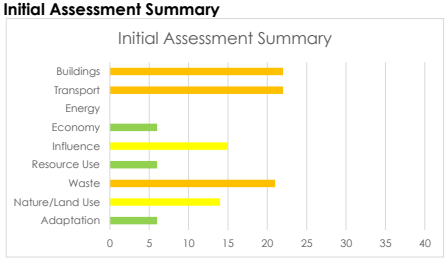
Climate Change Impact Assessment Summary

Project/Proposal Name	Sheaf Valley Cycle Route	**Portfolio**	City Futures
Committee	Transport, Regeneration and Climate	**Lead Member**	Ben Miskell
Strategic Priority		**Lead Officer**	Dominic Qaiser-Sweeting
Date CIA Completed	23/01/23	**CIA Author**	Dominic Qaiser-Sweeting
		Sign Off/Date	

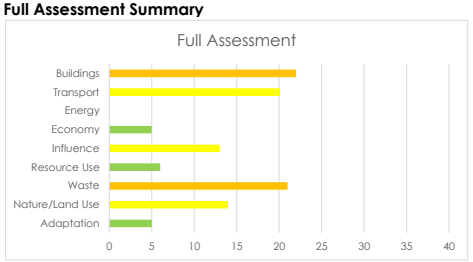
Project Description and CIA Assessment Summary	The proposed Sheaf Valley Cycle Route (SVCR) runs from Norton Hammer to the City Centre, via Shoreham Street and Little London Rd. The route connects: •Residential and commercial areas along the Sheaf Valley. •Transport hubs incl. Sheffield train station and bus interchange. •Sheffield Hallam University's city centre campus. •Colleges and schools. •Victoria Quays and West Bar. •Existing and planned cycle infrastructure The Sheaf Valley Cycle Route (delivered in its entirety) provides a safe, low-traffic active travel route between Norton Hammer and Sheffield City Centre. The route uses a range in interventions to support cycling and walking including: - Modal filters designed to reduce or eliminate through traffic and therefore increase safety for cyclists and pedestrians - Planned and improved segregated cycle infrastrucre - New signalised crossings - Parking restrictions and alterations to support cycle clearways - Junction improvements

Rapid Assessment	Does the project or proposal have an impact in the following areas? Select all those that apply. Only complete the		
Buildings and Infrastructure	Yes	**Influence**	Yes
Transport	Yes	**Resource Use**	No
Energy	Yes	**Waste**	Yes
Economy	Yes	**Nature/Land Use**	Yes
		Adaptation	No

Initial Assessment Summary



Full Assessment Summary



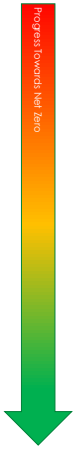
>=27	The project will increase the amount of CO2e released compared to before.
21-26	The project will maintain similar levels of CO2e emissions compared to before.
12-20	The project will achieve a moderate decrease in CO2e emissions compared to before.
3-11	The project will acheve a significant decrease in CO2e emissions compared to before.
0-2	The project can be considered to achieve net zero CO2e emissions.

Chesterfield Borough Council Climate Impact Assessment Tool provided inspiration for this tool.

Initial Assessment

Category	Impact	Description of Project Impact	Score
Buildings and Infrastructure	Construction	There wil be embedded carbon in the building materials used for any construction throughout the scheme. There are also potential impacts of works on site during construction phase e.g. power supply to site works, use fo fuel in machinery, transporting materials etc.	9
	Use	Will reduce maintenance costs where more durable surfacing is used that requires less maintenance. Where some interventions prevent through traffic by motorised vehciles accessing certain roads and vastly reduce vehicle numbers, this will reduce maintenance on these roads. However, this may be offset as traffic is re-directed onto other main roads.	6
	Land use in development	Minimal change. Few opportunities for planting/SUDS etc due to underground utilities/limited funding. Some above surface planters are used.	7
Transport	Demand Reduction	The Proposed Scheme is designed to empower travel by sustainable modes such as walking and cycling while reducing the need to travel by private car.	5
	Decarbonisation of Transport	Any reduction in private motorised vehcile use through increased cycling and walking (even for shorter, local, daily journeys), will reduce overall carbon emissions.	5
	Public Transport	The scheme is unlikely to have any overall impact on public transport. Changes in traffic flows may impact on public transport journey times and therfore demand but data suggests this will be minimal. Impoved walking and cycling infrastrucure may increase access to bus routes.	7
	Increasing Active Travel	The project proposals are aimed a delivering a significant enhancement to cycling and walking routes in the locality making them easier and safer to use and offer a more direct and coherent network. Increased walking and cycling in the Sheaf valley by increasing the number of and improving the quality of provision for pedestrians, cyclists and mobility users. Reduce emissions of carbon dioxide and other pollutants through walking and cycle usage for short journeys.	5
Energy	Decarbonisation of Fuel	N/A	NA
	Demand Reduction/Efficiency Improvements	N/A	NA
	Increasing infrastructure for renewables generation	N/A	NA
Economy	Development of low carbon businesses	N/A	
	Increase in low carbon skills/training	N/A	
	Improved business sustainability	There may be positive impacts for businesses along the route in the long term as they become more accessible by foot and bike - could help businesses reduce their scope 3 emissions if fewer staff/visitors are travelling by car.	6
Influence	Awareness Raising	The project provides a visible indication of the city's commitment to increasing active travel and will be supported by wider promotional activity as part of the Connecting Sheffield programme.	5
	Climate Leadership	The Scheme is part of the Sheffield City Region Active Travel Implementation Plan and complements the Net Zero Routemap. It plays a critical part in connecting residential and commercial areas with transport hubs, the city centre, education establishments and other sustainable transport schemes being delivered as part of the City's transformational Connecting Sheffield Programme. SCC and the wider MCA are leading the way compared to other areas.	4
	Working with Stakeholders	Lessons are being learned from the development and implementation of this and other similar schemes aross the City. Comms (and messaging) is a key one, especially with members, local businesses and wide members of the public. This is particularly true at the early stage of this type of scheme although engagement, monitoring and evaluation has improved as the scheme has progressed.	6
Resource Use	Water Use	N/A	
	Food and Drink	N/A	
	Products	Arguably, increase access to active travel routes may increase demand for bicycle and e-bikes, which increases resource use for certain products such as steel, aluminum, lithium etc in batteries, particulalry if people still retain a private motor vehcile. However, this is likely to be offset by lower fuel use as car trips are replaced by more sustainable modes	6
	Services	N/A	
Waste	Waste Reduction	There is the potential for impacts related to the production of waste during construction works.	7
	Waste Hierarchy	A suitable waste management plan for minimisation of waste will be produced in advance of any construction works taking place.	7
	Circular Economy	SCC service delivery partners, Amey, are tasked with recycling what they can. For example, we reuse surface chippings as a sub base and lighting heads for spares.	7
Nature/Land Use	Biodiversity	Negligable impact on biodiversity.	7
	Carbon Storage	N/A	NA
	Flood Management	Being close the River Sheaf, parts of the route are within flood zones 2 and 3 but internvetions at these locations should neither improve nor mitigate against flood risk	7
Adaptation	Exposure to climate change impacts	N/A	
	Vulnerable Groups	There is potential for the scheme to provide active travel opportunities for protected and under-served groups.	6
	Just Transition	N/A	

10	The project will significantly increase the amount of CO2e released compared to before.
9	The project will increase the amount of CO2e released compared to before.
8	The project will maintain similar levels of CO2e emissions compared to before.
7	
6	The project will achieve a moderate decrease in CO2e emissions compared to before.
5	
4	
3	The project will achieve a significant decrease in CO2e emissions compared to before.
2	
1	
0	The project can be considered to achieve net zero CO2e emissions.
Carbon Negative	The project is actively removing CO2e from the atmosphere.



Full Assessment

Category	Impact	Description of Project Impact	Mitigation Measures	Mitigated Score	Procurement Action Required?	Proposed KPI/Measure
Buildings and Infrastructure	Construction	There wil be embedded carbon in the building materials used for any construction throughout the scheme. There are also potential impacts of works on site during construction phase e.g. power supply to site works, use fo fuel in machinery, transporting materials etc.	None	9		
	Use	Will reduce maintenance costs where more durable surfacing is used that requires less maintenance. Where some interventions prevent through traffic by motorised vehicles accessing certain roads and vastly reduce vehicle numbers, this will reduce maintenance on these roads. However, this may be offset as traffic is re-directed onto other main roads.	Adhere to high quality construction methods and requirements as layed out by the highways adoptions team.	6		
	Land use in development	Minimal change.	Few opportunities for planting/SUDS etc due to underground utilities/limited funding. Some above surface planters are used.	7		
Transport	Demand Reduction	The Proposed Scheme is designed to empower travel by sustainable modes such as walking and cycling while reducing the need to travel by private car. This supports a reduction in car use for short, daily journeys	Explore further means to promote the scheme and empower behaviour change e.g. through the Better Points App or community engagment and training	4		
	Decarbonisation of Transport	Any reduction in private motorised vehicle use through increased cycling and walking (even for shorter, local, daily journeys), will reduce overall carbon emissions.		5		
	Public Transport	The scheme is unlikely to have any overall impact on public transport. Changes in traffic flows may impact on public transport journey times and therfore demand but data suggests this will be minimal. Impoved walking and cycling infrastrucure may increase access to bus routes.		7		
	Increasing Active Travel	The project proposals are aimed a delivering a significant enhancement to cycling and walking routes in the locality making them easier and safer to use and offer a more direct and coherent network.Increase walking and cycling in the Sheaf valley by increasing the number of and improving the quality of provision for pedestrians, cyclists and mobility users. Reduce emissions of carbon dioxide, nitrogen dioxide and particulate matter through walking and cycle usage for short journeys.	Explore further means to promote the scheme and empower behaviour change e.g. through the Better Points App or community engagment and training	4		
Energy	Decarbonisation of Fuel	N/A		NA		
	Demand Reduction/Efficiency Improvements	N/A		NA		
	Increasing infrastructure for renewables generation	N/A		NA		
Economy	Development of low carbon businesses	N/A				
	Increase in low carbon skills/training	N/A				
	Improved business sustainability	There may be positive impacts for businesses along the route in the long term as they become more accessible by foot and bike - could help businesses reduce their scope 3 emissions if fewer staff/visitors are travelling by car.	Explore further means to promote the scheme and empower behaviour change through businesses located along the route corridor e.g. through the Better Points App or community engagment and training	5		
Influence	Awareness Raising	The project provides a visible indication of the city's commitment to increasing active travel and will be supported by wider promotional activity as part of the Connecting Sheffield programme.	Explore further means to promote the route through Comms, Social Media, Press and engagement	4		
	Climate Leadership	The Scheme is part of the Sheffield City Region Active Travel Implementation Plan and complements the Net Zero Routemap. It plays a critical part in connecting residential and commercial areas with transport hubs, the city centre, education establishments and other sustainable transport schemes being delivered as part of the City's transformational Connecting Sheffield Programme. SCC and the wider MCA are leading the way compared to other areas.	Contine with this type of work	4		
	Working with Stakeholders	Lessons are being learned from the development and implementation of this and other similar schemes arass the City. Comms (and messaging) is a key one, especially with members, local businesses and wide members of the public. This is particulalry true at the early stage of this type of scheme although engagement, monitoring and evaluation has improved as the scheme has progressed.	Explore further means to work with stakeholder in the design of permanent elements of the scheme and promotion of the route in it's entirety. Work with stakeholders living and working along the route corridor to support uptake of walking and cycling	5		
Resource Use	Water Use	N/A				
	Food and Drink	N/A				
	Products	Arguably, increase access to active travel routes may increase demand for bicycle and e-bikes, which increases resource use for certain products such as steel, aluminum, lithium etc in batteries, particulalry if people still retain a private motor vehicle. However, this is likely to be offset by lower fuel use as car trips are replaced by more sustainable modes	No further actions	6		
	Services	N/A				
Waste	Waste Reduction	There is the potential for impacts related to the production of waste during construction works.	No further actions	7		
	Waste Hierarchy	A suitable waste management plan for minimisation of waste will be produced in advance of any construction works taking place.	No further actions	7		
	Circular Economy	SCC service delivery partners, Amey, are tasked with recycling what they can. For example, we reuse surface chippings as a sub base and lighting heads for spares.	No further action	7		
Nature/Land Use	Biodiversity	No impact on biodiversity.	Where interventions that prevent through traffic are made permanent, there may be scope for further design work to include removal of traditional highways materials and replacement with trees, plants etc that support increased biodiversity. This is subject to funding and cross party working both internally within the council and with external partners.	7		
	Carbon Storage	N/A	NA	NA		
	Flood Management	Being close the River Sheaf, parts of the route are within flood zones 2 and 3 but interntvetions at these locations should neither improve nor mitigate against flood risk	As above, future investement in schemes that are made permanent could look at flood mitigation methods such as SUDS.	7		
Adaptation	Exposure to climate change impacts	N/A				
	Vulnerable Groups	There is potential for the scheme to provide active travel opportunities for protected and under-served groups.	Explore options to engage with diverse user groups in the design, development, implemntation and promotion of the route.	5		
	Just Transition	N/A				

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Carbon Negative	The project is actively removing CO2e from the atmosphere.

Progress Towards Net Zero

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