

Glasgow Centre for Population Health

Response to the Infrastructure Commission for Scotland's initial call for evidence and contributions on Scotland's future infrastructure priorities

May 2019

We are responding on behalf of the Glasgow Centre for Population Health (GCPH) to your call for evidence. Before responding in more detail it may be helpful to summarise our Centre's purpose and work.

About GCPH

The GCPH was established in 2004 to carry out research and support new approaches to improve health and address inequalities, working in partnership with local organisations and communities.

Our activities are directed towards four main aims:

- To create and test new models for understanding the patterns, and causes, of Glasgow's enduring poor health while identifying potential solutions and actions for improvement.
- To bring excellent and innovative population health research together with the work of policy-makers and service providers to accelerate and strengthen processes for better and more equal health.
- To develop greater capacity for effective action to improve health through educational processes and events, provision of regular communications, and organisational and professional development.
- To be a focus for the exchange of ideas, independent thinking, analysis and debate about population health and health inequalities, linked with similar activities elsewhere in the world.

We are a partnership between NHS Greater Glasgow and Clyde, Glasgow City Council, and the University of Glasgow, funded by the Scottish Government. The GCPH's work is focused on Glasgow but often produces work with wider relevance across Scotland.

Our response

We have structured our response around the four key issues that the Commission has set out for its initial evidence gathering (Annex 1) and have responded to some but not all of the questions posed under these headings. Our responses reflect the focus of our work and the public health priorities that underpin them.

Key strategic drivers to an inclusive growth and low carbon economy:

The strategic and overarching objectives (on page 5 of the consultation guidance) are important but we would have some caveats and have a difference in emphasis in places. Our research over the last 15 years has highlighted repeatedly the poor health profile of Scotland in comparison with other western European countries¹ and, in particular, of post-industrial west of Scotland in comparison with other post-industrial European² regions and UK cities³. Allied to poor health, Scotland has wide health inequalities – which are currently widening further⁴ – and these are underpinned by stark socioeconomic inequalities.

These inequalities are socially determined by circumstances largely beyond an individual's control. NHS Health Scotland's work on health inequalities shows that the fundamental causes of health inequalities are an unequal distribution of income, power and wealth, which can lead to poverty and marginalisation of individuals and groups⁵. These fundamental causes also influence the distribution of wider environmental influences on health, such as the availability of work, education and good quality housing.

They can also influence access to services and social and cultural opportunities in an area and in society. The wider environment in which people live and work then shapes their individual experiences of low income, poor housing, discrimination and access to health services. This environment then shapes individual experiences across the population and leads to the inequalities in health outcomes.

It is important to state that many drivers of these inequalities are outwith the control of local and national government and agencies in Scotland, and are dictated by UK government policy (e.g. welfare policy and much of the tax system) and global geo-political forces. Nevertheless, new infrastructure can have a role in addressing inequality in Scotland and for this reason we believe addressing inequality should be given a clearer, stronger priority in the objectives of the Commission's work. The inequalities that we see today in Scotland have evolved and widened over the last 70 years within a Scottish context. Addressing and reducing these social and health inequalities will require multiple, complementary approaches. The Infrastructure Commission should have a strong positive role in this endeavour.

Climate change (both mitigation and adaptation) needs to be at the forefront of infrastructure planning. New developments need to incorporate plans for higher temperatures, higher rainfall/flood risk and renewable energy use. The relationship between climate change and inequality is worth noting. The most vulnerable people in our population – in particular the old, the very young, people living in poverty – are likely to be the most at risk from the direct impacts of climate change such as extreme weather events e.g. storms, flooding, etc.

Scotland's National Performance Framework explicitly acknowledges the connections between health, sustainability and fairness. Infrastructure policy needs to adopt a holistic approach that acknowledges the interactions between what is built and health, inequality and climate change issues. Policy should aim to achieve sustainable development and to do no harm.

Infrastructure in relation to an Inclusive Growth and Low Carbon Economy:

The infrastructure definition provided appears comprehensive. However, it may also be worthwhile to consider the indirect impacts of infrastructure. For example, the transport systems impact on air pollution, noise pollution and health. Looking through a public health lens, built infrastructure alongside the natural environment represents the physical environment within which humans live. Many features of this system interact and impact on human health, both positively and negatively. A broad 'whole system' holistic view of the built environment as part of human ecology is therefore needed.

Particular features of infrastructure can have strong influences on human health and wellbeing. Affordable, efficiently heated and insulated homes are a building block for human health and can also contribute to reducing carbon emissions. A transport system built on the principles of sustainable travel and transport can help mitigate carbon emissions, reduce transport-related pollutants and support sustainable local economies. The right infrastructure can indeed be a catalyst for helping to make the shift to a more sustainable transport system that enables people to travel more actively (on foot, by pedalling or on public transport). In places where car ownership is low, as in many parts of urban and rural Scotland, a good quality, affordable public transport system is a necessity to enable people to access education, training and employment opportunities.

There is evidence that local transport systems and place-making that prioritise walking and cycling can be attractive to residents and benefit local economies⁶.

The demand and need for the infrastructure assets:

We would advocate for an inequalities-focused approach to infrastructure planning, ensuring that more disadvantaged communities benefit from infrastructure investment at least as much as less disadvantaged areas. However, it is evident that there are clear current inequalities, for example, in levels of exposure to air pollution⁷; and the health burden of poor air quality falls disproportionately on disadvantaged or vulnerable populations⁸ – typically people living in more deprived areas, those with pre-existing health problems, the very young and the old. We also know that pedestrian casualties are higher in more deprived areas, and higher for children than for adults⁹.

There also needs to be recognition of the importance of maintaining infrastructure by timely and adequate maintenance programmes as well as investment in new infrastructure.

In terms of transport, active travel infrastructure (principally, for walking and cycling) has the potential to provide real long term population health benefits as well as supporting sustainable travel with a very low carbon footprint. However, scale and sustainability of investment is important. One study from the Netherlands estimated that the Dutch government had invested almost €0.5 billion per year over the last decades in cycling facilities and that the consequent population level health benefits due to Dutch cycling levels are equivalent to preventing 6,500 deaths per year or adding a half-a-year longer to life expectancy; and this investment has yielded high benefit-cost ratios in the long term¹⁰. In Scotland, the national budget for active travel has doubled in recent years (to £80 million p.a.) and government, transport, health and academic leaders back transport systems that prioritise walking, cycling and public transport as “the best investment for physical

activity”, for tackling vehicle emissions and reducing carbon emissions¹¹. Despite this support, even greater sustained investment in active travel will be needed¹² in Scotland to replicate Dutch levels of health benefit.

We would advocate sustained investment in infrastructure to transform levels of active and sustainable travel, and that this should be prioritised and co-ordinated with approaches to improve air quality, to reduce carbon emissions, to reduce related health inequalities and to improve liveability.

Approaches to infrastructure assessment and prioritisation and across all the infrastructure assets:

We believe that all new infrastructure should be thoroughly evaluated to seek to understand whether it has achieved its desired economic, health and sustainability objectives. Current criteria for assessing transport-related developments are weak on health impacts. All major new transport infrastructure should be assessed for its overall impact on carbon emissions, air quality, noise pollution, human health and health inequalities and should be subject to pre- and post-implementation evaluation. In our opinion a much more holistic comprehensive approach to evaluating the impact of new infrastructure will be required and this in turn will require more sophisticated approaches and smart technology, building on best practice internationally and academic expertise.

Given current climate change forecasts and the enhanced Scottish Government targets for reducing carbon emissions, much tighter criteria on carbon emissions and air pollution will need to be developed with respect to any major new development (e.g. a new road, housing or building development).

Further points:

The consultation document notes that further public engagement activities will be announced. Good community engagement will be vital to ensure that communities are involved in the decisions that are taken about the infrastructure plans for the areas in which they live and that these are appropriate for the needs of those in the community, and therefore are more likely to be well used. Related to this, it would be useful to consider how the requirements of Community Empowerment Act will be incorporated into the process of infrastructure planning.

Response prepared by Bruce Whyte with input from Jill Muirie, 3rd May 2019

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