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Response by the Faculty of Public Health of the Royal Colleges of Physicians of the United Kingdom

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Type of organisation Professional organisation in the health field.

FPH response to the Department for Transport's consultation on proposals for the creation of a Major Road Network

1. Health should be a central consideration

We welcome the opportunity to take part in this consultation and contribute to the shaping of the Major Road Network (MRN). Transport has important implications for health, wellbeing and human capital in the UK. Planning the future of transport therefore affords close consideration and review. Central and local government have a duty to promote health and reduce health inequalities. We are therefore deeply disappointed to see the MRN proposals fail to consider the potential health impacts of the network, including the need to assess and mitigate health harms (direct and indirect) and to maximise opportunities to improve health. This is particularly concerning in light of the aims for the MRN to traverse town and village centres and support new housing developments.

Transport is an opportunity to increase the health and prosperity of our population, but the health harms caused by motor traffic are well recognised. They include physical inactivity, air pollution, injuries, noise and community severance (1). Thus, transport policies that prioritise private car use over more sustainable modes damage people's health. Some groups are more disadvantaged than others, deepening health and social inequalities (2, 3). For example, among people living in towns and cities (who represent the vast majority of the population), research suggests car owners are less likely to do the recommended amount of physical activity then people who do not own a car (4), which increases their risk of a range of diseases, such as cancer and heart disease, and early death. Poorer people are more likely to live in areas affected by traffic noise, poor air quality and higher road danger, with multiple resulting health harms. They are also less likely to have access to safe and reliable public transport services, limiting the opportunities high quality transport systems can provide (2, 3).

Transport policies that promote active travel, including walking, cycling and using public transport, can dramatically improve population health and productivity (1, 5, 6). For

example, active travel is considered to have the potential to prevent heart disease equivalent to all other heart disease prevention programmes combined.

The document makes no mention of road danger, which is a leading cause of preventable death. In 2016 around 26,000 people were killed or seriously injured on Britain's roads. This included the highest number of deaths since 2011 (7). Reducing road danger should be a central consideration and all schemes should be required to include evidence-based measures to minimise road danger.

We recommend:

- Combined health and environmental impact assessments must be completed for all proposed schemes, addressing the key transport determinants of health, both direct and indirect.
- All scheme proposals must include monetised assessment of health impacts, which are included in the scheme's cost-benefit analysis.
- The Department's prioritisation framework for scheme funding must include health impacts and environmental sustainability.

2. Benefitting all people should be core principle, not a separate objective

The transport system exists to support the movement of people. It has health, social, environmental and economic impacts. Benefitting all people should be a core principle of the MRN and recognise its health and social, as well as the economic, impacts. Public transport, cycle and walking routes should be viewed as core elements of the transport network, not distinct from it. This will support realising the Government's vision of a UK where everyone has opportunity in life.

We are opposed to defining the network through vehicle numbers because this prioritises private vehicles and disregards all other road users. The transport system should be considered an opportunity to improve population health and reduce inequality; fundamental to this is investment in public transport and active travel modes. More roads designed exclusively for motorised vehicles serves only to bring more vehicles to the fleet ultimately increasing congestion.

We oppose excluding public transport schemes from the eligibility criteria. Instead, schemes that enhance public transport should be actively encouraged because they increase active travel and reduce car use. Furthermore, public transport is a more space-efficient mode than private vehicles so will reduce congestion more effectively than increasing road capacity for private cars. This also provides flexibility for population growth and changes in age structure.

We recommend:

- Benefitting all road users is included as a core principle that applies to all objectives.

- A measure of all road users (and not solely vehicle numbers) is included in the definition of any new transport network.
- Schemes that promote public transport and active travel are prioritised and not excluded from the eligibility criteria.

3. Environmental issues must be adequately addressed

The proposals do little to address the air quality impacts of motorised transport. Air pollution is among the 10 largest risk factors for early death in the UK (8). EU pollutant limits are routinely exceeded despite Government's commitment to achieving compliance. Increasing road capacity for private vehicles will increase transport-related air pollution, especially particulate matter (PM) emissions which mostly come from tyre- and brake-wear and therefore are not affected by improvements in engine technology. PM causes the greatest health harms, including heart disease, stroke and lung cancer, and there is no safe level (9).

The proposals do little to detail how climate change impacts will be assessed and addressed. With the emergence of electric vehicles, CO_2 emissions will remain a concern without significant investment in sustainable energy production.

The proposals fail to identify the flood risks introduced by laying down tarmac or specify how these will be addressed. Flood risk is likely to increase as a result of climate change.

We recommend:

- Mitigating environmental impacts of the transport system is a stand-alone objective and environmental impact assessment is a key criterion for scheme investment assessment.
- Impact on climate change is included in all environmental impact assessments.

4. Other fundamental limitations of the proposals

Congestion

The proposals imply increasing road capacity will reduce congestion, but there is strong evidence that more road space does not relieve congestion in the medium- to long-term (10). Indeed, the proposals explicitly state increasing road capacity will facilitate new journeys, which acknowledges the MRN will increase demand.

Private car use is one of the most space-inefficient travel modes. Investment in public transport and walking and cycling routes is necessary for reducing congestion long-term.

Future technologies

The proposals fail to acknowledge the emergence of technologies set to dramatically change the way people travel in the next 20 years. For example, the OECD has calculated using shared driverless vehicles as part of a total mobility system could reduce traffic by 90%. High-speed travel, through technologies such as the Hyperloop, is increasingly likely and would greatly modify the role of road networks. A flexible network that allows for ever-changing technologies is needed to ensure best use of precious resources and the ultimate design of a transport network that benefits all, now and in the future.

We recommend:

- Schemes are assessed by their potential to reduce congestion in the long-term, including through prioritising more space-efficient modes such as public transport.
- Schemes must incorporate flexibility to adapt to beneficial technological innovations so they are resilient to the substantial changes to transport technology predicted for the near future.
- Considering the challenges the UK faces, including health and inequality, connectivity and sustainability, this fund should be used for improving mobility in towns and cities through enhancing public transport, cycling and walking routes.

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