Climate Impact Assessment

ROY-8842-25

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Royal Parade Improvement Scheme

Project details

Assessment author

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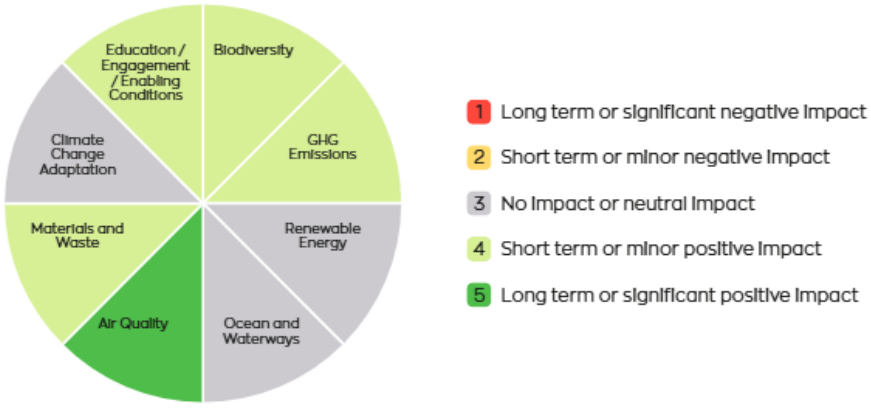
Project summary

The Royal Parade Improvement Scheme has been designed to reduce congestion and improve the reliability of bus services to and from the city centre by increasing the number of bus stops on the eastbound side.

Summary of assessment



The Royal Parade Improvement Scheme will have a positive climate impact in Plymouth's City Centre through the addition of three new bus stops and the sawtooth design to all stops, easing traffic on a busy and important transport hub. This will create a more reliable bus service throughout the city, one the public feel more confident in using, therefore increasing bus patronage – a sustainable transport method. The scheme will also provide green roofs to all bus stops to increase biodiversity to our City Centre. The benefits offered by the scheme will have a long-term effect, beyond 2030 and consequently future proofing Royal Parade.

Assessment scores

Biodiversity

Score

(4) Short term or limited positive impact

Score justification

Nature is an element that has been thought about throughout the scheme, improving the amount of green in the city centre being very important. As part of this we are implementing green roofs on all bus shelters along Royal Parade, which has already been completed on the south side of the road. This will improve biodiversity in the city centre by attracting pollinators and insects to these native friendly plant species

Also, by adding three new bus stops and a sawtooth design to all bus stops, we aim to improve the bus network not only on Royal Parade but for in the rest of Plymouth too – by reducing the amount of congestion caused by buses trying to stop. These elements will assist towards to net zero.

The project will not increase the risk of invasive species or dangerous pathogens entering the area.

GHG Emissions

Score

(4) Short term or limited positive impact

Score justification

The scheme will create a short-term increase in greenhouse gas emissions during the construction period. This is due to traffic management, leading to disturbed traffic patterns, the process of granite laying, soil disturbance, the use of construction vehicles and their journeys from the compound to site.

However, the scheme will produce a decrease in GHG emissions in the long-term due to increased bus efficiency in the system, less congestion on Royal Parade and aim for public behaviour to change and be more inclined to use a bus.

Renewable Energy

Score

(3) No impact or neutral impact

Score justification

No effect.

Ocean and Waterways

Score

(3) No impact or neutral impact

Score justification

No effect.

Air Quality

Score

(5) Long lasting or extensive positive impact

Score justification

It is anticipated that the Royal Parade scheme will increase bus patronage, enable bus timetables to run more efficiently, which will help services will be more efficient and more reliable.

We want bus services to be reliable so that people have confidence in using them. This in turn will reduce the number of cars with only one or few occupants. This in turn should improve air quality.

Waiting times and vehicle idling will reduce due to the sawtooth design aiding buses getting in and out of stops. This currently creates bottlenecks from buses causing traffic behind them on Royal Parade.

The scheme will provide additional cycle hoops and a Toucan crossing. The scheme seeks to future proof the city centre as we aim for more sustainable transport in the future.

Green infrastructure is also incorporated into the scheme via green roofs on all new bus shelters.

Materials and Waste

Score

(4) Short term or limited positive impact

Score justification

There will be a one-off negative impact during the construction phase of the scheme due to materials being used and waste being created.

The Contractor will be required to provide a comprehensive waste management plan. E.g all concrete slabs will not be reused, but they will be taken to a waste management site for reuse as aggregate. The existing granite kerbs will be stored and reused within the city.

However, the scheme will be replacing the concrete paving, which is at the end of its useful lifespan, with granite paving which has been chosen for its durability and longevity. It will be set onto a robust foundation which will ensure that its lifespan is maximised. This will therefore mean the upkeep for the materials will be low and due to its long lifespan, it will ensure that replacement paving will not be necessary for several decades, showing the long-term benefits of the project.

The Principal Contractor will be required to comply with environmental good practice.

The Royal Parade scheme will provide two large capacity litter bins with clear recycling advice on the bins.

Climate Change Adaptation

Score

(3) No impact or neutral impact

Score justification

The Royal Parade should enable Plymouth to be more resilient to the impact of climate change. This will be through the improvements of sustainable transport infrastructure through the three extra bus stops, safer toucan crossing across the road, cycle hoops. This will help to future proof the centre of Plymouth, especially with the expectation of electric buses being added to the system in future years.

Education / Engagement / Enabling Conditions

Score

(4) Short term or limited positive impact

Score justification

The scheme will have a positive impact on residents and businesses as it will help them to adapt to climate change by being able to be more confident in using public transport to get to work, due to the scheme improving bus timetable reliability. Another key element of the scheme is to promote sustainable methods of transport, this can be seen by the improved toucan crossing and cycle hoops which will make Royal Parade a safer and more suitable environment for pedestrians and cyclists. There will also be efforts to show the members of the public the impact of single-use traffic and how it increases greenhouse gas emissions. It is our aim to make using the bus a more desirable option of transport and if the Council can improve the bus system whilst educating and engaging with public, we stand a bigger chance of increasing bus patronage and a change in travel behaviour in the city.