



Wentworth Nursery School- Eco School Committee

Support for speed reduction interventions

Wentworth Nursery School is located on Cassland Rd, London E9 5BY, set back from the street by approximately two meters. Because Cassland Road is one of the main arteries in E9 that feeds into the A12, traffic is consistent. It is also often heavy between the hours of 8:00-9:00 when the children arrive at school, many of whom must cross the road to enter the school.

At the end of 2018, only 0.5% of all vehicles licensed in the UK were ultra-low emission vehicles (1). This highlights the significant challenge in reducing emissions from road traffic- essential to meet the goal of net zero emissions by 2050 and of reducing emission by 78% by 2035 (compared to 1990 levels) (2).

An increase in average speed is associated with an increased likelihood of both the occurrence of a crash and the severity of a crash (a 1% increase in mean speed produces a 4% increase in the risk of a fatal crash and a 3% increase in the risk of a serious crash) (3). The link between air pollution, particularly NO₂ a pollutant formed mainly from the combustion of fossil fuel, and negative health outcomes is well-documented (4). Among children in particular, several epidemiological studies have demonstrated the associate between exposure to traffic-related air pollution and new-onset paediatric asthma (5-7). A 2019 analysis of data from 194 countries found that an estimated 92% of paediatric asthma incidence is attributable to NO₂ exposure (8). The authors concluded traffic emissions should be a target for exposure-mitigation strategies.

While the installation of a traffic light and pelican crossing in YEAR enabled safer crossing, this has not led to a noticeable reduction in vehicle speed. A 2005 systematic review of the effect of speed cameras found that the existing evidence consistently shows that speed cameras are an effective intervention in reducing road traffic collisions and related casualties (9) MORE RECENT REFS. ASK LOUISE- INSERT EVIDENCE FOR ART AWARENESS INTERVENTION

The installation of a speed camera plus ART AWARENESS INTERVENTION around Wentworth Nursery School has the potential to produce lasting reductions in vehicular speed on this portion of Cassland Rd, reducing the risk of injury to Wentworth's children and their exposure to carbon emissions.

1. Road transport and air emissions. In: Statistics OfN, editor. 2019
2. UK enshrines new target in law to slash emissions by 78% by 2035 [press release]. 2021.
3. Road traffic injuries Geneva: World Health Organisation; 2020 [
4. Birchby D, Stedman J, Whiting S, M. V. Air Quality damage cost update 2019. UK Department of Environment, Food and Rural Affairs; 2019

5. Bowatte G, Lodge C, Lowe AJ ea. The influence of childhood traffic-related air pollution exposure on asthma, allergy and sensitization: a systematic review and a meta-analysis of birth cohort studies. *Allergy*. 2014.
6. Gasana J, Dillikar D, Mendy A, Forno E, E. RV. Motor vehicle air pollution and asthma in children: a meta-analysis. *Env Res*. 2012.
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8. Achakulwisut P., Brauer M., Hystad P, SC. A. Global, national, and urban burdens of paediatric asthma incidence attributable to ambient NO₂ pollution: estimates from global datasets. *The Lancet Planetary Health*. 2019;3(4).
9. Pilkington P, Kinra S. Effectiveness of speed cameras in preventing road traffic collisions and related casualties: systematic review. *Bmj*. 2005.