

Climate Impact Assessment, Appendix B, CRSTS Fitzwilliam Corridor Scheme – Consultation Approval

Will the decision/proposal impact...	Impact	If an impact or potential impacts are identified:			
		Describe impacts or potential impacts on emissions from the Council and its contractors.	Describe impact or potential impacts on emissions across the Borough as a whole.	Describe any measures to mitigate emission impacts	Outline any monitoring of emission impacts that will be carried out
Emissions from non-domestic buildings?	None	Not applicable in this instance	Not applicable in this instance	Not applicable in this instance	Not applicable in this instance
Emissions from transport?	Increase	There can be expected to be additional emissions associated with travel related to the development and construction of the projects.	<p>The approach to St Anns Roundabout will be reduced from two lanes to one, with one lane removed and converted to a bus lane. This may lead to increased congestion, resulting in more localised congestion from vehicles travelling outbound.</p> <p>The scheme also proposes the closure of the subways at St Anns Roundabout and introduce surface level pedestrian and cycle lanes and crossing points. In addition, there will be an additional crossing point introduced on the roundabout on the southern side near</p>	<p>The introduction of a bus lane on the in-bound to St Ann's will lead to faster journey times and punctuality of bus services at which is currently a key pinch point. This may lead to increased modal shift from vehicles to bus services and lead to a reduction in transport-based emissions.</p> <p>The introduction of a cycle-lane from St Ann's roundabout to Mushroom roundabout and improvements to the pedestrian realm will also provide safe segregated infrastructure, which may encourage modal shift from vehicles to active travel.</p>	<p>Bus journey time and patronage data will be collected as part of Monitoring and Evaluation.</p> <p>Automotive Travel Counts data will also be collected to assess impact of scheme.</p>

			<p>Tesco, which will all require vehicles to stop if need be. The carbon impact associated with traffic signals is primarily driven by the vehicle emissions from idling and stop-and-go traffic, which is far more significant than the electricity used to power the lights. However, the technology and timing of the signals will aim to reduce the length of time vehicles idle.</p> <p>If the public consultation is to be in person then there may be some increase transport emissions associated with its delivery, though this is likely to be very small.</p>		
Emissions from waste, or the quantity of waste itself?	Increase	Most schemes will result in excavations and/or disposal of materials as part of construction, with consequential one-off increase in waste and associated emissions.			
Emissions from housing and domestic buildings?	None	Not applicable in this instance	Not applicable in this instance	Not applicable in this instance	Not applicable in this instance

Emissions from construction and/or development?	Increase	All highway schemes have construction emissions arising from the supply, installation, maintenance, and operation of the schemes. The scale and nature of these cannot be confirmed until schemes are identified and more developed.	Not applicable in this instance	Not applicable in this instance	Not applicable in this instance
Carbon capture (e.g. through trees)?	None	Not applicable in this instance	Not applicable in this instance	Not applicable in this instance	Not applicable in this instance

It is noted in the officer decision report that the Council could choose to develop this project without consulting residents or individuals who are likely to be affected by the strategy. This would fail to account for the needs and wishes of individuals who may face barriers to inclusion and access to services, which intersect with individuals' and communities' differential exposure and vulnerability to climate change impacts. Systemic inequalities affect people's experience of notable climate change impacts such as increased flood risk and the emergence of extreme heatwaves as a recurring health hazard. In Rotherham, deprivation is correlated with exposure to extreme heat: more than two thirds of the population living in LSOAs (Lower-Level Super Output Areas) with the greatest urban heat island effect were amongst the 20% most deprived in England, as measured by the 2019 Index of Multiple Deprivation (double the proportion of the population living in the most deprived LSOAs, throughout the borough as a whole) (Rotherham Joint Strategic Needs Assessment, 2025). By consulting on the development of its Inclusion Strategy, the Council can address people's experiences of barriers which affect their access to services, which may increase local resilience to climate change impacts through long-term outcomes such as improved health and wellbeing, as well as through short-term responses to contingencies such as flooding and extreme heatwaves.

Will the proposal affect Council services' resilience to climate change, or the capacity of people living in the Borough to adapt to climate change?

The *CRSTS Fitzwilliam Corridor Scheme* is not expected to negatively affect the Council's resilience to climate change or the capacity of residents to adapt.

Where possible, the scheme will incorporate sustainable construction practices and materials, and will consider drainage, heat resilience to support long-term adaptability. Any temporary disruption during construction will be managed to minimise impact on services and residents.

Provide a summary of all impacts and mitigation/monitoring measures:

In summary, the following impacts are expected -

- A one-off increase in emissions associated with development and construction of the project.
- Potential neutrality of carbon impact due to modal shift from car to bus travel and active travel offsetting potential increase congestion on Fitzwilliam Road and on the approach to St Ann's Roundabout.

The increases associated development, construction, maintenance, and operation reflect the systemic nature of the carbon emissions problem; whilst the energy and construction systems are emitters of carbon, any additional activity utilising these systems can be expected to result in increases in emissions.

The changes are thought likely to be very small in the context of overall transport emissions in Rotherham, and very small in the context of the NZ2030 and NZ2040 targets, and remaining carbon budgets.

Supporting information:

Climate Impact Assessment Author	Mark Anderson Senior Transport Officer Transportation and Infrastructure Regeneration and Environment
Please outline any research, data or information used to complete this Climate Impact Assessment.	N/A
If quantities of emissions are relevant to and have been used in this form please identify which conversion factors have been used to quantify impacts.	N/A
Validation	Tracking Reference: CIA 585  Arthur King Principal Climate Change Officer