Tulse Hill LTN and Streatham Hill LTN – South Circular A205 Technical Note v1

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Version 1

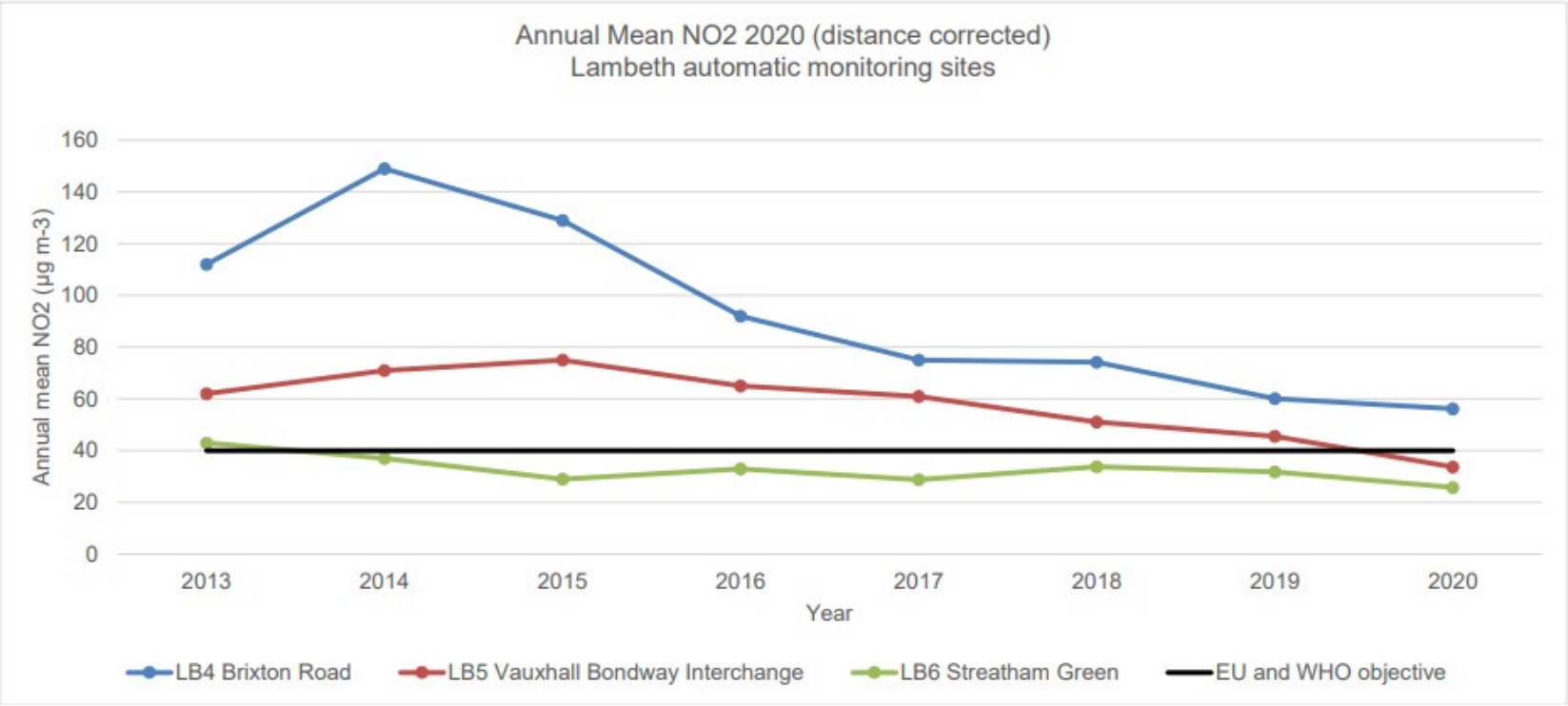
South Circular air quality technical note – Lambeth LTN monitoring Stage 2

This note is provided to provide additional context to the air quality modelling reports produced by Cambridge Environmental Research Consultants, commissioned by Lambeth Council to assess the air quality impacts of the Tulse Hill and Streatham Hill Low Traffic Neighbourhoods. This analysis is supplementary to the independent Stage 2 monitoring for the 2 Low Traffic Neighbourhoods and includes a broad context on the following:

1) Air quality trend in London
2) South Circular - function within the wider road network
3) Air quality on the South Circular before the Low Traffic Neighbourhoods
4) Stage 2 air quality modelling sensitive receptor site map and analysis
5) Expansion of the Ultra Low Emission Zone – expected impact on the South Circular
6) Additional air quality monitoring & developing

1. Air quality trend in London

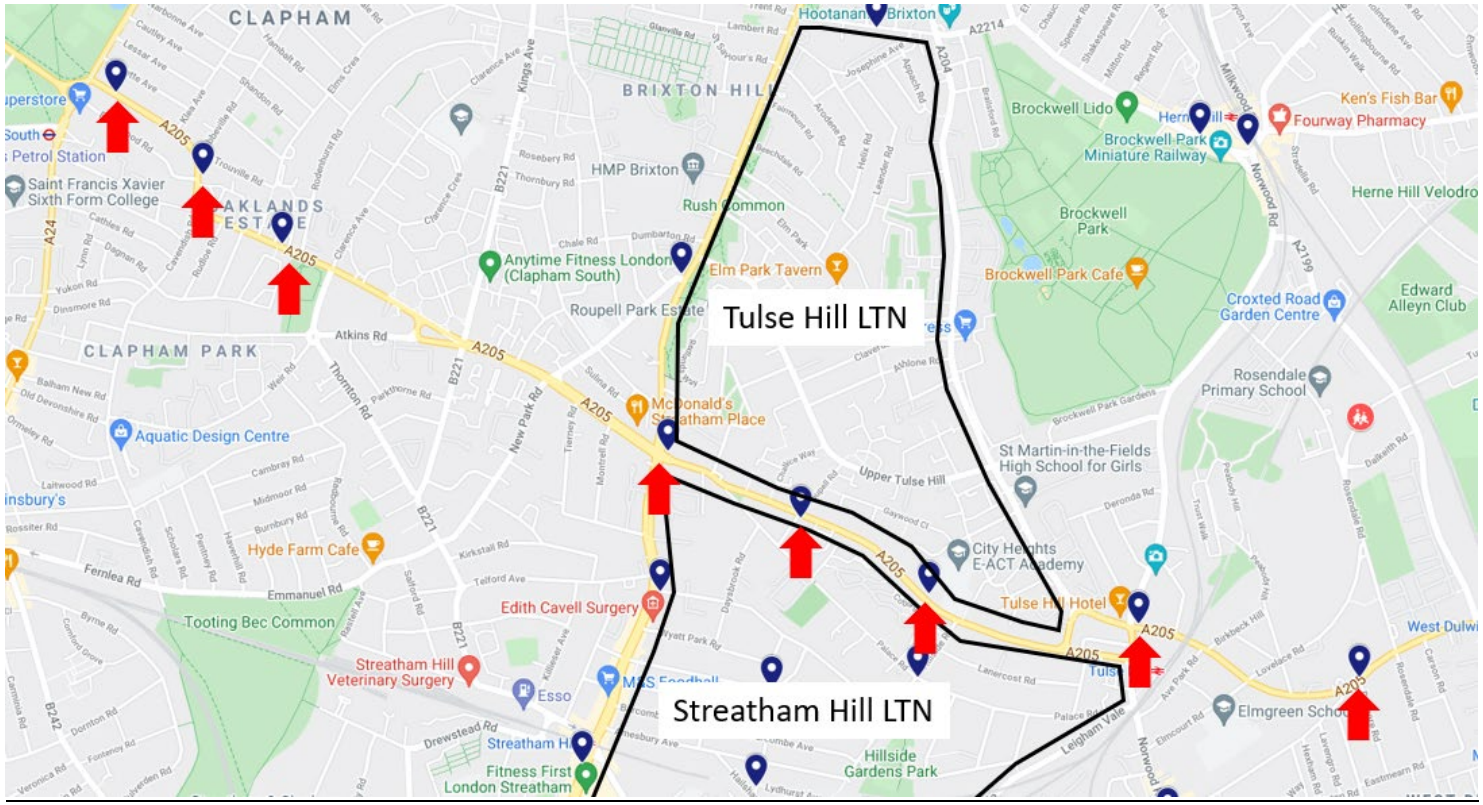
- Reductions in nitrogen dioxide are five times greater in London than elsewhere in the UK, partly due to measures such as the Ultra-Low Emission Zone and the introduction of less polluting buses.



2. South Circular – function within the wider road network

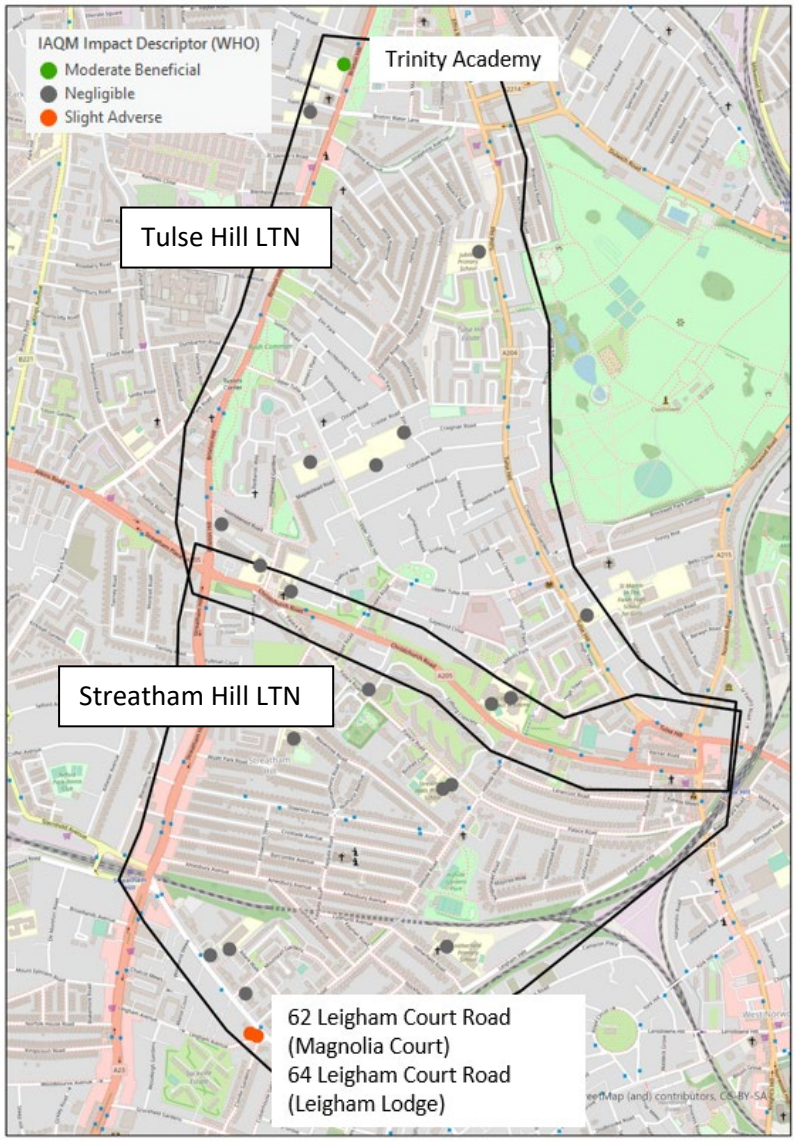
The South Circular is a major strategic road and generally designed to carry large volumes of motor traffic. This does not mean that the volume of traffic carried on these roads and the impact on the communities next to them is not important but that the approach to improving air quality on these roads will be different that roads designed to carry less traffic. Measures such as the introduction of road user charging – like the Ultra Low Emission Zone, Low Emissions Zone and Congestion Charge are jointly successful in reducing traffic volumes and improving air quality. For essential journeys – Lambeth is committed to enabling less polluting vehicles. To learn more about the Lambeth Electric Vehicle Charge Point schemes see here. Lambeth Council supports measures to reduce danger and traffic volumes and for essential vehicle journeys to be made with low emission vehicles.

3. Air quality on the South Circular before the Low Traffic Neighbourhoods



- The map above shows the 8 locations where NO2 is monitored using diffusion tubes on the South Circular. All 8 registered year on year improvements in air quality between 2018 and 2020.
- In 2018, all 8 tubes recorded illegal annual average NO2 levels. In 2020, only 1 of the 8 tubes (DT36) recorded illegal annual average levels and was not on the boundary of either Low Traffic Neighbourhood.
- Data for 2021 will be published in Summer 2021 within the Lambeth Air Quality Annual Status Report (2020 example here).

4. Stage 2 air quality modelling – sensitive receptor site map and analysis



- There are 28 ‘sensitive receptor’ locations within or on the boundary roads of Streatham Hill and Tulse Hill LTNs. These are locations where users of the site are likely to be more susceptible to the negative impacts of bad air quality, but that does not mean that other locations are disregarded.

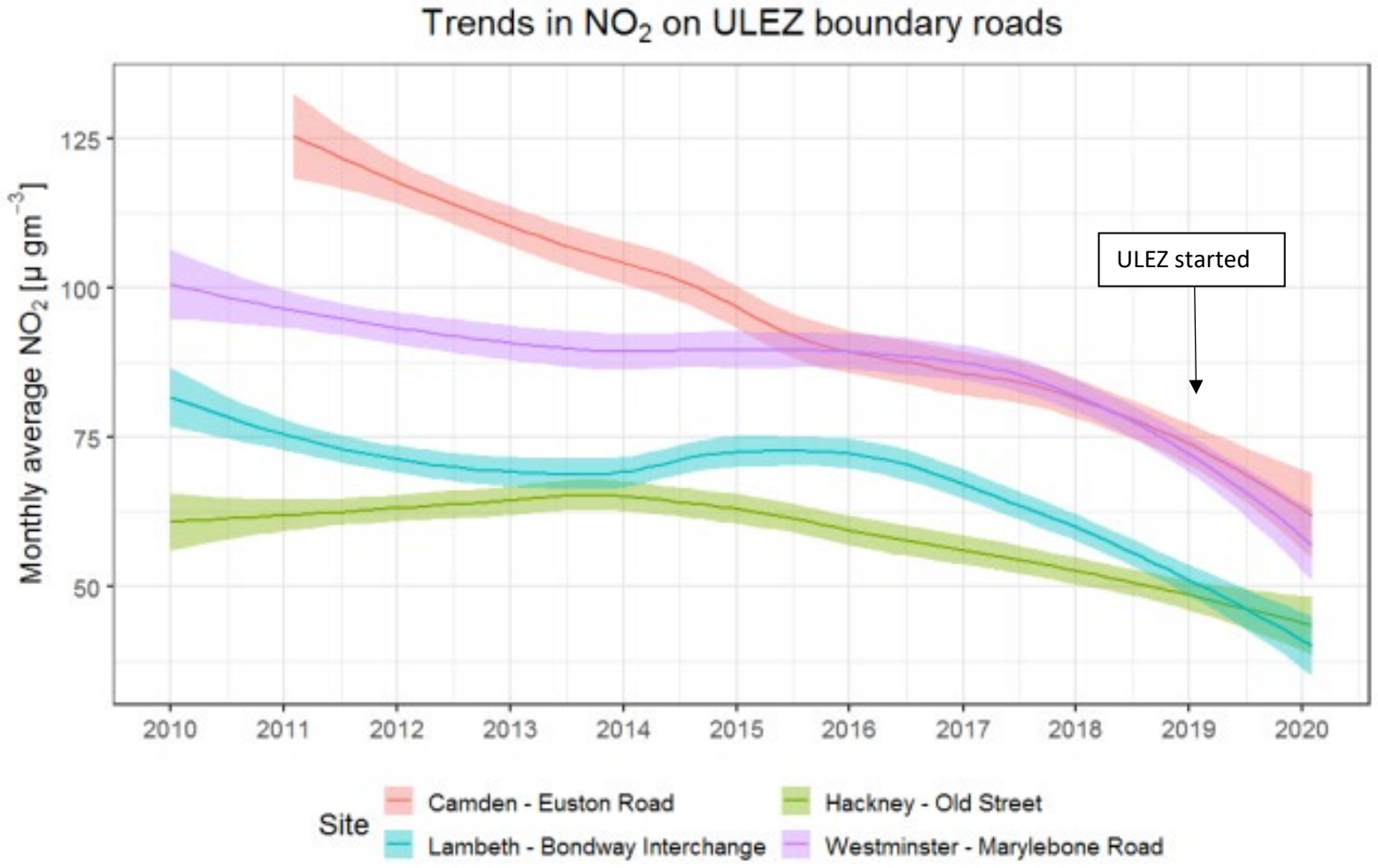
- No significant impacts on NO2 levels were recorded at any sensitive receptor sites. This includes sites on the boundary of the Low Traffic Neighbourhood.

- A slight benefit was modelled at Trinity Academy on Brixton Road, a slight negative impact was recorded at Magnolia Court, 62 Leigham Court Road and Leigham Lodge, 64 Leigham Court Road. Note these 2 locations are adjacent to each other and will be prioritised for measures to improve air quality.

- The modelling did not identify and sensitive locations where air quality was above legal limits for the first time due to the introduction of the Streatham Hill and Tulse Hill Low Traffic Neighbourhoods.

5. Expansion of the Ultra Low Emission Zone – expected impact on the South Circular

- In October 2021, the London Ultra Low Emission Zone expanded to the area within the North & South Circular.
- Previous data from the central London ULEZ zone indicates that boundary roads benefit in air quality terms from this type of scheme (see figure below). Therefore the expanded ULEZ is also expected to result in a positive impact overall, including on the South Circular.
- To see the full ULEZ 10-month monitoring report – see here



6. Additional air quality monitoring & developing

The air quality analysis completed by Cambridge Environmental Research Consultants models traffic data and resulting impacts on air quality across the entire day. This enables the air quality model to be verified against existing monitoring at diffusion tube sites and means the model is very accurate. This does however mean that it does not model air quality when traffic flows are highest.

As part of the ongoing commitment to assess impacts on air quality, lightweight air quality monitors will be installed on the South Circular and other key locations as part of the Stage 3 monitoring phase. Data from these monitors will include air quality when traffic flows are highest and be used to inform mitigations.