Colesdown Hill Underbridge

Project details

Assessment author

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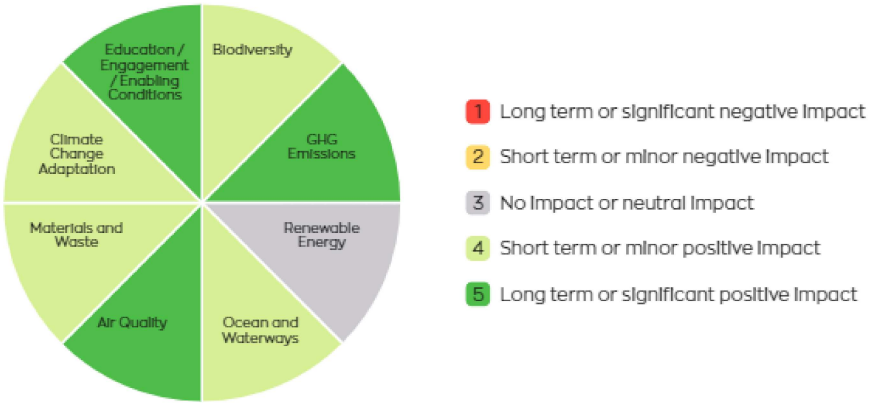
Project summary

Reinstatement of an underbridge to allow the continuation of a walking and cycling route ensuring that the route is accessible for all users.

Summary of assessment



The short-term localised environmental impact and also the carbon impacts of the scheme construction are expected to be more than offset because this is a scheme which helps provide opportunities for residents and businesses to travel sustainably. This will help reduce the carbon emissions associated with road transport whose emissions represent 30% of Plymouth's carbon footprint, a proportion that is set to increase. By helping to tackle congestion, the scheme as part of a wider programme of network improvements could provide wider environmental benefits by reducing demand for schemes to provide additional road capacity for general traffic.

Assessment scores

Biodiversity

Score

(4) Short term or limited positive impact

Score justification

The short term negative impacts of the construction of the scheme are expected to be more than offset by the fact

that the scheme is helping to encourage sustainable transport, so helping to reduce the climate and other environmental impacts of private motorised transport in the city. Without a significant reduction in motorised traffic, it will not be possible for the city to meet its climate emergency objectives.

Mitigatory measures applied:

Planning requirements will mean that the scheme will need to deliver a 10% biodiversity net gain. Therefore the scheme will need to deliver 0.29 units of biodiversity net gain. It is likely that the far more significant impact however is that the scheme is helping to support sustainable transport so helping to reduce the detrimental impacts of car use.

GHG Emissions

Score

(5) Long lasting or extensive positive impact

Score justification

GHG Emissions Score Justification: The immediate impact of this scheme will be an increase in carbon emissions as a direct result of the construction of the scheme and also the loss of of approximately 6 trees and also some limited habitat.

Mitigatory measures applied:

Road transport represents around 30% of Plymouth's carbon emissions, a proportion that is set to increase significantly in the coming years. This scheme is part of a wider network that is helping to make walking and cycling a viable alternative to the private car which has a very significant impact on carbon emissions through the following mechanisms: direct carbon impact of the construction of road schemes to increase capacity for general traffic; petrol and diesel consumption and to an extent electric consumption until UK electricity is carbon neutral; and construction of the vehicles themselves.

Renewable Energy

Score

(3) No impact or neutral impact

Score justification

The scheme has no impact on renewable/waste energy.

Ocean and Waterways

Score

(4) Short term or limited positive impact

Score justification

Road network pollutants come from tyre and brake wear, exhaust emissions, oil and fuel deposits. All of these can and do enter the water environment. In addition it's believed that 68,000 tonnes of microplastics are generated from tyre wear in the UK every year of which 7,000 to 19,000 tonnes enter surface waters. (Environment Agency, towns, cities and transport: challenges for the water environment, October 2021). By helping to provide an alternative to the private car, this scheme could be expected to have a longterm positive impact on water quality in Plymouth.

Air Quality

Score

(5) Long lasting or extensive positive impact

Score justification

In the UK, air pollution is the largest environmental risk to public health the annual mortality of human made air pollution in the UK is roughly equivalent to between 28,000 and 36,000 deaths every year. www.gov.uk/government/publications/airpollution-applying-all-our-health/air-pollution-applying-all-our-health The scheme has been assessed using the DfT's Active Mode Appraisal Toolkit (AMAT) which indicates a positive impact as a result of modal shift from car and taxi to walking and cycling. These benefits will be long lasting because of the scheme, once constructed will be in place for a number of years and continue to encourage walking and cycling.

Materials and Waste

Score

(4) Short term or limited positive impact

Score justification

Any construction project inevitably creates waste, and therefore there will be a short-term negative impact.

Mitigatory measures applied:

Every effort will be made to minimise the waste impact of the construction of the project, and the contractor will be required to provide details as to how this will be achieved. The use of private cars and taxis generates significant waste associated with construction of the vehicles, vehicle consumables such as tyres, and roadconstruction and repair. By helping to make alternative forms of transport more viable, this scheme can have a long-term beneficial impact on the waste impacts of car use.

Climate Change Adaptation

Score

(4) Short term or limited positive impact

Score justification

The increase in tarmac area could be expected to have a small localised detrimental impact on excessive urban heating associated with global heating.

Mitigatory measures applied:

Motor vehicles are a significant source of heat in the urban environment and therefore, this scheme by providing a sustainable
alternative means of transport can be expected to reduce this effect. It is estimated that around20% of urban areas is dedicated to roads and parking. Walking and cycling requires just a fraction of the road/parking space compared to the private car and therefore helps reduce congestion and the pressure to construct new and wider roads and car parks to accommodate motor vehicles.

Education / Engagement / Enabling Conditions

Score

(5) Long lasting or extensive positive impact

Score justification

The project enables residents and businesses to meet their travel needs more sustainably.