

Research Proposal: Assessing the Causes and Impacts of Increasing Road Traffic on the Environment and Individual in London

Research Problem

- Environmental issues
- Individual harm

Research Question

- What are the causes of increasing road traffic in London and how does this increase impact the environment and individual?
- Opportunities to discuss reasons for increasing traffic
- Discussing environmental impacts
- How these environmental changes impact individuals

Aims and Objectives

- What causes the increase in road traffic?
- Effects on the environment
- Impact on the individual
- How can this be alleviated?

Key literature related to the project

- Carey, I.M. *et al.* (2016) 'Traffic pollution and the incidence of cardiorespiratory outcomes in an adult cohort in London', *Occupational and Environmental Medicine* [Preprint]. doi:10.1136/oemed-2015-103531.
- Dietz, S. and Atkinson, G. (2014) *Public perceptions of equity in environmental policy traffic emissions policy in an english urban area*. S.l.: SSRN.
- Hajmohammadi, H. and Heydecker, B. (2022) 'Evaluation of air quality effects of the London ultra-low emission zone by state-space modelling', *Atmospheric Pollution Research*, 13(8), p. 101514. doi:10.1016/j.apr.2022.101514.
- Khan, S. (2016) *The causes of Road Congestion | london City Hall, London Assembly*. Available at: <https://www.london.gov.uk/who-we-are/what-london-assembly-does/questions-mayor/find-an-answer/causes-road-congestion> (Accessed: 17 June 2024).
- Ma, L., Graham, D.J. and Stettler, M.E. (2021) 'Has the ultra low emission zone in London improved air quality?', *Environmental Research Letters*, 16(12), p. 124001. doi:10.1088/1748-9326/ac30c1.
- Transport for London (2019) *Ultra Low Emission Zone, Transport for London*. Available at: <https://tfl.gov.uk/modes/driving/ultra-low-emission-zone>.
- UK Health Security Agency (2023) *Noise pollution: Mapping the health impacts of Transportation Noise in England, UK Health Security Agency*. Available at: <https://ukhsa.blog.gov.uk/2023/06/29/noise-pollution-mapping-the-health-impacts-of-transportation-noise-in-england/>.

Methodology

- Literature review
- Qualitative
 - TfL and Government data
- Quantitative
 - Qualtrics survey

Ethical Considerations

- Respect
- Beneficence
- Justice
- Respect for Law and Public Interest

Menlo Report (Finn & Shilton, 2023)

Artefacts

- Data Visualisation
- Heat Maps

Timeline – 6 months

- Month 1 – Literature Review and Methodology (Survey Design)
- Month 2 – Data Collection from survey alongside writing and third-party data collection
- Month 3 – Quantitative data collection will continue for third-party data
- Month 4 – Have qualitative survey fully tested so that it can be sent to correct stakeholders
- Month 5 – Analyse all data and draw conclusions
- Month 6 – Complete write up with included data then disseminate

Conclusion - Thank you!