	7,592	7,983	+5.2%	
Abbeydale Rd (nr Woodseats Rd) Nov 2021 – Nov 2022	6,894	6,742	-2.2%	
Little London Rd Jun 21 – Jun 23	1,739	2	-99.9%	
Saxon Rd Jun 21 – Jun 23	1,928	1,949	+1.1%	
Shoreham St Jun 21 – Jun 23	564	724	+28.4%	

Changes in southbound vehicle flows across key junctions along the Sheaf Valley.

#### 1.4.69 Abbeydale Rd, Sheldon Rd, Broadfield Rd Junction

- 1.4.70 Traffic flows across the Abbeydale Rd, Sheldon Rd, Broadfield Rd junction are summarised as follows:
  - Overall traffic counts have increased by 1.5% over a 12-hour period, 5.8% at am peak and 0.8% at pm peak.
  - Data shows a 5.8% increase in northbound vehicles travelling into the junction on Abbeydale Rd (513 vehicles) over a 12-hour period. This is 16% increase (122 vehicles) at am peak times and an 11% increase (81 vehicles) at pm peak times.
  - Vehicle counts have decreased further south on Abbeydale Rd by 6.5% (549 vehicles) for northbound flows at the Woodseats Rd junction.
  - Traffic counts on Sheldon Rd have dropped 12% at peak pm times near this junction.
  - Traffic counts on Broadfield Rd have dropped 18% at peak pm times near this junction.
  - Changes in traffic signals may reduce congestion at this junction, as proposed through planed bus corridor improvement schemes.

Further details can be found in appendix G and appendix T

- 1.4.71 Traffic observations over a 12-hour period (7am-7pm) show changes in traffic counts but these are less significant than at peak times. Vehicle counts show:
  - A 3.4% drop and a 2% drop in vehicle counts travelling into the junction from Sheldon Rd and Broadfield Rd respectively.
  - On Abbeydale Rd there is a 5.8% increase in vehicles travelling northbound into the junction (towards the city) and a 1.2% increase in vehicles traveling southbound into the junction (away from the city).

- 1.4.72 The total number of vehicles counted (in both directions) at the four arms of this junction (7am-7pm) show:
  - A 0.1% drop on Sheldon Rd
  - A 1.1% drop on Broadfield Rd
  - A 0.8% drop on Abbeydale Rd (Sheldon Rd to Bedale Rd)
  - A 6.3% increase on Abbeydale Rd (Sheldon Rd to Glen Rd)
- 1.4.73 The most significant increase in vehicle counts (15.8%) is on Abbeydale Rd travelling northbound towards the junction at am peak time (8am 9am). There is an increase in vehicle counts (4.8%) on Abbeydale Rd travelling southbound into the junction; a slight reduction in traffic counts running into the junction on Sheldon Rd (-1%); and on Broadfield Rd (-2%) at am peak (8am-9am).
- 1.4.74 On Abbeydale Rd at pm peak (5pm-6pm), there is an increase in vehicle counts of 11.3% northbound towards the junction and a 0.4% increase southbound into the junction. This is met by a reduction in traffic counts running into the junction on Sheldon Rd (-16.2%) and Broadfield Rd (-4.7%).
- 1.4.75 Additional counts on Abbeydale Rd at the Woodseats Rd junction, show a drop in vehicles counts of 6.5% northbound and 1.6% southbound (4.27% in both directions). This suggests that increases in traffic counts are limited to a short section of Abbeydale Rd near the Sheldon Rd/Broadfield Rd junction.
- 1.4.76 Data shows vehicle movements at a specific point on the network. Vehicles travelling multiple times through a junction would be counted more than once. Therefore, the number of vehicle trips counted is likely to be higher than the actual number of trips or total number of vehicles on the road in any given period.
- 1.4.77 More information about the specific locations and data collected is shown in appendix G.
- 1.4.79 <u>Bus Journey Time Data</u> (see appendix H)
- 1.4.80 Peak time bus journey times along Abbeydale Rd increased for inbound buses but decreased for outbound buses following the implementation of interventions (comparing May-2022 with October-2022).
- 1.4.81 The most significant changes are an increase from 8.2 to 9.3 minutes for peak am inbound buses and a decrease from 6.4 to 5.8 minutes for peak pm outbound buses. These changes in journey times were recorded between the Tesco Superstore and Abbeydale Picture House (roughly 1 mile). Peak times include 8.00am-9.30am and 4pm-6pm. Further details can be found in appendix H).

- 1.4.82 For inbound buses (am and pm), the most significant delays in journey times appear to be at the Archer Rd signals but for outbound buses the greatest reduction in journey times at am peak times are also at this junction.
- 1.4.83 Changes to traffic signals form part of the proposals included in the planned Southwest bus corridor schemes Abbeydale Rd and Ecclesall Rd as well as CRSTS funded bus route improvements on Chesterfield Rd. These will support improvements at key (signalised) junctions such as the Archer Rd junction.
- 1.4.84 The data available for bus journey times is not considered reliable enough to draw any firm conclusions about the impact the scheme may have on bus journey times. Data focuses on 8am-9am and 5pm-6pm peak times only. Given that there are only a relatively small number of buses making these journeys at these specific times, means the data may be skewed by a significant delay of just one bus (or lack thereof). Road works, traffic events, weather, bus driver changeovers, seasonal changes or the numbers of passengers getting on or off buses at a single location will all impact the reliability of the data.

#### 1.4.85 Collision data

- 1.4.86 Collision data shows a reduction in the number of vulnerable road users involved in collisions since the interventions were implemented. It is important to note that none of the reported collisions occurred directly on the SVCR. The data sample is small, so is unlikely to identify any reliable long-term trends in personal injury. Therefore, no reliable conclusions can be drawn on whether the scheme has had an impact on the overall number or types of collision on the route and surrounding road network.
- 1.4.87 Casualty numbers compare June to December in 2021 with June to December 2022 to highlight any obvious changes. Identifying collision patterns associated with transport schemes, typically requires at least 3 years of personal injury collision data to formulate reliable trends. This is not possible for a scheme that is less than 18 months old.

1	4	88
	1.4.	COCO

	Collision type			VRU Co	llisions	No. of VRUs		
	Slight Serious Fatal Total Cyclists Peds C			Child	P e d s			
Jun-21 to Dec-21 (before ETO)	12	5	1	18	4	7	2	8
Jun-22 to Dec-22 (after ETO)	12	5	0	17	4	3	0	3

Data shows a drop in collisions, particularly in the number of Vulnerable Road Users involved.

- 1.4.89 Eliminating through traffic or reducing the number of motorised vehicles on the SVCR aims to improve safety for people travelling on foot or by bike. Measures should lead to a reduction in the overall number and severity of road traffic collisions on the SVCR, it may also divert vulnerable road users away from other roads, therefore reducing the risk of a collision at these locations. This should not be at the expense of increased risk, for other road users elsewhere on the network.
- 1.4.90 Collision data should be viewed with caution for several reasons:
  - Reported collisions may take time to filter into national databases.
  - Classification of collisions can be subjective and reporting variable.
  - Collision rates can vary significantly over shorter time periods.
  - Reliable trends require long-term data sets (2-3 year or more)
  - Some collisions may not yet be properly verified.
  - Not all collisions or incidents are reported. appendix I includes maps of where these collisions took place.

#### 1.4.91 Crime Data

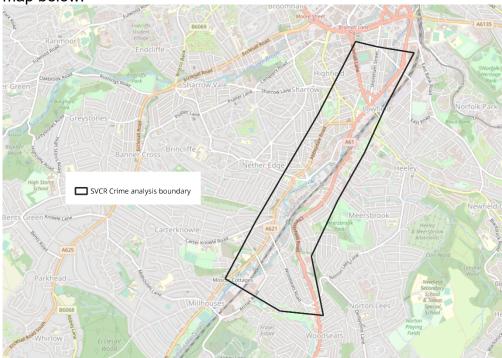
- 1.4.92 Data shows overall crime has reduced by 10.3% in the Sheaf Valley study area and demonstrates more positive changes in crime across most crime types when compared to the city-wide average. Data has not been split between crimes taking place directly on the SVCR and crimes taking place on other nearby roads. The data sample is small, so is unlikely to identify any reliable long-term trends in crime. Therefore, no reliable conclusions can be drawn on whether the scheme has had an impact on the overall number or types of crimes on the route and surrounding roads and streets.
- 1.4.93 Crime data has been obtained from a crime and policing open data source. Data from police forces across the country (including South Yorkshire Police) is published by the Single Online Home National Digital Team.
- 1.4.94 Crime data below shows changes in reported crime within the Sheaf Valley study area, as well as city-wide. Data compares crime reported from June 2021 to April 2022 (12 months before interventions were implemented) with crime reported from June 2022 to April 2023 (12 months after interventions were implemented).

1.4.95

Crime Type	Sheaf Valley Study Area		City Wide			
	Before	After	Change	Before	Before After Cha	
Violence/sexual offences	484	412	-14.9%	19,646	19,967	1.6%
Anti-social behaviour	281	252	-10.3%	9,960	9,031	-9.3%
Public order	183	151	-17.5%	5,729	6,113	6.7%
Criminal damage/arson	151	134	-11.3%	5,758	5,754	-0.1%
Vehicle crime	137	167	21.9%	4,331	4,975	14.9%
Shoplifting	114	76	-33.3%	3,204	4,129	28.9%
Burglary	109	118	8.3%	3,984	3,907	-1.9%
Other theft	90	94	4.4%	3,774	4,162	10.3%
Drugs	66	44	-33.3%	1,512	1,622	7.3%
Bicycle theft	39	18	-53.8%	503	399	-20.7%
Other crime	33	33	0.0%	1,387	1,425	2.7%
Possession of weapons	13	19	46.2%	608	696	14.5%
Robbery	9	12	33.3%	645	662	2.6%
Theft from the person	6	8	33.3%	559	635	13.6%
Total	1715	1538	-10.3%	61,600	63,477	3.0%

- 1.4.96 Most reported crime types have reduced, whilst others such as vehicle crime have increased. In percentage terms possession of weapons, robbery and theft from a person have increased most significantly but the total of all these three crime types, represent around 2% of total reported crimes. These crimes are starting from a relatively low baseline (less than 28 incidents compared to 484 reported incidents of violence and sexual assault) and so any small increase will represent a larger percentage.
- 1.4.97 Crime data should be viewed with caution for several reasons:
  - Reported crimes may take time to filter into national databases.
  - Classification of crimes can be subjective and reporting variable.
  - Crime rates can vary significantly over shorter time periods.
  - Reliable trends require long-term data sets (2-3 year or more)
  - Some crimes may not yet be properly verified.
  - Not all crimes or incidents are reported.

1.4.98 The analysis of crime in the Sheaf Valley covers the area shown in the map below.



#### 1.4.99 Speed Data

- 1.4.100 Speed data shows that the 85th percentile of vehicle speeds (the fasted 15% of journeys) captured on Shoreham St and Edmund St, fell from 32mph to 28mph and 30mph to 27mph respectively between June 2021 and May 2023.
- 1.4.101 A limited number of speed traps were used to provide an indication of changes in speeds brought about by interventions being trailed as part of the ETO. These were carried out at locations where pre-delivery data was already available. Data compares speeds captured in June 2021 with speeds captured in May 2023 on Shoreham Street (near Bramall Ln Stadium) and parallel to this on Edmund Street.
- 1.4.<sub>102</sub> This data provides a very limited picture of speed changes across the whole Sheaf Valley corridor but demonstrates that speeds have reduced, both directly on the cycle route corridor, and on parallel residential roads.

#### 1.4.103 Air Quality

1.4.104 Overall traffic volumes and traffic flows discussed in this report can be used to provide an indication of possible changes in vehicle emissions since interventions associated with the ETO were implemented. Any changes in traffic movements or traffic volumes that lead to traffic congestion, may influence air quality in isolated areas or at isolated times. However, there currently exists no reliable air quality monitoring data that can provide an

- accurate indication of the impact the scheme has had on air quality at a specific location on the road network or over specific short-term time periods.
- 1.4.105 Across the Sheaf Valley Nitrogen Dioxide (NO2) monitoring sites, the annual average concentrations of NO2 in 2022 were 34 mg/m3. This is an increase of 12% since 2021 (31 mg/m3) but lower than pre-pandemic levels. This is broadly in line with the Sheffield average of 35 mg/m3, which is an overall average increase of 15.9% compared to 2021. It is important to note that the latest available data for 2022 provide a 12-month average only. Given that the interventions associated with the ETO were implemented in May 2022 (nearly halfway through the year), it is not possible to use this data to draw any conclusions about the impact the scheme may have had on overall air quality.
- 1.4.106 A scheme of this scale is unlikely to have a notable impact on overall air quality at this early stage because any perceptible change in transport related pollutants would require a hugely significant change in motorised vehicle counts, which is not currently the case.
- 1.4.107 Sheffield City Council has been monitoring and tackling air pollution for many years. In 2010 an Air Quality Management Area was declared across the whole of the urban area of the city. Nitrogen dioxide (NO2) is measured relatively easily using simple, low-cost passive diffusion tubes. Diffusion tubes are a cheap, manual, yet reliable indicator of long-term changes in air pollution when used over a wide area and over period of at least 2-3 years. NO2 levels are monitored in this way at several hundred locations. These are not all always operational but there are around 200 sites being monitoring at any given time.
- 1.4.108 Concentrations of NO2 are measured at key locations relevant to this scheme including along Abbeydale Rd, Chesterfield Rd, London Rd and Shoreham Street. These measurements provide long-term changes in averages NO2 concentrations up to 2022 as shown below.

1.4.109

	Average annual concentrations of NO2 (mg/m3)									
Location	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Abbeydale Rd/Carterknowle Rd	51	47	44	44	41	38	38	31	32	39
Abbeydale Rd/Leyburn Rd		44	44	42	41	39	39	31	33	41
Abbeydale Rd/St Ronan's Rd		38	36	36	33	31	32	24	26	31
Abbeydale Rd/Chippinghouse Rd 1		23	24	23	23	20	21	16	23	28
Abbeydale Rd/Chippinghouse Rd 2		43	45	39	39	34	36	22	21	20
Abbeydale Rd/Chippinghouse Rd 3								32	34	33
Meersbrook Bank Primary						24	20	14	15	17
Chesterfield Rd/Meersbrook Park Rd	63	56	54	50	48	45	41	32	37	40
Chesterfield Rd/Valley Rd						41	41	32	36	38
London Rd/Well Rd	57	56	55	49	46	46	48	38	43	48
London Rd/Sark Rd	56	54	54	50	44	45	42	34	39	42
Lowfield School (218)	38	37	39	34	32	30	31	25	25	30
Lowfield School (217)	37	37	36	31	31	29	30	25	25	30
Lowfield School (219)	40	39	38	34	35	32	32	24	27	30
Shoreham St/St Mary's Rd	41	41	38	38	38	34				
Shoreham St/Matilda Ln	58	53	55	52	48	46	47	37	39	44
Average across all locations	49	44	43	40	38	36	36	28	30	34

1.4.110

	Percentage change in NO2 from previous year								
Location	2014	2015	2016	2017	2018	2019	2020	2021	2022
Abbeyd Rd/Carterknwle Rd	-8%	-6%	0%	-7%	-7%	0%	-18%	3%	22%
Abbeyd Rd/Leyburn Rd		0%	-5%	-2%	-5%	0%	-21%	6%	24%
Abbeyd Rd/St Ronan's Rd		-5%	0%	-8%	-6%	3%	-25%	8%	19%
Abbeydale Rd/Chippinghs Rd 1		4%	-4%	0%	-13%	5%	-24%	44%	22%
Abbeyd Rd/Chippinghs Rd 2		5%	-13%	0%	-13%	6%	-39%	-5%	-5%
Abbeyd Rd/Chippinghs Rd 3								6%	-3%
Meersbrook Bank Primary						-17%	-30%	7%	13%
Chesterfld Rd/Meersbr Park Rd	-11%	-4%	-7%	-4%	-6%	-9%	-22%	16%	8%
Chesterfld Rd/Valley Rd						0%	-22%	13%	6%
London Rd/Well Rd	-2%	-2%	-11%	-6%	0%	4%	-21%	13%	12%
London Rd/Sark Rd	-4%	0%	-7%	-12%	2%	-7%	-19%	15%	8%
Lowfield School (218)	-3%	5%	-13%	-6%	-6%	3%	-19%	0%	20%
Lowfield School (217)	0%	-3%	-14%	0%	-6%	3%	-17%	0%	20%
Lowfield School (219)	-3%	-3%	-11%	3%	-9%	0%	-25%	13%	11%
Shoreham St/St Mary's Rd	0%	-7%	0%	0%	-11%				
Shoreham St/Matilda Ln	-9%	4%	-5%	-8%	-4%	2%	-21%	5%	13%
Average	-11%	-1%	-7%	-4%	-7%	0%	-22%	9%	12%

1.4.111 These changes are broadly in line with city wide averages as shown below

1.4.112

Average annual concentrations of NO2 (mg/m3) and percentage change in NO2 from previous year - across all Sheffield diffusion tubes									
Year	2017 2018 2019 2020 2021								
Av. annual NO2 reading (mg/m3)	37	37	38	29	31	35			
Percentage change in NO2	37	37	36	-	31	33			
from previous year		-1.1%	4.3%	23.4%	3.9%	15.9%			

1.4.113 Tables below show annual average NO2 concentrations across wards that the SVCR passes through, alongside the percentage change in NO2 from the previous year.

1.4.114

Council Ward	No. of Monitoring	NO₂ Annual Mean Concentration (μg/m³)							
	Locations	2017	2018	2019	2020	2021	2022		
City	67	45	45	46	36	37	43		
Gleadless Valley	5	47	38	37	29	32	35		
Graves Park	8	31	30	32	23	25	28		
Nether Edge & Sharrow	16	32	30	31	24	27	29		

1.4.115

Council Ward	No. of Monitoring	Percentage change in NO2 from previous year						
	Locations	2018	2019	2020	2021	2022		
City	67	-1%	2%	-21%	2%	18%		
Gleadless Valley	5	-19%	-2%	-24%	13%	7%		
Graves Park	8	-4%	5%	-26%	8%	10%		
Nether Edge & Sharrow	16	-6%	3%	-23%	10%	9%		

- 1.4.116 NO2 concentrations have increased nationally, regionally and across Sheffield since 2020. Traffic volumes have continued to increase since 2020, following the easing of travel restrictions associated with the covid-19 pandemic.
- 1.4.117 There are multiple limitations associated with measuring NO2 further explored in appendix J. Data above provides an annual average concentration of NO2 up to 2022. Given the interventions associated with the ETO were implemented in May 2022, there is a lack of data to show changes in concentrations of NO2 both before and after the scheme was developed.
- 1.4.118 Any significant modal shift from motorised vehicle travel to walking, wheeling, cycling or public transport will provide an overall benefit to air quality in the long term. It is prolonged and consistent exposure to

pollutants (such as NO2 and particulates) that pose the greatest risk to long-term health and wellbeing, rather than short-term, isolated, or intermittent exposure to pollutants. A long-term and sustained reduction in overall vehicle traffic, will lead to improvements in overall air quality, reducing long-term exposure to harmful pollutants and therefore increasing overall physical health and wellbeing. Public health will benefit further from increases in physical activity through, for example, increased rates of active travel.

1.4.119 Monitoring outputs of tubes close the SVCR can be found in appendix J alongside further rationale for our approach to measuring air quality.

#### 2. HOW DOES THIS DECISION CONTRIBUTE?

- 2.1 The Sheaf Valley Cycle Route (SVCR) was put forward for funding for several reasons including:
  - The route was already reasonably well used by cyclists and pedestrians travelling to and from the city centre from nearby residential areas.
  - Topography, population density and connections to key destinations meant there was a high propensity for cycling.
  - Potential for significant modal shift from a high number of relatively short car journeys to active modes of travel along this corridor.
  - Proximity and links to other new and planned active travel infrastructure schemes such as the Nether Edge Active Travel Neighbourhood and Nether Edge - City Centre Cycle Route.
  - Simple, low-cost point closures or modal filters provide a safe, low-traffic route without the need for costly infrastructure such as segregated cycle lanes.
- 2.2 Investment in sustainable travel such as the SVCR scheme will directly contribute to SYMCA's Strategic and Economic Plan (SEP). In summary, the scheme will support the visions and ambitions of the SEP as follows:
  - Unlocking capacity and improving future efficiency and resilience of the transport network by reducing the number of shorter car journeys and reducing the future risk of traffic congestion events.
  - Proving an equitable transport system that works for all by connecting housing, employment and commercial sites through new, safer, attractive, and accessible cycling and walking infrastructure.
  - Enhancing productivity through increased health and wellbeing brought about by transport modes that involve physical activity.
  - Supporting a thriving economy.
  - Reducing transport related carbon emissions.

- 2.3 The scheme will also contribute to the delivery of the Government's Cycling and Walking Investment Strategy, which was updated in March 2022. Opportunities for cycling and walking are recognised at the national level and there is significant potential for changes to travel behaviour. The ambition is that 50% of all journeys in towns and cities should be walked or cycled by 2030.
- 2.4 The implementation of active travel infrastructure will contribute to Public Health outcomes and targets by making it easier for people to be active on a daily basis. The Move More physical activity strategy for Sheffield emphasises that walking and cycling needs to be more convenient, more accessible, and more acceptable for everyone. Well designed and safe walking and cycling transport systems will help create active, healthier, and more liveable communities. Creating a culture of physical activity in Sheffield could lead to the prevention of hundreds of premature deaths each year as well as providing social, physical and economic benefit to the city.
- 2.5 In February 2019, Sheffield City Council declared a climate emergency. This highlights the urgent need to reduce carbon emissions, whilst enabling our economy to grow. In total, 60% of journeys in Sheffield are made by car, and around 40% are less than 1km. Consequently, transport is one of the most significant contributors to carbon emissions and enabling and encouraging walking and cycle can reduce carbon emissions.
- 2.6 Locally, the city's 2019 Transport Strategy includes increasing rates of cycling and walking. This is imperative if current vehicle traffic volumes and flows are to be maintained give than growth and development in the city is expected to continue, which includes construction of an estimated 18,000 new homes as highlighted in the forthcoming Local Plan. Furthermore, the South Yorkshire Mayor's 'Vision for Transport' aims to put pedestrians and cyclists at the heart of SYMCA's transport plans to address carbon emissions.
- 2.7 The scheme's strategic alignment is clear. The SVCR supports walking and cycling on one of the key transport corridors between the Sheffield city centre and residential communities to the south. The route spearheads the provision of a coherent, direct, safe, comfortable, and attractive active travel infrastructure network. Road danger associated with high vehicle speeds and high volumes of traffic is regularly cited as one of the biggest barriers to walking and cycling. The SVCR provides an active travel corridor as a viable alternative to car travel.
- 2.8 A continued reliance on private car trips inevitably puts pressure on the wider transport network with increased risk of traffic congestion events. One of the ways in which the Council can manage traffic levels is via the introduction of area-wide active travel routes. This has been mainly focused in and around the city centre with ambitions for more routes connected to residential and commercial centres.

#### 3. HAS THERE BEEN ANY CONSULTATION?

#### 3.1 Consultation Approach

3.1.1 To shape the introduction and delivery of the Sheaf Valley Cycle Route (SVCR), the following engagement and consultation has taken place:

#### 3.1.2 *Initial/Pre-Delivery Consultation (2020/2021)*

- 3.1.3 The Connecting Sheffield programme and Commonplace online platform were launched in November 2020. From November 2020 through to June 2021, a series of meetings, webinars and drop-in sessions were arranged with key stakeholder including political, civic and community leaders, businesses, and interest groups. A telephone information line, email inbox and postal address was set up for the programme and promoted going forward. There have been ongoing meetings with elected members and key stakeholders including Sheffield United Football Club and South Yorkshire Police.
- 3.1.4 A public consultation survey ran on the Commonplace platform from 16th July 2021 to 13th August 2021. This was promoted through a postcard, which was sent out to 13,186 properties and provided a brief overview and how to respond to the survey. A press release was also issued to major regional and local media outlets.

#### 3.1.5 Formal ETO Consultation

3.1.6 The interventions being considered in this report were put in place via an ETO on 16<sup>th</sup> May 2022. A formal public consultation exercise took place for 6 months from this date. This helped to evaluate the impact of the interventions in real time; showing how effectively interventions were working and enabling members of the public to raise issues that could be addressed by officers. The period was extended until the 31<sup>st</sup> of December 2022 to give people more opportunity to comment.

## 3.1.7 <u>Email correspondence</u>

3.1.8 Members of the public were encouraged to submit formal written feedback by email through the Connecting Sheffield inbox. Feedback was also received via the <a href="mailto:transport@sheffield.gov.uk">transport@sheffield.gov.uk</a> inbox as well as through elected members. Inboxes have been searched for key words and themes to ensure all comments are considered.

#### 3.1.9 Route User Intercept Surveys (4<sup>th</sup> July to 8<sup>th</sup> July 2023)

3.1.10 443 route user intercept surveys were collected to gather feedback from route users more than a year after interventions were implemented. This provided insight into the strengths and

weaknesses of the route for users and a better understanding of who is travelling on the route and why.

#### 3.1.11 Sampled Perception Surveys (21st June to 24th July 2023)

3.1.12 We asked residents, organisations, and businesses for their views on the route interventions 12-months after implementation. This was a focused survey using a random sampling approach, rather than a self-selected audience, which is the case with feedback gathered through pre-delivery and formal ETO consultation.

Surveys were completed by 400 residents through face-to-face, onstreet interviews (including door knocking). 60 surveys were completed by business and organisation over the phone (cold calling).

#### 3.1.13 Online Perception Survey (23rd June-10th July 2023)

- 3.1.14 As well as surveys being conducted face-to-face, an online perception survey was added to the Commonplace platform. This received 345 responses for a period of two weeks beginning on the 23<sup>rd</sup> of June.
- 3.1.15 The online perception survey was promoted via email and social media (Twitter/Nextdoor) to various stakeholder, asking them to share the survey via their own communication channels. This included:
  - Elected members of the Transport, Regeneration and Climate policy committee
  - Sheffield MP Louise Haigh
  - Councillors for Nether Edge & Sharrow, Gleadless Valley, City and Graves Park wards.
  - 148 key local stakeholders largely based along the route corridor.

## 3.1.16 *Petitions*

- 3.1.17 A petition has been formally received calling for the SVCR to be completed and extended. The petition ran from the 17<sup>th</sup> of November 2022 to 30<sup>th</sup> of April 2023, receiving 968 signatures. A formal response to the petition has been written on behalf of the current Chair of the Transport, Regeneration and Climate Policy Committee, Cllr Ben Miskell.
- 3.1.18 A petition was formally received calling for the re-opening of Little London Rd to motorised vehicle traffic. The petition ran from the 16<sup>th</sup> of October 2022 to the 31<sup>st</sup> of January 2023, receiving 744 signatures. The petition was formally responded to on the 22<sup>nd</sup> of March 2023, by the former Co-Chair of the Transport Regeneration and Climate Policy Committee, Cllr Mazher Iqbal.

#### 3.1.19 Objections to the Scheme

- 3.1.20 Very often, public sentiment is that roads are designed, built and maintained for private motorised vehicles, so schemes that appear to favour other road users (people that walk or cycle), can spark strong public reaction. Roads have been dominated by motorised vehicle traffic and levels of active travel have remained stagnantly low for decades. The use of modal filters (bollards, blocks and planters) to reduce or eliminate motorised through traffic, has led to strong public sentiment, sometimes in favour, but largely against the scheme. This is highlighted in the ETO formal consultation feedback (see section 3.3 below and the ETO Formal Feedback Analysis Report: appendix Q). Self-selecting consultation processes such as the pre and postintervention consultation (summarised in this section above and covered in detail below as well as in appendices O, P and Q), can give the impression that public opinion is highly polarised. However, randomly sampled perception surveys (such as those carried out in respect of this proposal between 21st and 24th of June 2023, see section 3.5 and appendix R) show that a much larger percentage of people are indifferent to these types of schemes. People appear to take a pragmatic approach and weigh up the benefits of the scheme against some of the issues. Overall opinion is more weighted to being in favour of proposals than against.
- 3.1.21 A wide range of consultation approaches have been used provide insight into public opinion of the scheme and its perceived advantages and disadvantages (highlighted in this section of the report above). Formal objections to the interventions associated with the ETO should be made during the formal statutory consultation period, which is within the first 6 months of the ETO being implemented (16<sup>th</sup> May 2022 to 15<sup>th</sup> November 2022). All formal objections should be made in writing. Members of the public were instructed to make objections in writing via the Connecting Sheffield inbox.
- 3.1.22 All formal objections have been logged and are presented thematically for consideration within this report and covered in greater detail in appendix Q (ETO Formal Feedback Analysis Report). However, many of the consultation approaches used, fall outside the formal statutory consultation process and not all criticisms received outside of that process can be classed as formal objections. This may still be considered for the purpose of this report insofar as they may be regarded as relevant considerations. A pragmatic approach has therefore been used. The formal consultation period was extended for approximately 6 weeks; emails received through Council inboxes have been reviewed; and both formal and informal discussions with stakeholders and elected members have been considered.
- 3.1.23 Transport inbox emails are logged through a system called 'Confirm,' unless they relate to the scheme. In this instance they have been forwarded to the Connecting Sheffield inbox. Specific street names related to the SVCR were also searched for in the Transport inbox.

- 3.1.24 This raised a total of over 1600 results. This includes results that are not related to the scheme, emails that contain multiple search items, emails both in favour, against or indifferent to the scheme as well as multiple emails as part of a chain of correspondence related to single issues. Using the search term 'object' a total of 16 emails were identified in the Connecting Sheffield inbox.
- 3.1.25 Praise, comments, questions, and criticisms have been recorded where possible and considered against a range of different monitoring and evaluation methods. These methods are highlighted in section 1 of the report and considered against public feedback below. However, it is not possible to respond to each and every correspondence and issue raised within the context of this report.
- 3.1.26 The cumulative effect of the various processes above has resulted in all relevant commentary on the scheme being presented thematically for consideration in this report below with further detail presented in appendices O, P, Q, R & S).
- 3.2 Initial/Pre-Delivery Consultation 2020/2021 (See Pre-Delivery Consultation Engagement Report in appendix O)
- 3.2.1 The Connecting Sheffield programme was launched in November 2020. Connecting Sheffield sets out a city-wide programme of infrastructure schemes being planned and delivered. Commonplace provides an online citizen engagement platform where the Council can share plans, provide updates and interact with key stakeholders.
- 3.2.2 From November 2020 through to June 2021 a series of meetings, webinars and drop-in sessions were arranged with key stakeholder including political, civic and community leaders, businesses and interest groups. A telephone information line, email inbox and postal address was set up for the programme and promoted going forward.
- 3.2.3 There have been ongoing meetings more recently with members and key stakeholders including Sheffield United Football Club and South Yorkshire Police.
- 3.2.4 A public consultation survey ran on the Commonplace platform from 16th July 2021 to 13th August 2021. A postcard was sent out to 13,186 properties to provide a brief overview of the scheme and direct people to the online survey. A press release was also issued to major regional and local media outlets. A total of 1,317 responses were received, 1,298 came through the Commonplace platform.
- 3.2.5 Overall, 58% of those commenting on the proposals (prior to scheme delivery) provided positive feedback, 38% were negative and 4% neutral, which indicated an overall support of the proposals.

- 3.2.6 When asked what they like about the proposals, 75% of respondents liked the scheme because it would make it safer to walk and cycle, whilst 68% like the scheme because it would make a better environment of cycling.
- 3.2.7 55% of respondents supported the proposed modal filter on Little London Rd, 4% were neutral and 41% opposed.
- 3.2.8 When asked what they disliked about the proposals, 35% were concerned about access to homes or businesses, 30% raised concerns about loss of parking, 30% highlighted a lack of improvement in public transport, 28% said there was not enough improvement for cycling and 14% said there was not enough improvement for walking.
- 3.2.9 Concerns raised in open questions included increased congestion (6%), increased pollution (2%), and traffic displacement onto Abbeydale Rd and Woodseats Rd (2%).
- 3.2.10 Further detail of the consultation that took place in 2021 can be found online at: <a href="https://connectingsheffield.commonplace.is/en-GB/proposals/sheaf-valley-cycle-route/start">https://connectingsheffield.commonplace.is/en-GB/proposals/sheaf-valley-cycle-route/start</a>. A summary report is also available in appendix O.
- 3.2.11 Businesses that expressed concern over the interventions were contacted directly and an outdoor drop-in meeting was held on the 18th of August 2021 in line with Covid-19 restrictions. This largely involved businesses on Little London Road.
- 3.3 Formal ETO Consultation (May to December 2022) (See ETO Formal Feedback Analysis Report in appendix Q)
- 3.3.1 A total of 467 people provided feedback during the ETO consultation (462 via email, and 5 via phone) between 16th May 2022 and 31st December 2022. With no constraints of predetermined categories, response options or word count, people were free to express their experiences in their own words. A thematic approach was taken to identify, analyse and interpret patterns in feedback. A response to the major key themes is included below.
- 3.3. 2 The balance of sentiment towards the scheme is significantly weighted towards being negative. This should be considered alongside the aims to develop an improved and safer cycle route to assist people who currently cycle, encourage more people to cycle, and reduce car journeys. Measures that change the routes that people can take when traveling by car are likely to provoke negative feedback from those who have had to adapt their journeys. Some of the negative feedback provided but by no

means all – will inevitably relate to this dynamic, and so this should be borne in mind when determining if the scheme has had a positive overall impact or not. A full analysis report of the formal feedback can be found in in appendix Q

- 3.3.4 Summary of both positive and negative feedback is as follows:
  - There is more negative feedback associated with driving.
  - There is more positive feedback related to active travel and the environment.
  - Feedback is weighted negatively from those who appear to be living outside the scheme boundary or on peripheral roads.
  - Feedback is weighted positively from people commenting about living on roads within the scheme boundary (close to Little London Rd).
  - Feedback is weighted negatively from those who drive through the area, particularly those wanting to get to Abbeydale Rd.
  - Feedback is weighted positively from those commenting on their confidence to cycle and walk in/through the area.
  - There is concern from respondents about access for people with disabilities and for emergency services.
- 3.3.5 Congestion was the principal theme raised, being mentioned 500 times, 460 of which were negative. This largely related to concerns about traffic displacement, most notably on Abbeydale Road.
- 3.3.6 Positive sentiment highlighted how interventions made it easier, safer and more pleasant to walk and cycle. This largely linked to London Road and key themes included:
  - 'Improved surrounding' (47% of positive sentiment/34 mentions)'
  - 'Walking' (30% positive sentiment/31 mentions)'
  - 'Cycling' (22% positive sentiment/47 mentions).
- 3.3.7 Feedback on specific locations largely relates to Little London Road (287 mentions), Abbeydale Road (232 mentions), Woodseats Rd (105 mentions), Broadfield Road (67 mentions) and Chesterfield Road (59 mentions). Traffic counts and journey time data examines the impact of the scheme on some of these roads in section 1 of the report. The themes related to these roads are considered below. Feedback on other minor roads can be summarised as follows:
- 3.3.8 <u>Bramall Ln (11 mentions)</u> concerns that traffic volumes had increased but positive comments related to safety and pollution for those walking and cycling.
- 3.3.9 <u>Cherry St</u> (18 mentions)– concerns over impact on businesses and the impact on match days but positive comments related to safety for people walking and cycling.

- 3.3.10 <u>Hackthorn Rd (33 mentions) / Scarsdale Rd (26 mentions)</u> concerns about increased traffic on surrounding roads and access during wintery conditions but positive comments related to quieter and safer streets for cyclists and residents. Some issues with drivers ignoring the restrictions.
- 3.3.11 <u>Langdale Rd (18 mentions)</u>, <u>Rydal Cr (3 mentions)</u> and <u>Rydal Rd (16 mentions)</u> concerns related to residential access, increased journey distances/times and congestion on Abbeydale Rd. Positive comments on improved environment for people walking and cycling.
- 3.3.12 <u>Saxon Rd (5 mentions)</u> concerns over loading and unloading for businesses but positive comments in terms of a safer clearway for cyclists.
- 3.3.13 <u>Shoreham St (10 mentions)</u> concerns related to access to businesses and properties particularly during match days. Residents, pedestrians and cyclists positive about improved safety and pollution.
- 3.3.14 The concerns of the respondents can be broken down into several main categories, which are considered below. Monitoring and evaluation of the impact of the scheme related to each of these categories is covered in Section 1 of this committee report.

- 3.3.15 Congestion 460 negative mentions: This refers to the volume of traffic on roads and the impact of the cycle route on travel times, particularly on Abbeydale Rd (206 mentions), but also on others, such as Woodseats Rd (82 mentions), Broadfield Rd (58 mentions), and Chesterfield Rd (46 mentions).
- 3.3.16 It is acknowledged that there have been some increases in traffic volumes and travel times along sections of roads such as Abbeydale Rd and Chesterfield Rd, particularly at key signalised junctions during the period of the experiment. This is often in line with other areas of the city. Interventions associated with the SVCR and Nether Edge Active Travel Route have resulted in changes in travel patters across the highway network. The impact on average travel times largely amounts to seconds. The impact on longer (peak time) journeys amounts to several minutes. It is therefore considered that the impact the scheme has had on congestion as a) not entirely due to the experiment, b) not as significant as public perception suggests, c) isolated to small sections of road and d) isolated to relatively small periods of time.
- 3.3.17 As has been shown in Section 1 of this committee report, control data away from the experiment also suggests that traffic volumes have generally increased since 2021, which is likely due to the continued remergence of people travelling around the city since the easing of travel restrictions related to the COVID-19 pandemic.
- 3.3.18 The overall objective of the scheme, to increase active travel (as set out in Section 1 of this committee report) has clearly been met despite significant elements of the scheme still being under development.
- 3.3.19 It is considered that the planned Southwest Bus Corridors project can help mitigate the negative impacts recorded at signalised junctions on arterial routes such as Abbeydale Rd and Chesterfield Rd. The Council will continue to monitor the performance of the road network and seek to manage this to best effect in line with its statutory duties and adopted policies.
- 3.2.20 <u>Pollution 246 negative mentions:</u> Concerns that traffic displacement and congestion will increase harmful emissions, and noise most notably on Woodseats Rd and Abbeydale Rd. Positive comments related to pollution are focused on Little London Rd and Shoreham St.
- 3.3.21 A quantitative assessment of air quality impacts (and noise pollution) has not been undertaken given limitations in available data and monitoring techniques. A scheme of this scale is unlikely to have any notable impact on overall air quality because any perceptible change in transport related pollutants would require a significant change in motorised vehicle volumes. This has not been the case.
- 3.3.22 It is a fair to assume that any modal shift from motorised vehicle travel to walking, wheeling and cycling will provide an overall benefit to air

- quality in the longer term. Furthermore, any reduction on overall vehicle traffic, improvement in air quality or increase in physical activity (through increased active travel) will benefit public health by reducing exposure to pollutants and increasing physical health and wellbeing.
- 3.3.23 Noise pollution would be linked to the volume of traffic on the roads in and around the Sheaf Valley area. When compared to the preimplementation baseline, our monitoring data shows that overall, motorised traffic volumes have remained relatively stable and in line with other control sites although route choice does appear to have changed.
- 3.3.24 It is accepted that some residents may be negatively impacted by noise or air pollution in some isolated areas and at some isolated times. Although there is a lack of reliable data available to draw any firm conclusions about air or noise pollution, on balance, these negative impacts are not considered significant enough to outweigh the benefits associated with the provision of an active travel route. This is particularly true given that the SVCR demonstrates a latent demand for cycling as shown by the significant increase in the number of cyclists using the route. The SVCR is just one small element of a potential citywide active travel network. The provision of a comprehensive, accessible, and attractive active travel network would further increase levels of walking, wheeling and cycling city-wide, reducing car dependency and reducing the number of short, daily journeys taken by car. In the long-term, this is likely to lead to a reduction in pollution where active travel schemes encourage modal shift away from motorised vehicle journeys. Further details about air quality are found in section 1 and appendix J.
- 3.3.25 Perceived risk 218 negative mentions: Concerns that traffic displacement and congestion would increase collision risk to all road users. Comments related to walking and cycling were positively weighted as traffic volumes inevitably decreased along the route corridor. However, concerns were raised about crime, natural surveillance (eyes on the street), and women's safety along Little London Rd.
- 3.3.26 Research suggests that there is a potential link between the implementation of active interventions and reductions in crime. The theory behind this is that more natural surveillance ('eyes on the street') may deter crime. Furthermore, people walking or cycling may be more likely to witness an incident taking place than someone driving through an area at speed. People travelling actively may therefore be more likely to stop, intervene or contact the authorities in the event of an incident taking place.
- 3.3.27 Crime data has been analysed to monitor for changes in the volume of crime within the study area (as well as city wide) before the experiment started (June 2021 to April 2022) and after the project has been operational for 12 months (June 2022 to April 2023). Although no firm

conclusions can be drawn from the limited data available, overall, the number of crimes has decreased by 10% since the project was implemented. This is in comparison to the wider city where crimes have increased by 3%. Anecdotal evidence from police officers at Woodseats station suggests no noticeable increases in reported crime or anti-social behaviour along the route.

- 3.3.28 Collision data has been analysed to monitor changes in the number of collisions and the types of road users involved. The data set used is not reliable enough to draw any firm conclusions despite showing a reduction in the number of vulnerable road users involved in collisions. This type of data should be considered carefully going forward to monitor any long-term collision trends that may be linked to the scheme, particularly given that a scheme like this is designed to make travel safer for vulnerable road users.
- 3.3.29 Walking and Cycling (including pedestrian Crossings) 191 negative mentions: Negative sentiment for walking links to perceived risk (above) and some feedback suggests that interventions do not go far enough to improve the route for pedestrians. When it comes to cycling, the negative comments tend to focus on a lack of justification or demand for the scheme due to current low levels of cycling. Some comments express frustration at the speed at which the scheme has been delivered or that interventions do not go far enough to support safer cycling.
- 3.3.30 Concerns were raised that traffic displacement made it more difficult for people walking and crossing main roads e.g. on Woodseats Rd. The requirement for additional crossings based on road safety risk would be assessed through Local Safety Scheme approvals. This normally prioritises locations based on reported road collision data. Although funding is not currently allocated, the long-term vision for the SVCR is to extend further west, towards both Dore and Totley and towards Meadowhead. If this was to be developed to current recommended standards, it would include an appropriate toucan crossing (or similar) over Woodseats Rd.
- 3.3.31 The project is being delivered in the context of local, regional, and national policies that are aimed at enabling people to walk and cycle more, thereby increasing levels of physical activity whilst reducing the mode share for motorised vehicles. As the permanent static count data shows, the number of cycle trips along the SVCR have increased between 65% and 67% between June 2021 and June 2023.
- 3.3.32 Increases in walking rates are relatively modest compared to increases in cycling. This is likely because a reasonably good network of footways, walkways already existed before the scheme was implemented. This may mean that many people who wanted to walk already did so. Those people that wanted to cycle, on the other hand, had very limited provision in terms of a high-quality, safe cycle route. The scheme has therefore helped to meet a latent

- demand for cycling that may not exist to the same extent for walking. This said, it is important to consider the needs of pedestrians. Several signalised pedestrian/cycle crossings are being installed and planned along the full length of the route.
- 3.3.33 Road casualties before and after implementation have been reviewed and the current information does not suggest the scheme has had a significant impact on road casualties along the route. Although the number of vulnerable road users involved in a vehicle collision appears to have reduced, none of these incidents took place directly on the SVCR. Furthermore, not enough time has elapsed to determine a reliable trend in the data.
- 3.3.34 The Council will continue to monitor the performance of the scheme and seek to explore opportunities for future improvements and funding in line with its statutory duties and adopted policies.
- 3.3.35 <u>Impact on businesses 97 negative mentions</u>: Concerns relate largely to access, increased journey distances, parking and reduced passing trade on Little London Rd. The impact of traffic displacement, most notably on Abbeydale Rd, was also raised.
- 3.3.36 The impact of the project on specific businesses can be difficult to pre-empt, however, all businesses within the area remain accessible by motorised vehicle. Whilst, it is recognised that routes taken to access businesses may now be different, and indeed slightly longer than before the experiment was implemented, the impact this is likely to have is not deemed significant enough to warrant removal of a scheme that provides significant benefits to the health and wellbeing of a significant number of people, whilst improving the overall efficiency and reliance of the transport network as a whole.
- 3.3.37 Consultation directly with businesses and feedback from elected members, shows that businesses are less likely to support the scheme than other stakeholder groups. It also highlights that businesses are facing numerous economic challenges (including the aftermath of Covid, rising energy costs, business rates, inflation, interest rates and changes in shopping habits), which are all putting a huge strain on businesses as families battle with the cost-of-living crisis. It is acknowledged that transport schemes such as the SVCR generate added concern for businesses on top of all these other challenges. However, slightly longer journey times are not unlikely to impact businesses as much as many of these other factors.
- 3.3.38 The scheme included a greater level of parking restrictions than previously existed. The extent or lengths of the areas covered by double yellow line parking restrictions along the route were reviewed following feedback from various stakeholders. Most double yellow lines along the route have no further restrictions

attached to them, meaning that vehicles accessing businesses can load and unload on the restrictions without penalty. This approach maximizes parking and access without compromising safety for active travel users. Furthermore, there remains parking in the immediate area and significant parking a short walk away from most businesses.

- 3.3.39 It is positive that a planning application (23/01868/FUL) has been submitted for an indoor sports and leisure facility on Little London Rd. The investment is worth an estimated £1million and demonstrates that businesses are still serious about potential investment along this corridor following the possible implementation of the scheme on a permanent basis. Some studies show that businesses can benefit from increased footfall and passing trade as people walking and cycling are more likely to stop, spend time in and spend more money where there is appropriate investment in walking and cycling.
- 3.3.40 <u>Access 86 negative mentions:</u> Concerns were raised by businesses, residents, and other stakeholders. Whilst journey distances and times may have increased for some, all properties and roads remain open and accessible to all road users.
- 3.3.41 Cost 77 negative mentions: There were a low number of comments related to cost. Respondents tended to suggest that funding could be better used elsewhere (e.g. public transport). The scheme is funded through the Department for Transport's Active Travel Fund, which can only be used for schemes that support walking and cycling.
- 3.3.42 Central and local government policy has prioritised private vehicle use for the best part of 70 years, often at the expense of other modes of travel and leading to issues related to road safety risk, lower levels of physical activity, rising rates of obesity, transport poverty and less people friendly streets. Despite this, traffic and congestion and increasing journey times remain an issue in many large towns and cities. Building more roads is not possible and would likely induce further demand and use for private motorised vehicles.
- 3.3.43 In more recent years, policy has begun to change, and funding has increased for infrastructure schemes that support greater levels of active and sustainable travel. This is a key part of reducing car dependency and lowering the risk of future traffic congestion events. As part of the Connecting Sheffield programme, the SVCR provides an active travel route corridor that connects communities, business, and education centres along the Sheaf Valley and into the city centre. It also links into other similar schemes and key transport hubs.
- 3.3.44 The vision for Connecting Sheffield is to deliver a transformational change in the transport network and connectivity across Sheffield to attract more people onto public transport, and to use cycling and

- walking to get about. This is being achieved through improvements to road, public transport, cycling and walking infrastructure, reducing congestion, and providing equitable accessibility for all.
- 3.3.45 <u>Accessibility 47 negative mentions:</u> Concerns were raised about access for disabled road users and emergency services.
- 3.3.46 SCC liaise closely with disability stakeholder groups (incl. Transport 4 All and Disability Sheffield) through the Access Liaison Group and other formal and informal channels. There are also regular meetings with stakeholders at the Cycle Forum, which includes a representative from South Yorkshire Police. The emergency services are statutory consultees as part of the ETO process. SCC have received no objections or significant concerns from emergency services or disability groups in relation to the scheme. Indeed, the Fire Service provided supportive tweets for the scheme when the interventions associated with the ETO were first implemented.
- 3.3.47 Some disabled road users may see journey times or distances increase but this is likely to be offset by improved infrastructure and public realm for those disabled users that choose to walk or wheel along the SVCR. A Full Equalities Impact Assessment has been carried out for the scheme, a summary of which can be found in section 4 of this report. The full Equalities Impact Assessment is provided in appendix L.
- 3.3.48 <u>Improved surroundings 36 negative mentions</u>: Many positive comments focused on how the scheme made the route feel safer, quieter, and more pleasant for walking and cycling
- 3.3.49 Respondents that provided negative feedback in relation to the surroundings and general environment, tended to highlight that increased traffic volumes had negatively impacted nearby roads.
- 3.3.50 As outlined previously, the monitoring data shows that the scheme is generally having the intended impacts of reducing motorised traffic and increasing active travel on the route itself. Impact on the wider network appear to be small and/or isolated to short sections of roads at signalised junctions or at isolated times of the day.
- 3.3.51 Consultation 23 negative mentions: Some respondents expressed frustration that the ETO process does not involve consultation before interventions are trialled. The ETO process allows schemes to be implemented on a temporary basis, during which they be monitored, evaluated, and consulted upon to determine whether the intended outcomes of the scheme can be achieved. There is, therefore, lower risk of a permanent scheme being implemented which does not deliver on its objectives. During the temporary period in which an experiment is underway, schemes can be

altered or removed if the aims and objectives are not met or if the scheme result in unexpected, adverse or disproportionate outcomes. A normal TRO and consultation process does not allow for this level of flexibility, which limits the ability to trial these sorts of interventions.

- 3.3.52 Some respondents may expect a greater level of personal engagement with SCC Officers or ward members. Resources and funding mean that personal phone calls or home visits cannot to be made to all properties along the entirety of the proposed route. Where businesses, individuals and stakeholder groups have expressed specific concerns, SCC has worked to liaise with these groups and record issues raised wherever possible. Consultation that has taken place (as summarised in section 3.1) is robust and goes beyond statutory requirements set out as part of the ETO process.
- 3.3.53 Parking - 14 negative mentions: Some concerns were raised in relation to on-street parking but given the nature of the route few residents have been affected. Where businesses raise specific concerns (e.g. related to loading), officers have considered and implemented measures to minimise any negative impacts to businesses. The scheme includes a greater level of parking restrictions than previously existed but the extent of these has been reduced where possible. Most double yellow lines along the route have no further restrictions attached to them, meaning that vehicles accessing businesses can load and unload on the restrictions without penalty. This approach maximizes parking and access without compromising safety for active travel users. Furthermore, there remains parking in the immediate area and significant parking a short walk away from most businesses. Any further changes to parking would need careful consideration as it may compromise the effectiveness of the scheme to provide a safe. comfortable, and attractive active travel route.
- 3.3.54 <u>Speeding 6 negative mentions:</u> Feedback focused on reduced traffic speeds and increased journey times.
- 3.3.55 Section 1 and the Traffic Monitoring Data Pack (appendix T) provides details of changes in journey times. To summarise, overall average journey times have increased by seconds, but peak time journeys have increased by several minutes.
- 3.3.56 A limited number of baseline motorised vehicle speeds have been measured. Speeds measured before the start of the experiment are compared against speeds monitored after the scheme was introduced. The data suggests that vehicle speeds have reduced by around 3 to 4 mph see section 1/appendix T. This is considered a positive outcome given that improved safety for active travel users is considered a key priority of the scheme. Any increases in vehicle speeds would

- represent an increased risk to all road users but most notably those walking and cycling.
- 3.3.57 Public transport: Comments focused on a lack of investment in buses/bus routes and the possible impact traffic displacement might have on bus journey times. As previously discussed, this scheme is funded through the Active Travel Fund, which can only be spent on interventions that support greater walking, wheeling and cycling. Sheffield City Council is using other funding streams (such as Transforming Cities Fund and the City Region's Sustainable Transport Settlement) to fund bus corridor improvement schemes. These aim to deliver highways improvements that benefit bus journey times and user experience on arterial routes including Abbeydale Rd, Chesterfield Rd and Ecclesall Rd. Data suggests that this scheme has had minimal impact on journey times along these corridors.
- 3.4 Route User Intercept Surveys

(See Post-Delivery Perception Survey Report for full details- appendix R)

- 3.4.1 The route user intercept surveys were carried out to better understand user perspectives on the experimental changes. The survey was completed by 443 respondents. Support for the scheme is expressed as follows:
- 3.4.2 **Support for keeping the interventions in place:** 
  - 49% Don't know.
  - 27% completely support the interventions.
  - 12% support the interventions if certain things were changed.
  - 12% do not support the interventions.
- 3.4.3 Reasons 119 respondents support the interventions include:
  - Safer Roads (47%)
  - Good idea/should be extended (20%)
  - Few cars/less traffic (20%)
- 3.4.4 Reasons 55 respondents support interventions with changes:
  - Improvements needed on bigger roads/make safer (27%)
  - Needs policing/enforcement (24%)
  - Need to slow down traffic (18%)
- 3.4.5 Reasons 51 respondents do not support interventions include:
  - Some roads busier/people using side roads (35%)
  - Made journeys worse/longer/confusing (20%)
  - Hasn't made a difference/not worked (20%)
- 3.4.6 The survey was designed to be short and easy for respondents to answer quickly, while still soliciting useful feedback. The aim of the surveys was to explore:

- Travel frequencies and modes of travel chosen by route users;
- Changes in travel behaviour due to the scheme;
- Changes in users' health and wellbeing due to the scheme;
- Changes to levels of usage along the route; and
- Perceived changes to safety and quality of the route.
- 3.4.7 Overall, 77% of respondents were walking, 21% were cyclists and 2% were using a mobility aid. 57% indicated that they use the route most days or more, 23% use the used the route once or twice a week, and 20% said they used the route a few times a month or less. 59% of respondents said they do not have access to a car, van or motorcycle.
- 3.4.8 Most respondents said that, in general, over the last 12 months, there had been no change in the amount they walk (77%), cycle (62%) or drive (75%). 16% of respondents said that they walk more, 33% said they cycle more and 19% said that they drove less in the last 12 months.

3.4.9	Mode	Change	Change in Levels of Walking, Cycling, and Driving									Change in Levels of Walking, Cycling, and Drivin					
		Increased	No Change	Decreased	Didn't Know												
	Walking	16%	77%	6%	2%												
	Cycling	33%	62%	3%	3%												
	Driving	4%	75%	19%	3%												

Tabe summarising perceived personal change in active travel (from users interviewed on the route)

- 3.4.10 Of those that walk or use a mobility aid (348 respondents), 81% said that the amount they walk in the local area had stayed the same, 12% said it increased and 4% said it decreased. Of those that cycle (95 respondents), 67% said that the amount they cycle in the local area had stayed the same, 28% said it had increased and 1% said it had decreased.
- 3.4.11 Responses were varied when respondents were asked about how changes in their levels of walking and cycling had impacted their health and wellbeing. Of those who said they walked and cycled more, 103 respondents (59%) felt that their health and wellbeing had improved. Conversely, 40% of those who said they walked and cycled less (25) had the same opinion.
- 3.4.12 When asked about the perceived safety of the route for walkers and cyclists, responses were varied depending on the time of day. The highest percentage of respondents said the route was neither safe nor unsafe (44% during the day and 44% after dark). 44% felt the route was safe during the day and 19% felt the route was safe after dark. 8% felt the route was unsafe in the day, 29% felt the route was unsafe after dark. The table below summarises the responses.

3.4.13	Time of Day	Perceptions of Safety Since the Changes						
			Safe Neither safe nor Unsafe		Didn't Know			
	During the day	44%	44%	8%	5%			
	After dark	19%	44%	29%	9%			

Tabe summarising perceived safety of the route (from users interviewed on the route)

- 3.4.14 66% think walking infrastructure has stayed the same in the last few years, 17% think it has improved and 7% think it has got worse. 54% think cycling infrastructure has stayed the same in the last few years, 37% think it has improved and 6% think it has got worse.
- 3.5 Sampled Perception Surveys (see appendix R)
- 3.5.1 The surveys were conducted separately to gain randomly sampled perceptions from people that live locally to the scheme and from businesses/organisations that operate within close proximity to the scheme.
  - 403 residents were sampled via a random location sampling approach within the defined area and visited at their homes or on the street by in-person interviewers.
  - 60 businesses and organisations within the area were collated and interviews were undertaken over the phone.
- 3.5.2 The aim of the surveys was to explore:
  - The perceived changes in traffic volumes and speeds on residential streets, and main roads.
  - The perceived changes in the number of people using the route since the experiment began.
  - Perceived changes to safety and noise along the route.
  - Changes in travel behaviour due to the scheme.
  - Customer feedback and the impact the scheme had on footfall.
  - The level of support for the scheme.
- 3.5.3 The key points to summarise the perceptions of 403 residents surveyed include:
- 3.5.4 **Support for the scheme** 
  - 37% completely support interventions being made permanent.
  - 24% support interventions if certain things were changed.
  - 29% said they did not know.
  - 10% said they did not support interventions.
- 3.5.5 Reasons why 148 respondents support the scheme include:
  - Safer Roads (33%)
  - Good idea/general support/should be extended (26%)
  - Encourages active travel (16%)
  - Fewer cars/less traffic (13%)

- Less pollution (13%)
- 3.5.6 Reasons why 97 respondents support the scheme with changes:
  - More needed/more on main roads/make safer (29%)
  - Better/cheaper public transport (16%)
  - Disconnected/not working (14%)
  - Indifferent (13%)
  - Traffic displacement (11%)
- 3.5.7 Reasons why 41 respondents do not support the scheme:
  - Some roads busier/people using side roads (39%)
  - Journeys worse/longer/more confusing (39%)
  - Hasn't made a difference/isn't working (15%)
  - More pollution (15%)
- 3.5.8 Perceived changes in traffic volumes and speeds (403 respondents):
  - 30% feel that traffic *volumes* have increased on *residential streets*.
  - 20% feel that traffic *volumes* have decreased on *residential streets*.
  - 17% feel that traffic *speeds* have increased on *residential roads*.
  - 18% feel traffic *speeds* have decreased on *residential roads*.
  - 53% feel that traffic *volumes* have increased on *main roads*.
  - 3% feel that traffic *volumes* have decrease on *main roads*.
- <u>Perceived changes in people using the route (403 respondents):</u>
  - 36% feel that cycling numbers have increased along the route.
  - 25% feel that pedestrian numbers have increased along the route.
  - 5% feel that cycling numbers have decreased along the route.
  - 1% feel that pedestrian numbers have decreases along the route.
- 3.5.10 Perceived changes to safety when walking *locally* (403 respondents):
  - 56% feel that safety in the local area has stayed the same in the day.
  - 50% feel that safety in the local area has stayed the same at night.
  - 30% feel the local area is safer during the day.
  - 15% feel in the local area is safer at night.
  - 7% feel the in the local area is less safe during the day.
  - 13% feel in the local area is less safe at night.
  - 30% feel changes make it safer for children to walk unsupervised.
  - 17% feel changes make it less safe for children to walk unsupervised.
- 3.5.11 Why the route feels safer for walking (123 respondents during the day/50 respondents after dark):

Of those that feel the route is safer for walking:

- 65% say this is because there is less traffic during the day.
- 78% say this is because there is less traffic after dark.
- 43% say this is because more people use the route during the day.
- 32% say this is because more people use the route after dark.

# 3.5.12 Why the route feels less safe for walking (29 respondents during the day/45 respondents after dark):

Of those that feel the route is less safe for walking:

- 83% say this is because there is more traffic during the day.
- 18% say this is because there is more traffic after dark.
- 10% say this is because of increased crime/ASB\* in the day.
- 56% say this is because of increased crime/ASB at night.
- 10% say this is because fewer people use the route during the day.
- 44% say this is because fewer people use the route after dark.
   \*Antisocial behaviour

### 3.5.13 Perceived changes to safety when cycling in the local area

Of those that said they cycle (161 respondents/40% of respondents):

- 36% feel that safety in the local area has stayed the same in the day.
- 40% feel that safety in the local area has stayed the same at night.
- 46% feel the local area is safer during the day.
- 33% feel the local area is safer at night.
- 8% feel the local area is less safe during the day.
- 8% feel the local area is less safe at night.

Of the 403 total respondents:

- 28% think the changes make it safer for children to cycle unsupervised.
- 18% think the changes make it less safe for children to cycle unsupervised.

### 3.5.14 Why the route feels safer for cycling

Of those that feel the route is safer for cycling (a total of 126 respondents):

- 81% say this is because there is less traffic during the day.
- 81% say this is because there is less traffic after dark.
- 30% say this is because of slower traffic during the day.
- 31% say this is because of slower traffic after dark.

### 3.5.15 Why the route feels less safe for cycling

Of those that feel the route is less safe for cycling (a total of 25 respondents):

- 85% say this is because there is more traffic during the day.
- 54% say this is because there is more traffic after dark.
- 15% say this is because of increased crime/ASB in the day.
- 23% say this is because of increased crime/ADB at night.
- 8% say this is because of quicker traffic in the day.
- 31% say this is because of quicker traffic after dark.

### 3.5.16 Perceived changes in walking (403 respondents)

- 37% said the changes had resulted in them walking more. (5% a lot more, 14% somewhat more, 18% a little more).
- 60% said the changes had not resulted in them walking more.

- 3.5.17 **Perceived changes in cycling** 
  - Of those that said they cycle (161 respondents):
  - 45% said the changes had resulted in them cycling more. (12% a lot more, 16% somewhat more, 17% a little more).
  - 51% said the changes had not resulted in them cycling more.
- 3.5.18 The key points to summarise the perceptions of 60 respondents representing organisations and businesses include:
- 3.5.19 Business/organisation support for the scheme
  - 15% completely support the scheme.
  - 15% would support the scheme if changes were made.
  - 15% don't know.
  - 55% do not support the scheme.
- 3.5.20 Customer feedback and the impact of the scheme on footfall
  - 60% felt that the scheme negatively impacted operations.
  - 40% felt that footfall had declined since the scheme began.
  - 64% felt customer feedback about the scheme was negative.
  - Of the 24 respondents that felt footfall had declined, 76% think that difficulty accessing the area by motor vehicle was the cause.
  - Of the 36 respondents that charge for products/services or receive donations, 50% felt spend or donations had decreased.
- 3.7 Connecting Sheffield Online Perception Survey(See Post-Delivery Online Perception Survey Report appendix S)
- 3.7.1 A survey was created after the initial trial period for the Experimental Traffic Order had ended. The survey was designed to gain insight into people's views of the SVCR after they have had the opportunity to experience the scheme and get used to changes along the route corridor. The survey was hosted on the Connecting Sheffield website between 23rd June 2023 and 10th July 2023, receiving some 345 responses comprising the following:
  - 75 residents who live along the route.
  - 255 users who travel along the route.
  - 15 owners/managers of business along the route
- 3.7.2 The key points to summarise the views of the 75 residents that live along the route, include:
- 3.7.3 The level of support for the scheme among 75 residents:
  - 67% support the scheme.
  - 7% support the scheme it changes are made.
  - 25% did not support the scheme.
  - 1% didn't know.

- 3.7.4 Perceived changes in the number of people walking or cycling: 61% of residents noticed an increase in the number of people walking or cycling, whilst 33% said they had not noticed any change.
- 3.7.5 Perceived changes in traffic volumes on residential streets:
  39% of residents have not noticed any change in traffic volumes on residential streets, 29% of residents noticed a decrease in traffic volumes and 27% noticed an increase in traffic volumes.
- 3.7.6 <u>Perceived changes in traffic speeds:</u>

27% of residents noticed a decrease in traffic speeds on *residential streets* and 29% noticed a decrease in traffic speeds on *main roads*. 9% have noticed an increase in traffic speeds on *residential roads* and 7% have noticed an increase in speeds on *main roads*.

- 3.7.7 Perceived changes in traffic volumes on main roads:
   47% of residents noticed an increase in traffic volumes on main roads,
   whilst 40% said they had not noticed any change.
- 3.7.8 Perceived changes in travel behaviour
  The proportion of respondents selecting car as one of their main ways of travelling along the route decreased, from 69% to 43%. The proportion of respondents that selected walking and cycling as one of their main ways of travelling along the route increased, from 55% to 63%.
- 3.7.9 Perceived changes to safety along the route
  88% of respondents said that safety had improved along the route during
  day and 79% said safety had improved after dark. 62% of respondents
  said they thought the changes had either positively or very positively
  impacted children's safety when they walk and cycle around the local
  area without supervision. Only 16% felt that the scheme had a negative
  impact.
- 3.7.10 The key points to summarise the views of the 255 people who travel along the route, include:
- 3.7.11 The level of support for the scheme
  - 86% support the scheme.
  - 3% would support the scheme if changes are made.
  - 11% do not support the scheme.
  - <1% didn't know.</li>
- 3.7.12 Perceived changes in the number of people walking or cycling 82% of respondents who travel along the route have noticed an increase in the number of people walking or cycling with just 13% saying they had not noticed any change.

### 3.7.13 Perceived changes in traffic volumes and speeds

- 42% have noticed decreased traffic volumes on residential streets,
   12% have noticed an increase and 31% have not noticed any change.
- 33% have noticed a decrease in traffic speeds on residential streets and 22% have noticed a decrease in speeds on main roads.
- 7% have noticed an increase in traffic speeds on residential streets and 7% have noticed a decrease in traffic speeds on main roads.
- 50% have noticed no change in traffic volumes on main roads and 33% have noticed an increase.

### 3.7.14 Perceived changes in travel behaviour

The proportion of users travelling along the route selecting car as one of their main ways of travelling along the route decreased, from 51% to 16%. Whilst the proportion of respondents that selected walking and cycling as one of their main ways of travelling along the route increased, from 48% to 61%.

### 3.7.15 Perceived changes to safety along the route

88% of respondents said the safety along the route had improved during the day and 72% said safety had improvement after dark as a consequence of the scheme. 70% said that they thought the changes had either positively or very positively impacted children's safety when they walk and cycle around the local area without supervision. Only 3% felt that the scheme had a negative impact.

- 3.7.16 The key points to summarise the views of 15 owners/managers of businesses include:
- 3.7.17 The level of business/organisation support for the scheme
  - 20% support the scheme.
  - 80% did not support the scheme.

### 3.8 Perceived impact of the scheme on footfall

73% of businesses felt that footfall had declined since the scheme began and 73% believe that difficulty accessing the area by motor vehicles was the cause.

- 3.8.1 Other correspondence
- 3.8.2 Sheffield City Council have received regular communication from members of the public including organisations and businesses throughout the development and implementation of this scheme. This amounts to many thousands of interactions and correspondence through emails, letters, phone calls, video calls and face-to-face meetings with officers and elected members.
- 3.8.3 Many of the correspondence we have received fall outside the formal consultation process, but steps have been taken to consider all feedback received both good and bad. Project specific email inboxes

have been monitored and email searches carried out for key words related to this scheme. Officers have met formally and informally with colleagues, project partners and elected members to share insights into public perceptions and feedback. Where significant or specific issues have been raised (or where these issues affect specific stakeholders), steps have been taken to deal with these in a timely and direct manner.

3.8.4 Most feedback received falls within the themes already discussed in this section of the report. However, there may be instances where it has not been possible to provide a response to each and every correspondence in detail, given the scale of feedback received and the nuanced nature of some responses.

### 3.9 Other Consultees

3.9.1 No response has been received from other consultees, such as South Yorkshire Fire and Rescue Service, the Yorkshire Ambulance Service, or South Yorkshire Passenger Transport Executive.

### 4 RISK ANALYSIS AND IMPLICATIONS OF THE DECISION

### 4.1 Equality Implications

- 4.1.1 A full Equalities Impact Assessment has been completed for this scheme (see appendix L)
- 4.1.2 Cycling is often perceived to be a sport or leisure pursuit reserved for the brave and the bold rather than a serious alternative to car travel for people of all backgrounds. Certain demographics may be less likely to cycle as a mode of travel or transport, this is certainly true of women and girls, with men being more likely to ride bikes. There may also be certain age groups that are less able to ride and cultural barriers that mean certain ethnic groups may also be less likely to use cycling to get around.
- 4.1.3 Safety is often cited as the number one barrier to cycling. This scheme is designed to provide a safer cycling corridor through reduced traffic. A key objective of this approach is to empower more groups with protected characterises to walk, wheel or ride including women, children, young people, the elderly, or those from different socioeconomic or cultural/ethnic groups. The scheme has the potential to benefit people of all backgrounds. Those people on lower incomes without access to a car as well as young people, families or retirees may see the greatest benefit.
- 4.1.4 The scheme reduces car dependency and encourages modal shift away from motorised vehicle journeys, which benefits all residents within the local area. It will lead to a more efficient and resilient road network with fewer traffic congestion events both now and in the future.

- 4.1.5 This will be of particular benefit to those that depend on their car to get around as well as public transport users.
- 4.1.6 The scheme will help to meet net zero targets and will improve overall air quality. Making our roads and streets better places to live, work, learn and play and supporting a thriving economy. This is a benefit all residents, regardless of how they travel.
- 4.1.7 Potential conflict between cyclists and pedestrians needs consideration as this may have a greater impact on those with disabilities. This is balanced against reduced risk of collision with larger motorised vehicles that have a greater potential to cause injury or death to all road users.
- 4.1.8 Overall, there are likely to be positive equalities impacts from this proposal. People with certain protected characteristics (age, gender, sex, cultural background) may be less likely to cycle than others. This scheme is more likely to provide benefits to those groups that are less well represented than it is to provide disbenefits, ultimately giving all people greater travel choices with minimal impact on those that depend on motorised vehicles to get around.
- 4.1.9 Wider potential benefits include a better work-life balance, less congestion (meaning shorter journey times), feeling safer to cycle and walk, and finding walking / cycling in their local area easier and more pleasant. Cycling and walking interventions can bring about positive health benefits through increased physical activity and encourage more people to spend time outdoors and interacting with others. As well as cyclists and pedestrians being among the most satisfied transport users, active commuters tend to be physically and mentally healthier. Physical activity has also been associated with higher school grades and improved learning. (Investing and Walking & Cycling: Rapid Evidence Review, A report for the Department for Transport, October 2016). This scheme helps to ensure that cycling isn't just the reserve of the bold and brave or those that traditionally cycle (white, middle-aged men). If we can make roads and streets healthier and more people friendly, there can be positive impacts for overall mental wellbeing and reductions in isolation and loneliness.
- 4.1.10 The development of active travel infrastructure offers an opportunity for modal shift away from private car use which helps to reduce congestion and so tail pipe emissions contributing to improved air quality for all. The interventions have been identified to seek abstraction away from private car where there is evidence for this, in particular utilising the Propensity to Cycle Tool.
- 4.1.11 The proposals are in line with and informed by the Sheffield Transport Strategy as such proposals seek to separate main cycle routes from main routes for motor traffic wherever possible. This will help minimise any adverse health impacts associated with increased exposure to

- poor quality air (which in any event are expected to be more than outweighed by the benefits of increased activity).
- 4.1.12 Sheffield City Council should continue to liaise with stakeholder groups and project partners to examine further ways to support those groups with protected characterises. This includes improving access to new and planned active travel infrastructure as well as supporting an efficient, resilient, multi-modal transport network that works for all users including those travelling by private motor vehicles and public transport.

### 4.2 Financial and Commercial Implications

- 4.2.1 The SYMCA FBC was approved in June 2022, with a scheme allocation of £2,386,000 funded from Active Travel Fund 2 (ATF): £1,493,000 capital and £300,000 plus £593,000 Gainshare capital. However, SCC did not enter into the agreement for this funding as we were unable to meet the timescales included for the Shoreham Street element of the scheme.
- 4.2.2 A revised SYMCA FBC is currently being worked up as the project will have to be delivered in phases both due to cost and time pressures. These issues have been raised with Active Travel England/Department for Transport through their change control process as funder. There is still an intention to deliver the whole Sheaf Valley cycling scheme (including elements up to and across the Inner Ring Road at Shoreham Street), but this will be over a longer period with additional funding proposed to be committed from the City Region Sustainable Transport Settlement.
- The cost of this phase of the scheme up to the end of July 2023 is £648,844, broken down as follows:
  - £160,313 Transport fees which covers TRO work costs for the larger scheme as advertised, pre-covid parking surveys & HMD fees
  - £40,349 Communications costs
  - £199,472 Amey design
  - £233,852 Amey construction
  - £14,857 Other fees (incl. Commercial, Road Safety Audits and Utility Surveys)
- 4.2.4 This includes all elements of the route included in this report plus the Highfield 20mph scheme (£33k) and improvements along Alsine Rd (£332k). It does not include other costs related to other elements of the Sheaf Valley Cycle Route (SVCR) being implemented through separate permanent Traffic Regulation Orders. This includes development of the northern end of Shoreham Street.
- 4.2.5 The <u>estimated total</u> cost of this phase of the scheme as proposed is £993,971 as follows:

- £220,313 Transport fees which covers TRO work costs for the larger scheme as advertised, pre-covid parking surveys, HMD fees, pre and post scheme surveys (incl. attitudinal)
- £66,349 Communications costs
- £199,472 Amey design
- £447,981 Amey construction
- £59,856 Other fees (including commercial, Road Safety Audits, TRO and Utility Surveys)
- 4.2.6 This value will be included in the revised SYMCA FBC due to be submitted soon. It is expected that a funding agreement from SYMCA will follow the approval of the FBC. This will then enable claims to be made against costs spent to date.
- 4.2.7 The costs above do not include additional costs associated with more permanent solutions to the temporary interventions (bollards, blocks, planters etc). The scale and scope of what permanent designs might look like is to be determined following a committee decision on the future of the scheme. This will require further discussions with committee, members, ward members and other stakeholders. Agreements with SYMCA related to funding for this work (as part of Phase Two of the scheme) is also required.

### 4.3 Legal Implications

- 4.3.1 The Council has the power to make an Experimental Traffic Order ('ETO') under Section 9 of the Road Traffic Regulation Act 1984 ('the 1984 Act') for the purposes of carrying out an experimental scheme of traffic control which may continue in force for a maximum of 18 months, and which may include provisions;
- 4.3.2 a) for avoiding danger to persons or other traffic using the road or any other road or for preventing the likelihood of any such danger arising
  - b) for facilitating the passage on the road or any other road of any class of traffic (including pedestrians)
  - c) for any of the purposes specified in paragraphs (a) to (c) of subsection (1) of section 87 of the Environment Act 1995 (air quality)
- 4.3.3 Before the Council can make an ETO, it must consult with relevant bodies in accordance with the Local Authorities' Traffic Orders (Procedure) (England and Wales) Regulations 1996 ('the Regulations'). It must also publish notice of its intention in a local newspaper and make copies of the Order available for inspection for the duration of the effect of the Order. The Council has complied with these requirements.
- 4.3.4 The Council has the power to make a Traffic Regulation Order which has the effect of making the provisions of an ETO permanent according to Regulation 23 of the Regulations. The Council is required to consider all and any duly made public objections received and not withdrawn before it can proceed with making the provisions of an ETO permanent.

- 4.3.5 Those objections are presented for consideration in this report. In addition, objections were received throughout the lifetime of the development of the proposal, which is the subject of this report, and via a range of (non-statutory) consultation and monitoring processes as described in section 3 above; all objections considered relevant to the decision recommended in this report are provided for consideration.
- 4.3.6 If there are modifications or variations made to the ETO within 12 months of it being made, a statement of those modifications is required to be deposited with the copy order available for inspection.
- 4.3.7 In exercising the aforementioned powers, the Council is under a duty to secure the expeditious, convenient and safe movement of vehicular and other traffic (including pedestrians) as per section 122 of the 1984 Act. In doing so the Council must have regard to the desirability of securing and maintaining reasonable access to premises, the effect on the amenities of any locality affected, any applicable national air quality strategy, the importance of facilitating the passage of public service vehicles and any other matters appearing to the local authority to be relevant. The Council is considered to be fulfilling this duty in implementing the proposals in this report.
- 4.3.8 The Council is under a further duty contained in section 16 of the Traffic Management Act 2004 ('the 2004 Act') to manage its road network with a view to securing the expeditious movement of traffic on that network, so far as may be reasonably practicable while having regard to their other obligations, policies and objectives. This is called the network management duty and includes any actions the Council may take in performing that duty which contribute for securing the more efficient use of their road network or for the avoidance, elimination or reduction of road congestion (or other disruption to the movement of traffic) on their road network. It may involve the exercise of any power to regulate or co-ordinate the uses made of any road (or part of a road) in its road network. Section 17 of the 2004 Act imposes a duty upon to Council to make such arrangements as they consider appropriate for planning and carrying out the action to be taken in performing the network management duty.
- 4.3.9 Section 18 of the Act requires that the Council shall have regard to guidance of the appropriate national authority about the techniques of network management or any other matter relating to the performance of the duties imposed by sections 16 and 17 of the Act. The proposals described in this report are considered to fulfil those duties in accordance with the aforementioned statutory guidance.

### 4.4 Climate Implications

- 4.4.1 A full climate impact assessment has considered how the proposed measures impact on climate change (appendix M). As with all highway schemes, these proposals carry with them embedded carbon linked to the manufacturing, transportation and construction of materials used to build infrastructure. Given that this scheme empowers more people to walk or cycle, more of the daily journeys more often, it is expected that this will be more than offset construction through a reduction in long-term carbon emissions associated with local motorised vehicle journeys.
- 4.4.2 The Council declared a Climate Emergency in February 2019 and through its 10-Point Plan for climate action is committed to being carbon neutral by 2030. The SVCR contributes to this commitment, by:
  - Empowering people to make more of their shorter daily journeys by bike or on foot, which would otherwise be made by car.
  - Reducing vehicle miles driven and emissions from car journeys along this corridor.
- 4.4.3 Transport is a major contributor to CO2 emissions in Sheffield and active travel infrastructure plays an important role in making roads safer and less congested while reducing overall emissions that contribute to climate change.

### 4.5 Other Implications

- 4.5.1 There will be an expectation from residents and businesses that it will be easier for them walk and cycle near their homes and businesses. However, there is a risk that some links from residential areas or issues along the main route may still be considered unsafe, which could lead to complaints or reduced service satisfaction levels. This issue may be exacerbated by the removal of interventions associated with other schemes such as those delivered as part of the Nether Edge Active Travel Neighbourhood.
- 4.5.2 The decision to make trial interventions permanent goes against much of the feedback from residents and businesses and there is potential for public opposition to the change.
- 4.5.3 Equally, the decision to remove the trail interventions is likely to provoke a strong reaction from those individuals and groups that have expressed strong support for the scheme, and those that have benefitted from the interventions, including those that already cycle and those that want to cycle more. This may adversely affect those with protected characterises or those on the lowest incomes that do not have access to a car or who are less likely to cycle without the proper infrastructure in place.

### 5. ALTERNATIVE OPTIONS CONSIDERED

- 5.1 Focusing solely on the interventions associated with the ETO, there are three main approaches to consider:
  - Make all interventions permanent.
  - Remove all interventions and return the highway to its former state.
  - Make some interventions permanent and remove others.
- There may be some more nuanced/minor alterations to signage and lines that can be considered along some sections of the route. However, this has already taken place following early stages of consultation and there has been very little correspondence to suggest that this would make a significant difference for individuals or organisations along the route corridor.
- 5.3 Remove all interventions and return the highway to its former state.
- This approach reintroduces through-traffic along all roads where interventions have been implemented. The increased vehicle traffic, and movements across junctions where interventions are present. This would mean that much of the Sheaf Valley Cycle Route (SVCR) is longer LTN1/20 compliant and therefore less safe, less coherent, less comfortable, less attractive, and therefore less likely to encourage modal shift away from motorised vehicle traffic to active modes. It would undermine those permanent interventions that are already in place as the route would essentially become disconnected.
- 5.5 This would be at odds with Sheffield City Council strategy and policy including transport and net zero targets. It sends a message that the speed and convenience of those travelling by private motor vehicle is a priority over the provision of infrastructure that benefits those individuals that do not have access to a car or whose choose to travel by bike or on foot. All other benefits of the scheme, as outline in section 1 of the report, would be undermined. This would lessen improved amenity and worsen the environment for walking and cycling. Ultimately, these types of funded proposals exist to support all transport users across the entire network. With current and planned developed taking place within and near the city centre, these schemes represent a real opportunity to deal with expected increases in demand for transport without an overreliance on car dependency. Outside of the Connecting Sheffield programme, there current exists no other proposals that would address these issues.
- 5.6 Modify/remove some interventions.
- 5.7 It is not possible to make the ETO permanent while also modifying the proposal owing to restrictions on the Council's ability to do so per regulation 23 of the Local Authorities' Traffic Orders (Procedure) (England and Wales) Regulations 1996. The Council has the option of either making the implemented scheme permanent or not at all.

- It is possible to consider the effect of potential modifications. While they are not presented to the committee as an alternative option within this report, such a proposal could be taken forward as a modification subsequent to the recommended scheme being permanently implemented (should the committee so decide). However, this would incur significant resource implications in terms of issuing an entirely new traffic order, carrying out additional public engagement and further demand on officer time.
- 5.9 Furthermore, removal of a single intervention along the SVCR has the potential to undermine the effectiveness of the entire scheme. For example, taking out the Cherry St/Shoreham St filter reintroduces increased traffic volumes along Shoreham St. This means that the route quality declines for active travel users at this location and therefore the full route becomes disconnected and less attractive for people travelling by bike or on foot.
- The exception to this is the Hackthorne Rd/Scarsdale Rd intervention as this is not an imperative element of the scheme. However, data clearly shows that this intervention has been successful at removing significant levels of through traffic on Hackthrone Rd and adjoining residential streets.
- 5.11 Little London Rd has received more public feedback than any other element of the scheme. If the modal filter was removed here, the road would effectively become less accessible for people on bike or on foot. This is particularly true where the carriageway and footway are extremely narrow (under the rail bridge). Re-opening Little London Rd to through-traffic effectively means that the SVCR would end where the walking and cycling route from Saxon Rd meets Little London Rd. The long-term vision to extend the SVCR to Dore and Totley Station and To Meadowead, would we much more difficult to realise.
- 5.12 The overall impact of removing any of the ETO interventions is similar in nature (if not scale) to the removal of all interventions along the route as highlighted above.

### 6. REASONS FOR RECOMMENDATIONS

- 6.1 A truly multi-modal transport network that is built to a high standard, offers inclusive economic, social and environmental opportunities and benefits to everyone, regardless of their age, gender, ethnicity or background. Furthermore, safer, cleaner and lower traffic routes can make the city a better place to live, work, learn and play.
- 6.2 Make all interventions permanent:
- This report recommends making all interventions permanent. Section 1.1 of the report sets out the strategic importance of the Sheaf Valley

Cycle Route SVCR (and all other active travel schemes being planned and delivered). This includes supporting a truly multi-modal transport network that increases travel choices for all and builds resilience into the road network against current and future traffic events. The scheme also more equitable access to jobs, education and training; increased health and wellbeing through increased physical activity; and has environmental benefits that support net-zero targets.

- 6.4 Section 1.4 covers the monitoring and evaluation data, which highlights that these interventions have achieved the intended outcomes. There has been a significant increase in cycling rates and some notable increase in walking rates along the route. The negative impacts of the scheme, which largely focus on traffic, congestion and journey times appear to be modest.
- 6.5 It is accepted that some very local journeys for some people will now be longer and that motorised traffic movements have changed across some junctions. Data shows that traffic volumes and journey times have seen some increases in isolated areas (largely on roads running into key signalised junctions) and at isolated times (peak times journeys are more likely to be adversely affected). Data shows that these impacts are relatively minor.
- It is important to recognised that traffic levels have continued to increase since 2020 following the easing of travel restrictions associated with the global pandemic. Roads that suffer from traffic and congestion events may appear to have got much worse since 2020 but these issues are historical and were largely present pre-pandemic. Traffic levels have not yet returned to pre-pandemic levels and so these issues could become more prominent going forward without provision for alternative modes of travel.
- 6.7 There is very little scope for towns and cities to increase road capacity for private motorised vehicles and this approach would likely induce demand for driving, leading to the same issues with traffic and congestions that most major cities have faced for decades. Walking, cycling and public transport interventions represent a real opportunity to provide a better transport network that works for all, and makes Sheffield a better place to live, work, learn and play.
- 6.8 Making trial interventions permanent will:
- Provide a permanent, coherent, direct, safe, comfortable and attractive active travel route between Woodseats and Sheffield City Centre. The route links into other current and planned active travel schemes such as the Nether Edge Active Travel Neighbourhood, Grey to Green and the City Centre-Attercliffe-Darnall scheme. It therefore forms part of a city-wide active travel network. Making all interventions permanent provides opportunities for future route expansion out to Meadowhead and Dore & Totley train station.

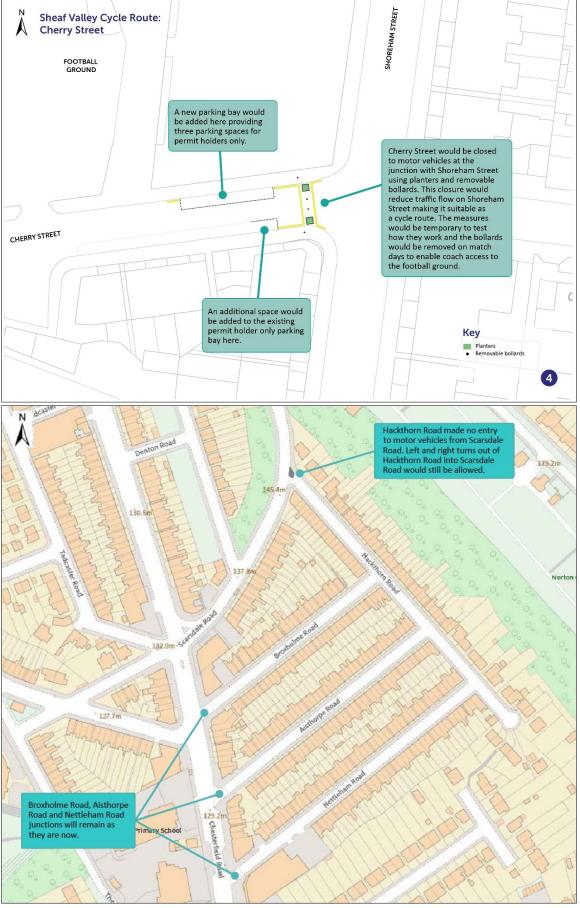
- Reduce the risk of road collisions between vulnerable road users (people walking or cycling) and those driving larger motorised vehicles. This is achieved by reducing volumes of traffic on roads where interventions have been implemented, and providing an alternative route for active travel users so there is less reliance on arterial roads such as Chesterfield Rd and Abbeydale Rd. Road danger is regularly cited as one of the biggest barriers to walking and cycling.
- Continue to empower more people to make shorter daily journeys by bike and on foot. Substantial elements of the SVCR are still under development, most notably at the northern end of Shoreham St. It is expected that cycling and walking trips will continue to increase upon completion of the full route and as the route become more well used and more well known amongst residents and visitors alike.
- Support modal shift away from private motorised vehicles towards active and sustainable modes and therefore reduce the risk of present and future traffic congestion events. People feel compelled to drive short distances because of a lack of travel choices available to them. In Sheffield around 60% of commuter journeys are by car and 40% of journeys are within 1km. An increased demand on the transport network is expected with continued growth and development in and around the city centre. This includes an expected 18,000 new homes before 2040. Without more choice, people will naturally defer to driving.
- Support inclusive access to services, amenities, greenspace, jobs, education and training. This is particularly true for those without access to a car. The percentage of households without access to a car along the Sheaf Valley ranges from over 20% in parts of Woodseats and Meersbrook; 40% to 50% in parts of Lowfield and Highfield; and as high as nearly 75% in parts of the city centre. These communities suffer from the adverse effect of large volumes of through traffic, may have limited access to certain amenities and therefore suffer the effects of transport poverty. The scheme supports access to opportunity for all, particularly more vulnerable road users that may be less likely to walk or cycle independently including children, young people, families, the elderly, those with disabilities or those on lower incomes.
- Support increased physical and mental wellbeing through physical activity in the form of active travel. Empowering more people to spend time outside interacting with others will also support community cohesion and combat loneliness.

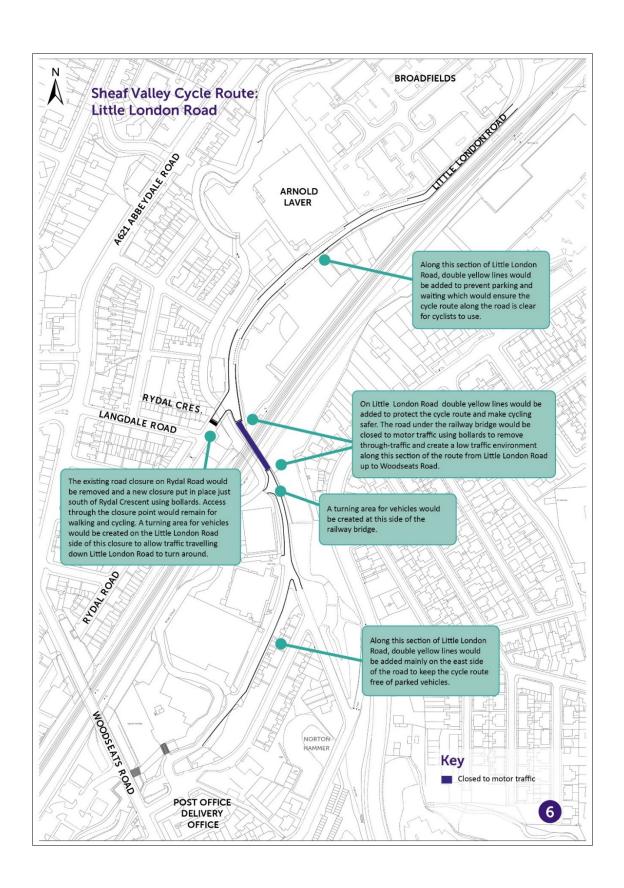
- Support net zero targets by reducing overall vehicle miles driven for shorter local journeys and reducing long term vehicle emissions that contribute towards climate change.
- Create opportunities for businesses in the long term. Increasing numbers of pedestrians and cyclists along this corridor, may increase footfall and customers numbers for certain businesses.
   Those travelling by bike or on foot are more likely to stop (acting as passing trade), spend more time in local commercial areas and may be more likely to spend money than people driving through an area at speed.
- 6.17 Therefore, having considered the response from the public and other consultees it is recommended that the interventions in the ETO be implemented on a permanent basis as, on balance, benefits of the scheme outweigh the concerns raised.

## Appendix A: Overview map



## Appendix B: Sketch plans of specific interventions **Sheaf Valley Cycle Route: Cherry Street**

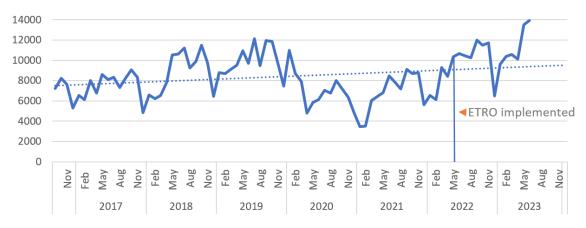




# **Appendix C: Permanent/Static Cycle Counts Sheaf Valley)**

### Cycle Counts on Sheaf Valley Cycle Route

Chippinghouse Rd-Broadfield Rd (two way counter)



### Cycle Counts on Sheaf Valley Cycle Route

Chippinghouse Rd-Broadfield Rd (two way counter)



## Cycle Counts on Sheaf Valley Cycle Route

Shoreham St/St Mary's Rd (Northbound only)



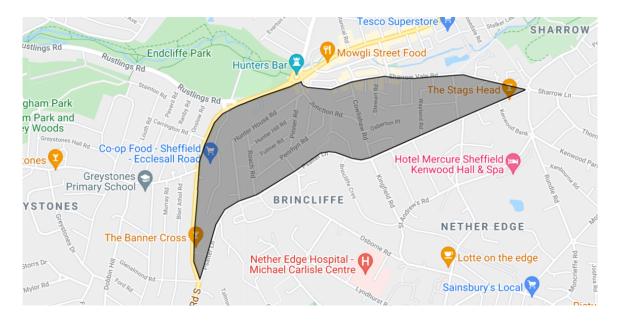
## **Appendix D: Permanent/Static Cycle Counts City Wide**

	Cycle Trips			Percentage change		
Location	2021	2022	2023	2021- 2022	2022- 2023	2021- 2023
Attercliffe Rd (5WW)	4672	4815	5150	3.05%	6.96%	10.22%
Sheaf Valley Cycle Route	6836	9482	11361	38.70%	19.81%	66.18%
Moore St roundabout	7432	9815	9843	32.06%	0.28%	32.43%
Broomspring Ln	2981	3797	4328	27.38%	13.98%	45.19%
Penistone Rd	8783	9525	9625	8.45%	1.05%	9.59%
Smithywood Dr (B'burn valley)	1652	1571	1566	-4.89%	-0.31%	-5.19%
Barrow Dr (B'burn Valley	3749	3428	3243	-8.56%	-5.41%	-13.51%
Cemetery Rd	2806	3391	3027	20.83%	-10.72%	7.88%
Clarkehouse Rd	9210	10737	10332	16.58%	-3.77%	12.18%
Sunnybank (nr Ecclesall Rd)	3784	4851	4650	28.19%	-4.14%	22.89%
Shoreham St (inbound only)	2141	3080	3464	43.90%	12.46%	61.82%
Broomhall Rd	1416	1819	1936	28.46%	6.43%	36.72%
Average overall percentage change 19.51% 3.05%						
Av. overall percentage char	nge exl. S	VCR/Sh	oreham	15.16%	0.43%	15.84%

Table showing the 12-month average number of cycle trips and the percentage change in cycle trips recorded across 12 static cycle count sites across the city. Comparison is 2021 with 2022, 2022 with 2023 and 2021 with 2023.

# **Appendix E: Sharrow Vale Traffic Count Data Control Site**

This control area was identified by Sheffield City Council with support from the University of Westminster. It was selected based in its similarity to the Nether Edge Active Travel Neighbourhood based on its size, traffic volume, road characteristics and demographic make-up. Other factors such as topography and the presence of certain services were also considered. The overall aim was for the control area it be roughly similar to an intervention area, but without its own active travel interventions in place now or planned within several years. An area of Sharrow was identified alongside 2 other areas of Sheffield.



## **Appendix F: Sheaf Street Traffic Count Data Control Site**

AADT Average	2018	2019	2020	2021	2022	2023
5-Day Average	41,609	41,607	30,600	36,087	37,766	39,869
7-Day Average	38,929	39,035	28,549	33,843	35,708	37,552

Table shows annual average daily traffic counts on Sheaf Street near Harmer Ln (2023 data is calculated up to the 31st July 2023)

AADT % Change	2018	2019	2020	2021	2022	2023
5-Day Average		-0.01%	-26%	18%	5%	6%
7-Day Average		0.27%	-27%	19%	6%	5%

Table shows percentage change in annual average daily traffic counts when compared to the previous year

<b>AADT % Change 2018-2023</b>					
5-Day Average	-4.18%				
7-Day Average	-3.54%				

Table shows percentage change in annual average daily traffic counts when comparing 2018 (pre-pandemic) to 2023.

% Change 2021-2023					
5-Day Average	10.48%				
7-Day Average	10.96%				

Table shows percentage change in annual average daily traffic counts when comparing 2021 with 2023.

## **Appendix G: Junction Traffic Count Data**

Abbeydale Rd, Sheldon Rd and Broadfield Rd junction traffic counts

Counts of motor vehicles were carried out over 2 days in early May 2022 (before the ETO interventions were implemented) and again in October 2022 (roughly 5 months after interventions were implemented).

Traffic counts at the junction of Abbeydale Rd, Sheldon Rd and Broadfield Rd show significant changes in vehicle movements across the junction at both peak times and over a 12-hour period.

To summarise, traffic counts show a reduction in the volume of vehicles on both Sheldon Rd and Broadfield Rd, particularly at peak times near this junction. Furthermore, counts show a noticeable increase in traffic volumes along Abbeydale Rd, particularly at peak times. However, this increase is limited to a short section of Abbeydale Rd, at least as far as Sheldon Rd to Glen Rd (100m) but may extend as far as Sheldon Rd to Woodseats Rd (700m).

Peak morning traffic (8am-9am) travelling into this junction has changed since measures were implemented. Vehicle counts show:

- A 1% drop and 2.2% drop in vehicle numbers from Sheldon Rd and Broadfield Rd respectively.
- A 15.8% increase in vehicle numbers travelling towards the city and a 4.8% increase vehicle numbers travelling away from the city along Abbeydale Rd.

Considering the total number of vehicles travelling in both directions at the four arms of this junction there has been a noticeable increase in traffic on Abbeydale Rd between Glen Rd and Sheldon Rd only. Vehicle counts at morning peak times show:

- A 0.5% drop in vehicle numbers on Sheldon Rd between Sandford Grove and Abbeydale Rd.
- A 5.5% drop in vehicle numbers on Broadfield Rd between Broadfield Way and Abbeydale Rd
- An 8% increase in vehicle numbers on Abbeydale Rd between Sheldon Rd and Bedale Rd.
- A 14.3% increase in vehicle numbers on Abbeydale Rd between Sheldon Rd and Glen Rd

Peak evening traffic (5pm-6pm) travelling into this junction has changed more significantly since interventions were implemented. Vehicle counts show:

- A 16.2% drop and a 4.7% drop in vehicle numbers from Sheldon Rd and Broadfield Rd respectively
- An 11.3% increase in vehicles travelling towards the city and a 0.4% increase in vehicles travelling away from the city on Abbeydale Rd.

Considering the total number of vehicles travelling in both directions at the four arms of this junction there has been a significant decrease in traffic on Sheldon

Rd and Broadfield Rd, with some increase on Abbeydale Rd, largely between Sheldon Rd and Glen Rd. Vehicle counts at evening peak times show:

- An 12.2% drop in vehicle numbers on Sheldon Rd between Sandford Grove and Abbeydale Rd.
- A 17.6% drop in vehicle numbers on Broadfield Rd between Broadfield Way and Abbeydale Rd
- A 3.3% increase in vehicle numbers on Abbeydale Rd between Sheldon Rd and Bedale Rd.
- A 11.6% increase in vehicle numbers on Abbeydale Rd between Sheldon Rd and Glen Rd

Looking at traffic counts over a 12-hour period (7am-7pm), changes in traffic travelling into this junction is still notable but is less significant than at peak times. Vehicle counts show:

- A 3.4% drop and a 2% drop in vehicle numbers from Sheldon Rd and Broadfield Rd respectively.
- A 5.8% increase in vehicles travelling towards the city and a 1.2% increase in vehicles traveling away from the city along Abbeydale Rd.

Considering the total number of vehicles travelling in both directions at the four arms of this junction there has been a noticeable increase in traffic on Abbeydale Rd between Glen Rd and Sheldon Rd only. Vehicle counts over a 12-hour period show:

- A 0.1% drop in vehicle numbers on Sheldon Rd between Sandford Grove and Abbeydale Rd.
- A 1.1% drop in vehicle numbers on Broadfield Rd between Broadfield Way and Abbeydale Rd.
- A 0.8% drop in vehicle numbers on Abbeydale Rd between Sheldon Rd and Bedale Rd.
- A 6.26% increase in vehicle numbers on Abbeydale Rd between Sheldon Rd and Glen Rd.

Additional counts on Abbeydale Rd between Archer Rd and Woodseats Rd, show a drop in overall traffic of 5.9% (total vehicle counts in both directions). This highlighting that increases in traffic volumes are a very isolated issue on a short section of Abbeydale Rd.

As with bus journey time data, vehicle count data has its limitations given that both counts were only conducted over 2 days. Again, with a relatively small data set, road works, traffic events, weather, driver behaviour, seasonal changes and so on could all impact the results

### Little London Rd, Broadfield Way junction traffic counts

Counts of motor vehicles were carried out in June 2021 (before the ETRO interventions were implemented) and again in June 2023.

Traffic counts at the junction of Little London Rd and Broadfield Way show a significant reduction in vehicle movements across the junction at both peak times and over a 12-hour period. This is to be expected as traffic reduction on Little London Rd was the intended outcome of the interventions implemented on Little London Rd and Rydal Rd.

Data over a 12-hour period (7am-7pm), shows vehicles turning right from Little London Rd (north) onto Broadfield Way has increased by 14.4% (348 more vehicles) because these vehicles would have turned left onto Little London Rd to head south. However, this is offset by the 75.5% reduction/1,103 fewer vehicles heading north from Little London Rd to Broadfield Way. The overall number of vehicles travelling south into this junction (over 12 hours), from the northern end of Little London Rd, has increased by just 0.1%.

Data at morning peak times (8am-9am), shows there has been a 21.7% increase in vehicles (72 more vehicles) heading south on Little London Rd towards Broadfield Way. This mirrors a 36% increase in vehicles turning right onto Broadfield Way (72 more vehicles). At evening peak times (5pm-5pm), data shows a 19.3% decrease in vehicles (53 fewer vehicles) heading south on Broadfield Way. This includes a 2.8% decrease in vehicles turning right onto Broadfield Way (6 fewer vehicles).

Any increase in traffic queues on the northern end of Little London Rd may be due to more vehicles making a right turn instead of a left turn rather than any overall increase in traffic as has been suggested in some public feedback.

Comparing this data against cycling trip counts over the same period shows that cycle trips made up just over 5% of total trips at this junction in June 2021 (peds, cycles and vehicle trips), this increased to over 12% of total trips at this junction in June 2023. Total active travel trips (walking and cycling) made up less than 14.5% of all trips at this junction in June 2021. Total active travel trips increased to over 25% of total trips at this junction in June 2023

### Data over a 12-hour period (7am-7pm) shows:

- A 35.3% reduction/1,829 fewer vehicles on Broadfield Way (both directions)
- A 78.2% reduction/2,524 fewer vehicles on Little London Rd (South both directions)
- A 0.1% increase/4 more vehicles on Little London Rd (North)
- An 82.3% reduction/1,701 fewer vehicles travelling into the junction from Broadfield Way
- A 19.5% reduction/757 fewer vehicles travelling away from the junction on Broadfield Way
- A 75.5% reduction/1,103 fewer vehicles travelling into the junction from Little London Rd (South)
- An 80.3% reduction/1,419 fewer vehicles travelling away from the junction on Little London Rd (South)
- Virtually no overall change/1 more vehicle travelling into the junction from Little London Rd (North)

### Data at morning peak time (8am-9am) shows:

- A 22.7% reduction/130 fewer vehicles on Broadfield Way (both directions)
- A 77.3% reduction/262 fewer vehicles on Little London Rd (South both directions)
- A 21.7% increase/72 more vehicles travelling into the junction on Little London Rd (North-southbound only)
- A 63.6% reduction/42 fewer vehicles travelling into the junction from Broadfield Way
- A 17.4% reduction/88 fewer vehicles travelling away from the junction on Broadfield Way
- An 84.8% reduction/190 fewer vehicles travelling into the junction from Little London Rd (South)
- A 62.6% reduction/72 fewer vehicles travelling away from the junction on Little London Rd (South)

### Data at evening peak time (5pm-6pm) shows:

- A 54.7% reduction/323 fewer vehicles on Broadfield Way (both directions)
- An 84.1% reduction/364 fewer vehicles on Little London Rd (South both directions)
- A 19.3% reduction/53 fewer vehicles travelling into the junction on Little London Rd (North-southbound only)
- An 88.8% decrease/206 fewer vehicles travelling into the junction from Broadfield Way
- A 32.6% reduction/117 fewer vehicles travelling away from the junction on Broadfield Way
- A 77.6% reduction/111 fewer vehicles travelling into the junction from Little London Rd (South)
- Am 87.2% reduction/253 fewer vehicles travelling away from the junction on Little London Rd (South)

## <u>Chesterfield Rd, Scarsdale Rd, Woodseats Rd, Broxholme Rd junction traffic</u> counts

A more basic 12-hour analysis of this junction has been carried out. A more detailed analysis was intended but could not be completed due to resource constraints. This is true of this junction and other junctions where traffic counts have been completed.

The data clearly shows that the modal filter at the Hackthorn Rd/Scarsdale Rd junction is having the intended effect of removing 72% of traffic (301 vehicles) on Broxholm Rd, which would have previously cut-through this residential area to avoid the signalised junction at Chesterfield Rd. This traffic (257 vehicles) is now travelling into the junction on Scarsdale Rd as intended, represented by an 8% increase in counts at this location.

Although not conclusive, the vehicle counts also indicate that traffic that would have previously used Little London Rd are now being diverted through this junction. This is indicated by the increased number of vehicles travelling southbound on Chesterfield Rd (9% increase or 543 vehicles) into the junction,

the number of vehicles turn right onto Woodseats Rd (78% increase or 196 vehicles) and the number of vehicles turning left from Woodseats Rd/Scarsdale Rd onto Chesterfield Rd (27% increase (116 vehicles).

Although there is no conclusive evidence to suggest all changes are related to the SVCR, it is positive to see that there has been a 3% reduction (297 vehicles) in the number of vehicles travelling northbound into the junction along Chesterfield Rd, a 5% decrease in vehicles travelling eastbound into this junction from Scarsdale Rd and Woodseats Rd (148 vehicles) and a 14% decrease in vehicles travelling East towards Scarsdale Rd from Scarsdale Rd and Woodseats Rd (209 vehicles).

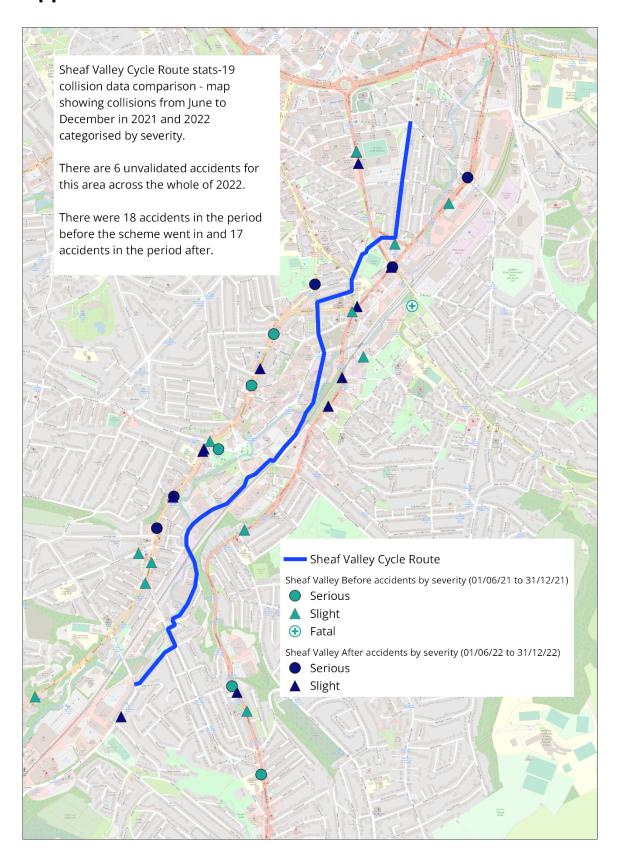
### 12-hour junction counts show:

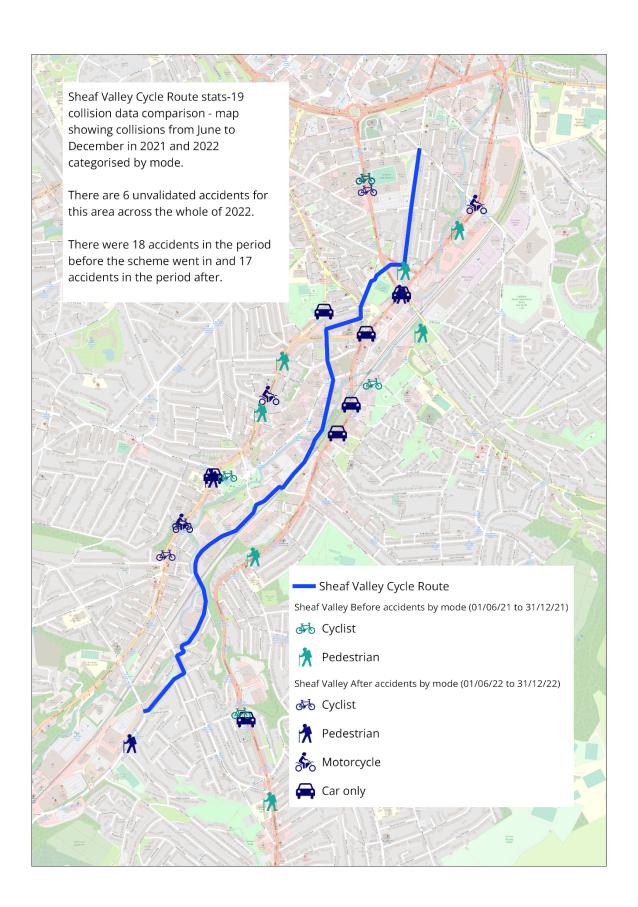
- 0.3% increase in total vehicle movements across this junction (54 vehicles)
- 9% increase in vehicles travelling southbound into this junction on Chesterfield Rd (543 vehicles)
- 3% decrease in vehicles travelling northbound into this junction on Chesterfield Rd (297 vehicles)
- 5% decrease in vehicles travelling eastbound into this junction from Scarsdale Rd and Woodseats Rd (148 vehicles)
- 8% increase in vehicles travelling westbound into this junction from Scarsdale Rd (257 vehicles)
- 78% increase in vehicles turning right from Chesterfield Rd (southbound) to Woodseats Rd (196 vehicles)
- 27% increase in vehicles turning left from Scarsdale Rd/Woodseats Rd onto Chesterfield Rd (116 vehicles)
- 14% decrease in vehicles heading East towards Scarsdale Rd from Scarsdale Rd and Woodseats Rd (209 vehicles)
- 8% increase in vehicles travelling west into this junction on Scarsdale Rd that would have previously cut-through Hackthorn Rd (257 vehicles)
- 72% decrease in vehicles travelling down Broxholm Rd (301 vehicles)

## **Appendix H: Bus Journey Time Data**

A three-day average is used for bus journey times between the Holt House (nr the Tesco Superstore) and Empire Rd (nr the Abbeydale Picture House) at peak times (8.00am-9.30am and 4pm-6pm). The three-day averages were taken in early May 2022 (before the interventions were in place) and in October 2022 (around 5 months after interventions were in place).

## **Appendix I: Collision Data**





## **Appendix J: Air Quality Data**

There are multiple sources of pollutants that can influence overall air quality. This includes both human induced and naturally occurring pollutants that have long-term implications for human health and wellbeing. Transport is not the only contributor to poor air quality, but vehicle exhaust emissions contribute significantly to overall concentrations of pollutants such as volatile organic compounds, particulate matter, and nitrogen dioxide. This is particularly significant where there are high volumes of vehicle traffic such as on major roads in and around the city centre or on motorways.

Nitrogen Dioxide (NO2) is closely associated with vehicle transport emissions. There are limitations in using the NO2 data available to evaluate the impact a scheme such as the Sheaf Valley Cycle Route (SVCR) has had on overall air quality. This is particularly true when considering changes in concentrations of NO2 over a relatively short period of time, in isolated locations and for a scheme of this scale. These limitations also help to explain why a more detailed quantitative assessment of air quality has not been carried out along the SVCR and along key roads linked to the scheme. Limitations include:

- Demonstrable changes in NO2 require at least 2-3 years data. It is not
  possible to provide accurate before and after data following the introduction
  of the interventions associated with the ETO because these were
  implemented in May 2022, almost halfway through the 2022 data collection
  year, and less than 2 years ago.
- 2) Travel restrictions associated with the Covid-19 pandemic in 2020 were still in place at the start of 2021, meaning travel and transport habits remained different to pre-pandemic norms, even at this late stage. Travel and transport habits have still not returned to pre-pandemic levels.
- 3) Wind speeds, precipitation, ambient air temperature, topography and city/regional traffic patterns are likely to have greater influence on NO2 than small changes in localised traffic patterns. Seasonal and daily changes in weather conditions can have significant impacts on NO2 including secondary sources not linked directly to transport.
- 4) NO2 levels can vary significantly depending on where measurements are made. NO2 concentrations are at their highest within the carriageway and fall steeply just metres from the kerb line.

Whilst there are potentially more advanced technologies available to measure air quality across a scheme of this scale, these approaches have limitations. Government approved equipment that accurately measures NO2, particulates and other pollutants costs tens of thousands of pounds per unit (excluding maintenance and running costs). Furthermore, these units are roughly the size of a caravan and therefore there are limitations of where they can be located.

The nearest example of more sophisticated equipment being used to measure air quality in Sheffield is at Lowfield Primary School. This equipment shows

relatively positive changes in concentrations of both NO2 and particulates in 2021 and 2022 as shown below.

Name	Locality	Site Type	NO₂ Annual Mean Concentration (μg/m³)					
			2017	2018	2019	2020	2021	2022
GH3	Lowfield	Roadside	0.0	32.0	31.0	22.0	27.0	27.0

Name	Locality	Site Type	PM <sub>10</sub> Annual Mean Concentration (μg/m³)					
			2017	2018	2019	2020	2021	2022
GH3	Lowfield	Roadside	16.0	18.0	17.0	12.0	11.0	10.0

Name	Locality	Site Type	PM <sub>2.5</sub> Annual Mean Concentration (μg/m³)					
			2017	2018	2019	2020	2021	2022
GH3	Lowfield	Roadside	16.0	18.0	11.0	7.0	7.0	6.0

There may be other newer technologies available at lower costs than the sophisticated equipment currently being used. However, these are not government approved and there currently exists a lack of confidence in their accuracy. In addition to this, there is no agreed protocol on how these units should be deployed in terms of their proximity to the roadside, height positioning and so on. This results in further issues related accuracy, particularly when comparing data between different locations.

Note: Concentrations of air pollutants associated with vehicle traffic are normally at their highest within the carriageway, particularly at peak traffic times or during traffic congestion events. In these instances, drivers and passengers within motorised vehicles are generally exposed to greater levels of pollutants than cyclists, pedestrians or people living and working within properties set back from the roadside. Concentrations of pollutants drop significantly, over very short distances from the carriageway.

## **Appendix K: Pre-Delivery Consultation Postcard**









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