Eco Impact Checklist

Title of report: Transport Capital Budget Allocation 2021/22
Report author: Douglas Sole
Anticipated date of key decision:
Summary of proposals: To seek approval for the budget allocation of the Highways Capital Maintenance and Integrated Transport Block for financial year 2021/22 as detailed in Appendix A. The schemes include highway and structures maintenance and transport improvements for public transport and active transport modes. Detailed assessment of the impact of each scheme will be carried out during the design phases of the schemes. This report only focuses on funding from Department for Transport grants, which primarily but not exclusively, come via West of England Combined Authority (WECA) as follows; Highways Capital Maintenance including Incentive Funding; Integrated Transport Block; This is not the full Transport Capital Programme, as it excludes specific grant allocations which are subject to their own decision pathways e.g. Clean Air Fund, s106, CIL, etc.

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	Enhancements to public transport and cycling facilities will contribute to a reduction in emissions through increased sustainable travel choices. New road surfaces will promote smoother and more efficient journeys and reduce the need for future maintenance and traffic management measures. Match funding for EV taxi charge points will encourage the use electric vehicles within the city.	Use sustainable procurement practices for resources needed for projects undertaken. Aim to use local suppliers and contractors where possible to reduce travel distance.
		+ve	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%.	
		-ive	Construction and engineering requires combustion of fossil fuels.	Direct and embodied carbon emissions from individual projects will be calculated using manufacturer environmental product declarations (EPDs), the Circular Ecology ICE database, the government's Carbon Reporting data, or the most relevant alternative source.
		-ive	There will be embodied carbon from the sourcing and processing of materials used, such as asphalt, aggregates, sand and cement.	
Bristol's resilience to the effects of climate change?	Yes	+ive	Drainage repairs will help to alleviate flood risk.	
		-ive	Specific schemes may have a negative impact. For instance, by increasing impermeable surfaces.	
Consumption of non-renewable resources?		+ive	Enhancements to public transport and cycling facilities will contribute to a reduction in emissions through increased sustainable travel choices.	Ensure contractors use sustainably sourced materials where possible. Utilise the industries advancements in technology to minimise the volume of non-renewable resources,
		-ive	Construction of new infrastructure consumes materials and fuels.	Currently some recycled materials are used for road surfacing, research is being undertaken to use innovative technologies such as including waste materials in roads for future works, continue to research this option. Consider contractor travel, look to procure

				local contractors / materials where possible.
Production, recycling or disposal of waste	Yes	-ive	Waste will be produced through infrastructure & engineering works.	Ensure the waste hierarchy is applied throughout any projects undertaken with this budget. Ensure waste is disposed of correctly and legally. Contractors will need to supply a waste management plan for large projects. Works on major projects will go through cabinet separately and detailed impacts are considered in their respective Eco IAs.
The appearance of the city?	Yes	-ive / +ive +ive	New infrastructure will alter the appearance of the city. Repaired surfaces will improve appearance of the city.	Ensure that the appearance of the city is considered as part of the planning of schemes, and that engagement takes place with appropriate internal teams and the public during design of any scheme.
Pollution to land, water, or air?	Yes	+ive -ive	Enhancements to public transport and cycling facilities will contribute to a reduction in emissions through increased sustainable travel choices. Repairs on the roads reduce the likelihood of vehicle incidents reducing the likelihood of fuel spillage as a result of this. It's likely that engineering & construction works will create noise and dust. There is also the	Primarily mitigated through contractor management and design on a scheme-by-scheme basis. Ensure effective traffic management during delivery of schemes as this can reduce congestion which

			possibility of accidental releases of fuels and chemicals to land or water. Construction works may cause traffic congestion which negatively effects air quality.	contributes to air pollution.
Wildlife and habitats?	Yes		Development of infrastructure may harm wildlife & habitats.	Ensure that where projects may lead to development on existing green land the council's ecology officer is involved at an early stage in design to give advice about ecology in the area.

Consulted with: Consultation will happen on a scheme by scheme basis as appropriate. At this stage the request is to approve funding, and the details of the schemes to be delivered are not developed to the degree needed to consult on.

Summary of impacts and Mitigation - <u>to go into the main Cabinet/ Council Report</u>

The significant impacts of this proposal are in construction and maintenance works and the associated carbon emissions and material use. There are positive impacts in that improved infrastructure will encourage more sustainable travel choices.

The proposals include the following measures to mitigate the impacts – For individual projects, plans will be created as needed for contractor, traffic, ecology and waste management, material choices and data gathered on carbon emissions. The team will reduced transport during procurement.

The net effects of the proposals are mixed. If managed correctly the negative impacts can be minimised.

Checklist completed by:

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Extension:	
Date:	25/01/2020
Verified by Environmental Performance Team	Giles Liddell Project Manager - Environmental

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