

Glasgow Centre for Population Health response to the Transport Scotland consultation: Building Scotland's Low Emission Zones

Closing date: 28th November 2017

1. Do you support the principle of LEZs to help improve Scottish air quality?

Please be as specific as possible in your reasoning.

Yes. We support the main arguments in favour of introducing low emission zones in Scotland made in the consultation paper and consider them to be an important part of the solution to poor air quality. As recognised in the paper, improving air quality is an health inequalities and social justice issue and we know that vulnerable groups – the very young, older people and people with pre-existing health issues such as respiratory conditions are disproportionately affected. We also know that many transport-related pollutants are disproportionately concentrated in deprived areas in Scotland, that inequalities are greater in areas with the poorest air quality and that populations of Air Quality Management Areas (AQMAs) - who are likely to experience high pollution levels by virtue of the designation of an AQMA - are disproportionately deprived relative to the rest of the population in Scotland¹.

We also recognise that the contribution that transport makes to ill-health goes far beyond air quality. Consequently, LEZs have the potential, depending on their design and implementation, to drive a range of positive changes, including reductions in congestion, encouraging more people to walk, cycle and use public transport and improving the liveability in our urban communities, including benefiting local economies^{2;3}. We fully support the broader aspirations suggested for the revised transport policy and recommend that there are explicit links made between the LEZ policy, the revised transport policy, wider public health, physical activity and sustainability/climate change policies.

2. Do you agree that the primary objective of LEZs should be to support the achievement of Scottish Air Quality Objectives? If not, why not?

Yes, but care will be needed to avoid unintentionally increasing the emissions of other pollutants. Additionally, LEZs should be planned, taking cognisance of the Scottish Government's vision of a low carbon economy incorporating cleaner vehicles driven by newer technologies, such as electric and hydrogen.

3a. Do you agree with the proposed minimum mandatory Euro emission criteria for Scottish LEZs?

Yes. But there should be an acknowledgement that research has not identified thresholds of PM below which adverse effects do not occur⁴. The plans should therefore go beyond mitigation and aim for prevention of polluting vehicles and there should be explicit links between these LEZ plans

and the Cleaner Air for Scotland strategy (CAFS) and wider transport, public health, climate change and sustainability policies.

It will be important to incorporate the more accurate real world driving emission (RDE) testing.

3b. Do you agree with the proposal to use the NMF modelling in tandem with the NLEF appraisal to identify the vehicle types for inclusion within a LEZ?

Yes. We would also wish to see a move to 'real world' testing as soon as possible and that this is accompanied by helpful public communications, so that new car sales are informed by these plans.

3c. Should emission sources from construction machinery and/or large or small van refrigerated units be included in the LEZ scope, and if so should their inclusion be immediate or after a period of time?

More information about the contribution these make to air pollution/emissions problems would be helpful in order to answer this question. We would suggest that these need to be regulated somewhere in the system if not as part of LEZ. Perhaps their regulation as part of LEZ can be phased in.

4. What are your views on adopting a national road access restriction scheme for LEZs across difference classes of vehicles?

We support this in principle but we recognise that this is potentially discriminatory against those who cannot afford a newer, more compliant car. Therefore the introduction of LEZs need to be phased in, accompanied by clear information and supported by alternative transport provision, where necessary. Such alternatives might include better access to car clubs, bike hire schemes and enhanced public transport.

5. What are your views on the proposed LEZ hours of operation, in particular whether local authorities should be able to decide on LEZ hours of operation for their own LEZs?

We recognise the challenges here, but suggest that 24 hour a day operation would avoid any confusion and would provide the maximum benefit to air quality. Perhaps more limited hours of operation could be adopted during a lead-in period.

6. What are your views on Automatic Number Plate Recognition enforcement of LEZs?

We support this as an investment which can be used to support the implementation and enforcement of LEZs as they evolve in the future. It should aid transparent and effective enforcement operation and monitoring of an LEZ, and would also be a cost efficient approach.

7a. What exemptions should be applied to allow LEZ to operate robustly? Please be as specific as possible in your reasoning.

We cannot comment specifically on this but would support an approach that minimises the number of exemptions and should not significantly impact on the main aims of the LEZ to lower air pollutant emissions to safe levels.

7b. Should exemptions be consistent across all Scottish local authorities?

Local circumstances should be taken into account but we believe the default position should be that the schemes operate in a consistent way and that the number of exemptions should be limited and should not significantly impact on the main aims of the LEZ to lower air pollutant emissions to safe levels.

8. What are your views on LEZ lead-in times and sunset periods for vehicle types shown in Table 2?

We broadly agree that these seem fair. It will be vital that effective communication and engagement takes place during this period to allow people to prepare accordingly. Nevertheless, given the current impacts of poor air quality on morbidity and mortality in Scotland we would wish this to be factored in to the decisions about lead-in times and sunset periods and that these should be minimised.

9. What are your views about retrofitting technology and an Engine Retrofitting Centre to upgrade commercial vehicles to cleaner engines, in order to meet the minimum mandatory Euro emission criteria for Scottish LEZs?

No comment.

10. How can the Scottish Government best target any funding to support LEZ implementation?

No comment.

11. What criteria should the Scottish Government use to measure and assess LEZ effectiveness?

Part of the traffic monitoring should focus on levels of walking, cycling and public transport use and the impacts of a LEZ on these. This is important because an LEZ, as well as improving air quality, is likely to alter modes of travel used. In terms of health, it will be useful to know how levels of active travel (i.e. walking, cycling, scootering etc) are impacted by LEZs.

12. What information should the Scottish Government provide to vehicle owners before a LEZ is put in place, during a lead-in time and once LEZ enforcement starts?

We support the use of the Scottish Air Quality website as the central repository for information related to LEZs and that it should be easy to assess a vehicle in relation to LEZ regulations. There is also a need to set these schemes into the wider context of reducing climate change emissions, addressing health threats, reducing congestion, increasing opportunities for active travel and creating more liveable environments.

13. What actions should local or central government consider in tandem with LEZs to address air pollution?

As already stated in our response, there is a need to place LEZs in a wider context of reducing climate change emissions, addressing health threats, reducing congestion, increasing opportunities for active travel and creating more liveable environments. Approaches to place-making that involve communities in decisions about where they live and work, such as the Place Standard are important. Largescale transport projects, such as those envisaged within City Deals, should be assessed in

relation to future LEZs and potential positive and negative impacts on air quality, health and health inequality.

14. How can LEZs help to tackle climate change, by reducing CO2 emissions in tandem with air pollution emissions?

We support the proposal for the Scottish Government, local authorities, regional transport partners and additionally public health departments to evaluate the scope and impact of urban-wide low emission zones but we would like to see a slightly wider focus on climate change emissions, air pollution and health impacts. Linking these issues is important because of their close inter-relationships. We know that the more affluent sections of the population contribute far more to road transport-related climate change emissions than the most deprived⁵ but that it is more deprived communities that suffer the most from the impacts of air pollution and other transport related health inequalities e.g. people in more deprived communities are at a higher risk of being a pedestrian road accident casualty⁶.

15. What measures (including LEZs) would make a difference in addressing both road congestion and air pollution emissions at the same time?

The inter-connections between congestion and air pollution are clearly complex. However, the most obvious routes to reducing congestion and air pollution emissions concurrently are to reduce the volume of motor vehicle traffic on our roads, particularly the most polluting petrol and diesel vehicles, to encourage higher usage of cleaner public transport options and to increase walking and cycling for short journeys. To achieve these changes will require behavioural change at a population level and thus will require a clear vision of what it is that we are trying to achieve and the benefits for individuals, our communities and the planet. [A long-term vision for Active Travel in Scotland 2030](#)⁷ is an example of this sort of vision. Local and national leadership from elected members, council planners and public health departments will be needed to communicate such a vision.

16. Do you have any other comments that you would like to add on the Scottish Government's proposals for LEZs

No.

17. What impacts do you think LEZs may have on particular groups of people, with particular reference to the 'protected characteristics' listed in paragraph 5.2? Please be as specific as possible in your reasoning.

It is difficult to predict the impacts of LEZs on particular sectors of the population, although there are clearly potential benefits in general for socially deprived populations from LEZs, depending on their positioning and implementation. Monitoring of impact should include methods of assessing impacts on different groups in the population including across different protected characteristics and in relation to socioeconomic status. Assessment of impact should focus on overall impact and impacts in relation to health and social inequality.

18. Do you think the LEZ proposals contained in this consultation are likely to increase or reduce the costs and burdens placed on any sector? Please be as specific as possible in your reasoning.

This is a question we are not able to answer but we would support a comprehensive evaluation of the costs and burdens of LEZs that takes account of implementation costs, economic costs, health impacts, etc.

19. What impacts do you think LEZs may have on the privacy of individuals? Please be as specific as possible in your reasoning.

No comment.

20. Are there any likely impacts the proposals contained in this consultation may have upon the environment? Please be as specific as possible in your reasoning.

Given that the primary purpose of LEZs is to reduce levels of transport-related air pollution, their introduction will presumably be expected to have this very direct impact. Related to this, modal shifts in travel, for example away from private car use and onto public transport and/or involving greater levels of active travel, could potentially lead to reductions in transport-related carbon emissions and levels of noise pollution. Robust monitoring and evaluation of LEZs and surrounding areas will help establish whether and to what extent these types of impacts are achieved.

¹ DEFRA. *Air Quality and Social Deprivation in the UK: an environmental inequalities analysis*. Final Report to Department of Environment, Food and Rural Affairs AEAT/ENV/R/2170. 2006. Available at: https://uk-air.defra.gov.uk/assets/documents/reports/cat09/0701110944_AQinequalitiesFNL_AEAT_0506.pdf

² Living Streets. *The pedestrian pound: the business case for better streets and places*. 2016. Available at: https://www.livingstreets.org.uk/media/1391/pedestrianpound_fullreport_web.pdf.

³ Rajef, Saffrey A. *The value of cycling*. London: Department of Transport; 2016. Available at: <https://www.gov.uk/government/publications/the-value-of-cycling-rapid-evidence-review-of-the-economic-benefits-of-cycling>

⁴ World Health Organization. *WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide. Global update 2005. Summary of risk assessment*. WHO: Geneva; 2005. Available at: http://apps.who.int/iris/bitstream/10665/69477/1/WHO_SDE_PHE_OEH_06.02_eng.pdf

⁵ Ian Preston, Joshua Thumim et al. *Distribution of carbon emissions in the UK: Implications for domestic energy policy*. JRF; 2013 Available at: <https://www.jrf.org.uk/report/distribution-carbon-emissions-uk-implications-domestic-energy-policy>

⁶ Whyte B, Waugh C. *Trends in pedestrian and cyclist road casualties in Scotland*. Glasgow: GCPH; 2015. Available at: http://www.gcph.co.uk/publications/572_pedestrian_and_cyclist_casualty_trends_in_scotland.

⁷ Transport Scotland. *A long-term vision for Active Travel in Scotland 2030*. 2014. Available at: <https://www.transport.gov.scot/media/33649/long-term-vision-for-active-travel-in-scotland-2030.pdf>