

## Eco Impact Checklist

<b>Title of report:</b> Additional Funding for Highways maintenance and pothole repairs				
<b>Report author:</b> Shaun Taylor				
<b>Anticipated date of key decision</b> 1 <sup>st</sup> July 2021				
<b>Summary of proposals:</b>				
Will the proposal impact on...	Yes/ No	+ive or -ive	If Yes...	
			Briefly describe impact	Briefly describe Mitigation measures
Emission of Climate Changing Gases?	Yes	+ive	<p>Although repair work with emit some climate changing gases, research published recently (citation provided at the end of this document) found that pothole repair and prevention work reduces traffic emissions by up to 2%.</p> <p>Harder wearing surfaces that require less heating and curing time have already been introduced, to reduce the impacts of, and need for, pothole repairs.</p> <p>The council's statutory duty to ensure highway safety means that work on bus and cycle lanes cannot be prioritised. Safer and more comfortable journeys on these forms of transport have the potential to reduce car use (and therefore road wear and emissions), but there is no direct cause-and-effect.</p>	This funding will be used for both prevention and repair work, which will be prioritised using careful modelling.

Bristol's resilience to the effects of climate change?	Yes	+ve	All repairs ensure high levels of wet weather grip and use materials that meet British Standards, which minimises hot weather melting during current climatic extremes.	
Consumption of non-renewable resources?	Yes	-ve	Minerals are used for works.	Asphalt containing waste materials are being developed, but are unlikely to be ready to be used during works covered by the funding.
Production, recycling or disposal of waste	No	-ve	There will be some waste during repairs. Asphalt containing waste materials are being developed, but are unlikely to be ready to be used during works covered by the funding.	Waste will be minimised during repairs.
The appearance of the city?	Yes	+ve	Roads that are free of potholes improve the appearance of the city.	
Pollution to land, water, or air?	Yes	+ve	Speeds are low on most Bristol roads, so noise-reducing surfacing will be used only where really needed, since it can compromise wear, and sometimes grip and curing time, depending on the type used.	
Wildlife and habitats?	No			

**Consulted with:**

**Summary of impacts and Mitigation - to go into the main Cabinet/ Council Report**

Pothole repair and prevention works emit greenhouse gases, use mineral products and produce a small amount of waste. However, recent research found that they can reduce traffic emissions by up to 2%. In conjunction with modelling to prioritise works giving the greatest benefits, minimising waste and using materials that are designed to minimise the

need for future repairs, works using this funding will improve the safety, appearance, and greenhouse gas emissions associated with Bristol's roads.

The overall impact will be environmentally beneficial.

**Checklist completed by:**

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Dept.:	Highways
Extension:	
Date:	10/05/2021
Verified by Climate Change Team	Giles Liddell

Citation of the research work referred to above:

Hao Wang, Israa Al-Saadi, Pan Lu & Abbas Jasim (2020) Quantifying greenhouse gas emission of asphalt pavement preservation at construction and use stages using life-cycle assessment, International Journal of Sustainable Transportation, 14:1, 25-34, DOI: [10.1080/15568318.2018.1519086](https://doi.org/10.1080/15568318.2018.1519086)