

# Measuring Distributional Equity: a spatial analysis of London's new Low Traffic Neighbourhoods

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<https://osf.io/preprints/socarxiv/q87fu/>

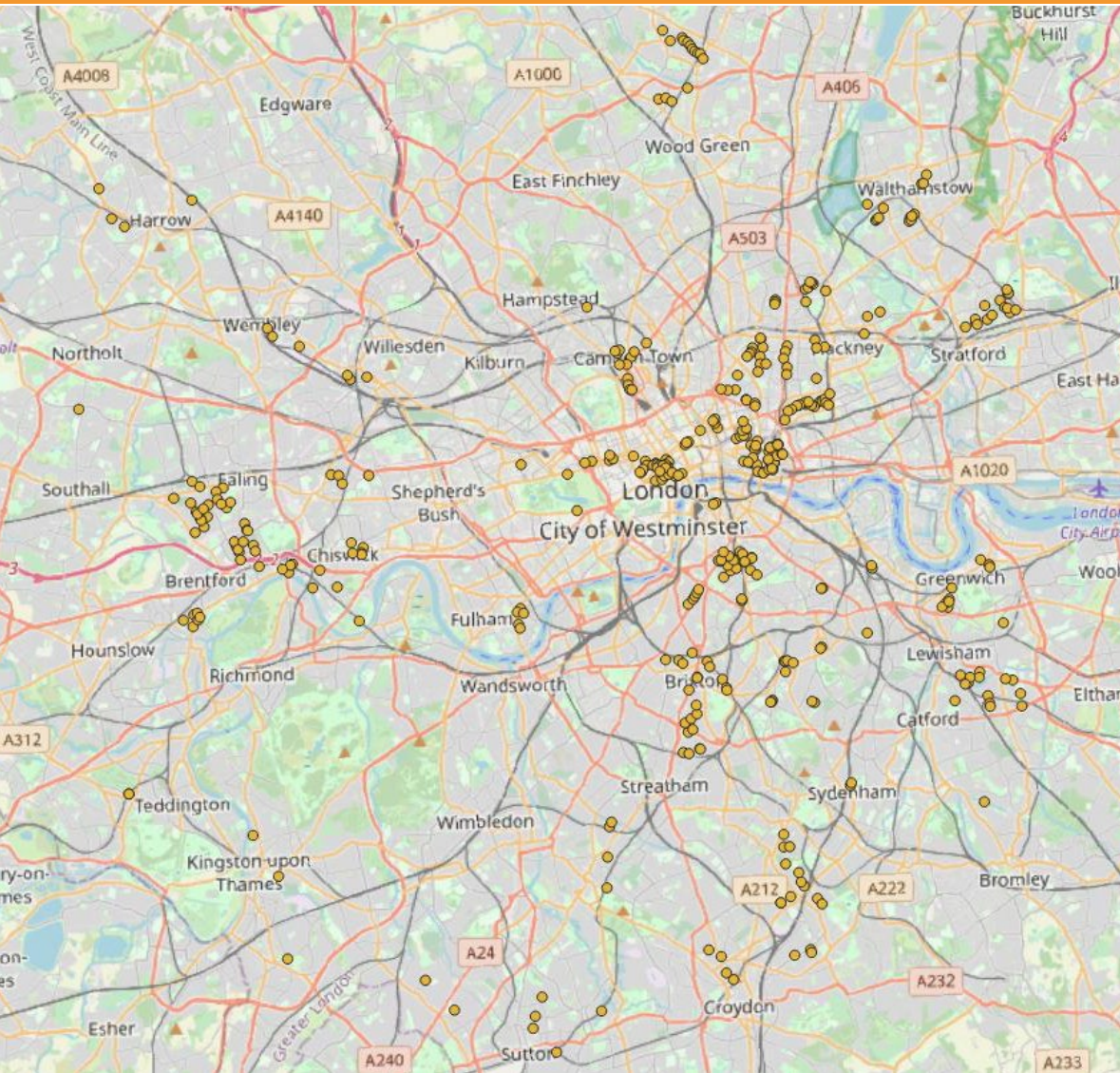


# LOW TRAFFIC NEIGHBOURHOODS IN LONDON





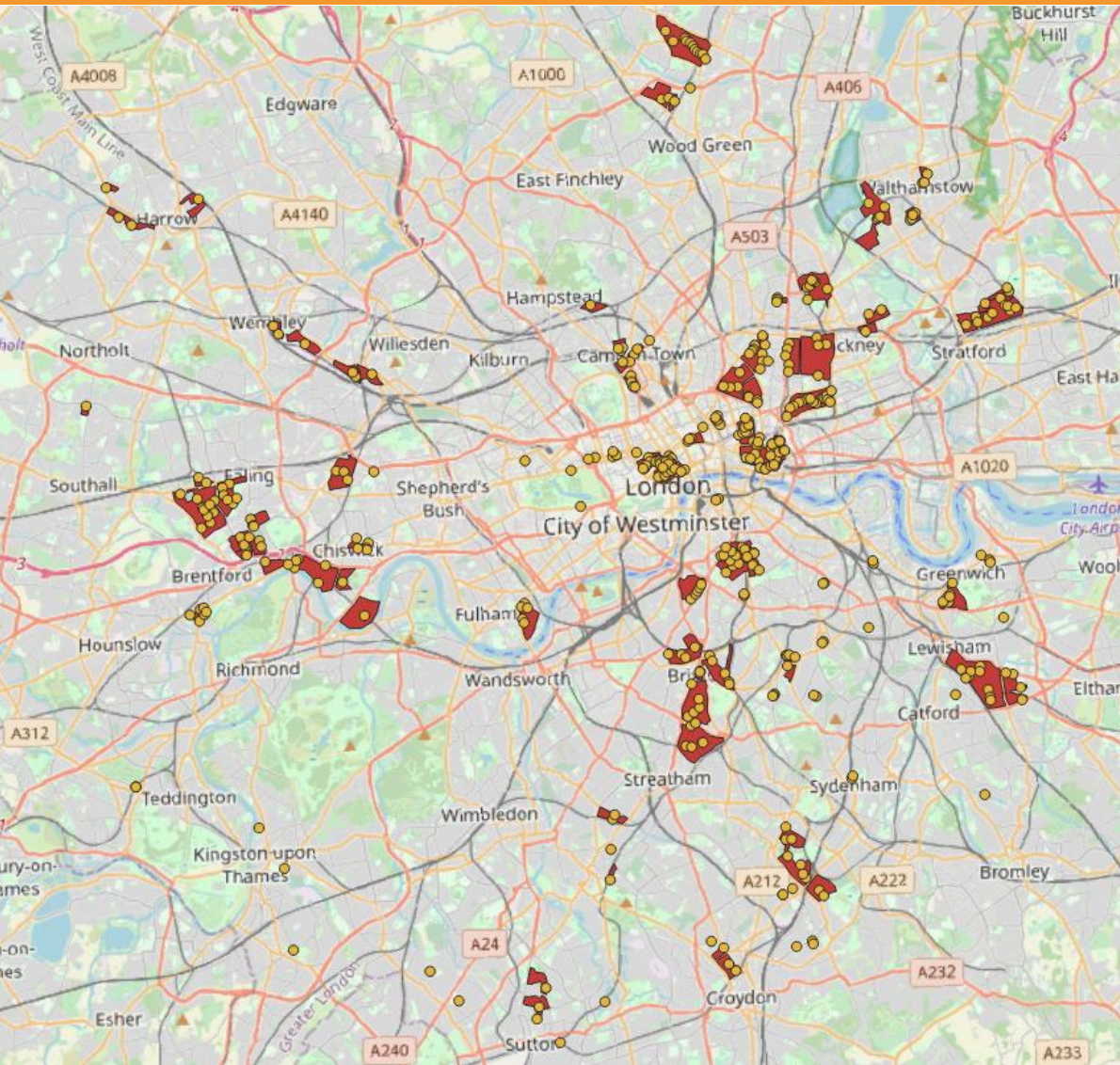
# LONDON'S NEW LTNS: MARCH-SEPT 2020



- New LTNs covered 4% of London residents, or just over 300,000 people. In Hackney the figure was as high as one in six, or 17%.
- Of 33 districts, 21 built LTNs, 10 built no LTNs, 2 built LTNs but removed them soon after.
- Across a range of demographic groups, around 9 in 10 Londoners live on primarily residential streets.



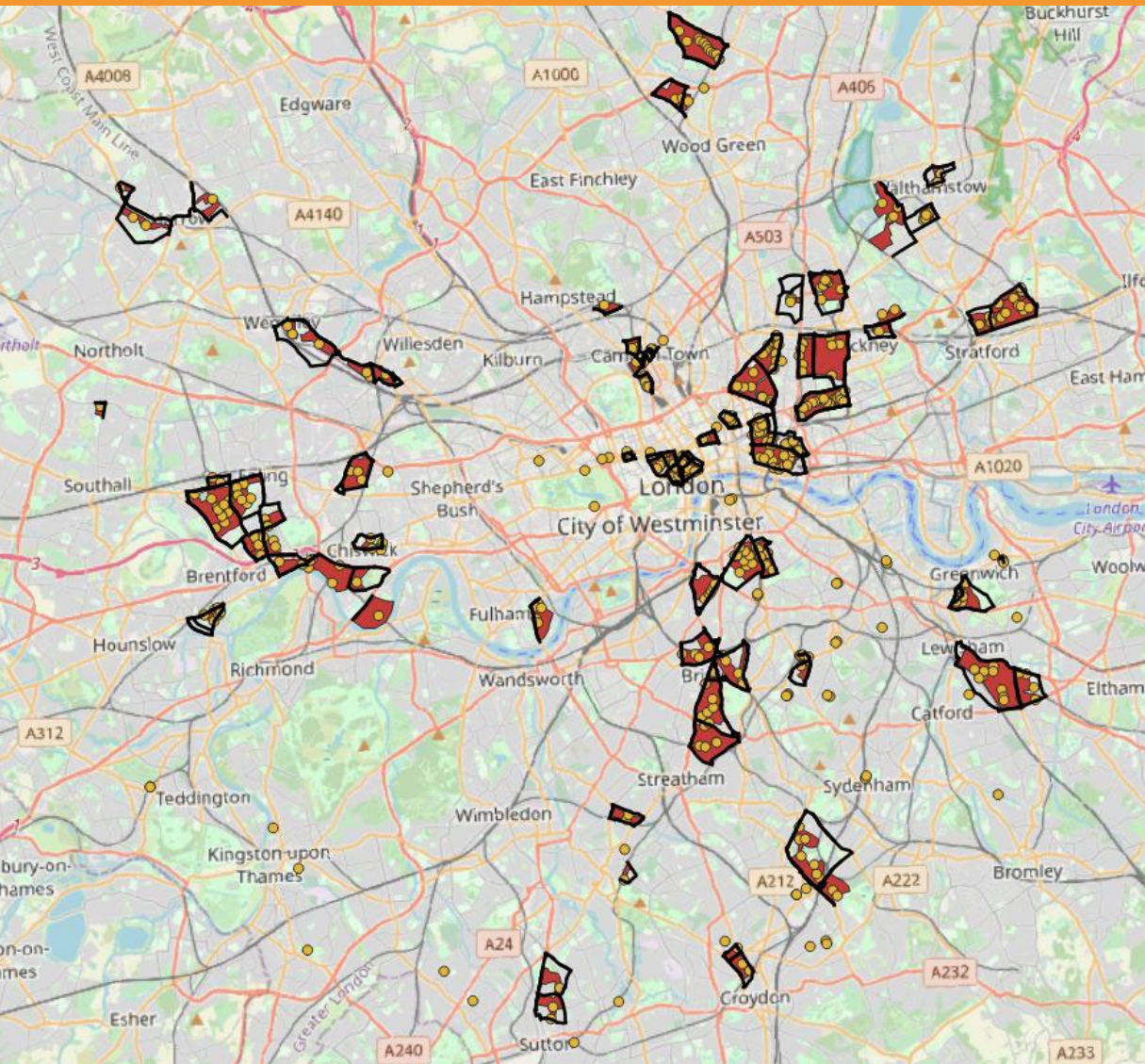
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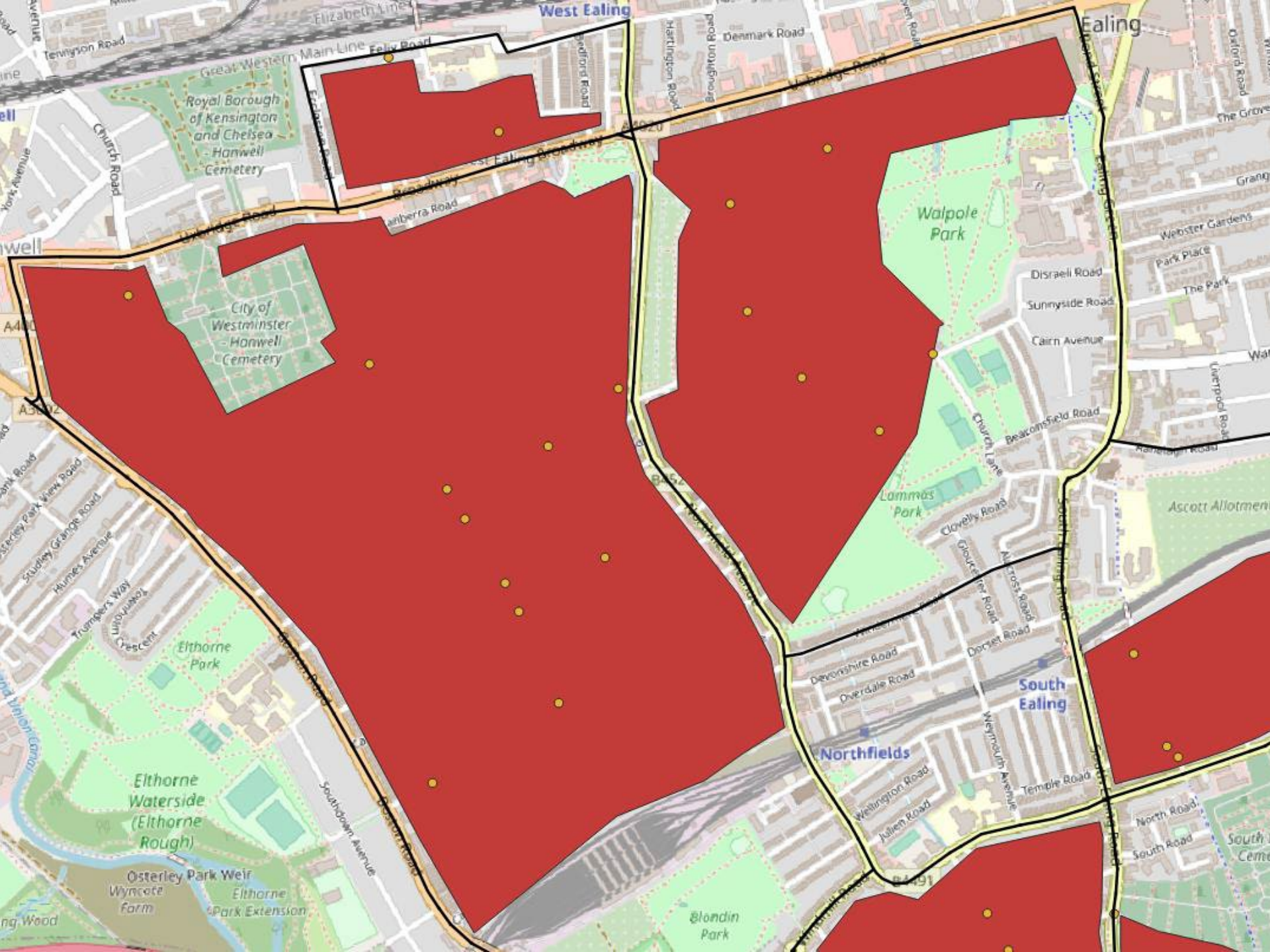


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# LONDON'S NEW LTNS: MARCH-SEPT 2020

1. With respect to key dimensions of equity (e.g. ethnicity, deprivation), how equitably are LTNs distributed across London?
2. Are there differences between LTNs and nearby surrounding areas in relation to these dimensions of equity?
3. Are relationships (or lack thereof) observed for London as a whole in (1) also present within individual boroughs?





Royal Borough of Kensington and Chelsea  
Hanwell Cemetery

City of Westminster  
Hanwell Cemetery

Etthorne Park

Etthorne Waterside (Etthorne Rough)

Osterley Park Weir  
Wyncote Farm

Etthorne Park Extension

Walpole Park

Lammas Park

Blondin Park

Ealing

West Ealing

South Ealing

Northfields

South Ealing

Great Western Main Line

Felix Road

St Ealing Broadway

Southdown Avenue

Devonshire Road  
Overdale Road

Wellington Road  
Julien Road

Temple Road

North Road  
South Road

Church Road

Tennyson Road

York Avenue

A4

A302

Bank Road

Stoney Park View Road

Stouley Grange Road

Humes Avenue

Trumper's Way

Upton Crescent

Wynne Road

Wynne Road

Wynne Road

Wynne Road

Wynne Road

Wynne Road

Wynne Road

Bedford Road

Harrington Road

Broughton Road  
Denmark Road

Claydon Road

Wynne Road

Wynne Road

Wynne Road

Oxford Road

The Grove

Grange

Webster Gardens

Park Place

The Park

Wynne Road

Wynne Road

Wynne Road

Wynne Road

Wynne Road

Wynne Road

Wynne Road

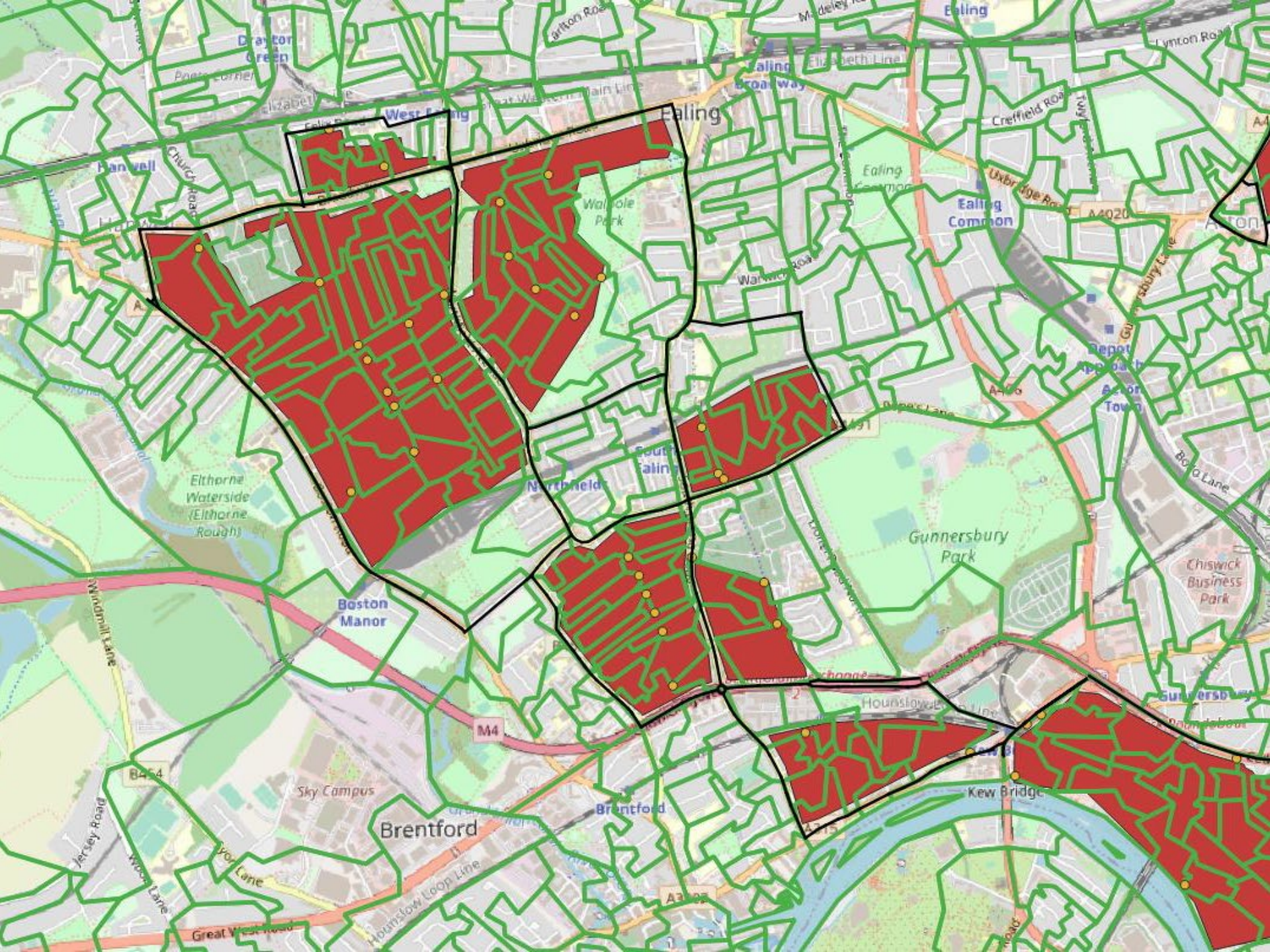
Wynne Road

Wynne Road

Wynne Road

Wynne Road





Drayton Green

Ealing

Ealing Common

Elthorne Waterside (Elthorne Rough)

Northfield

Gunnersbury Park

Boston Manor

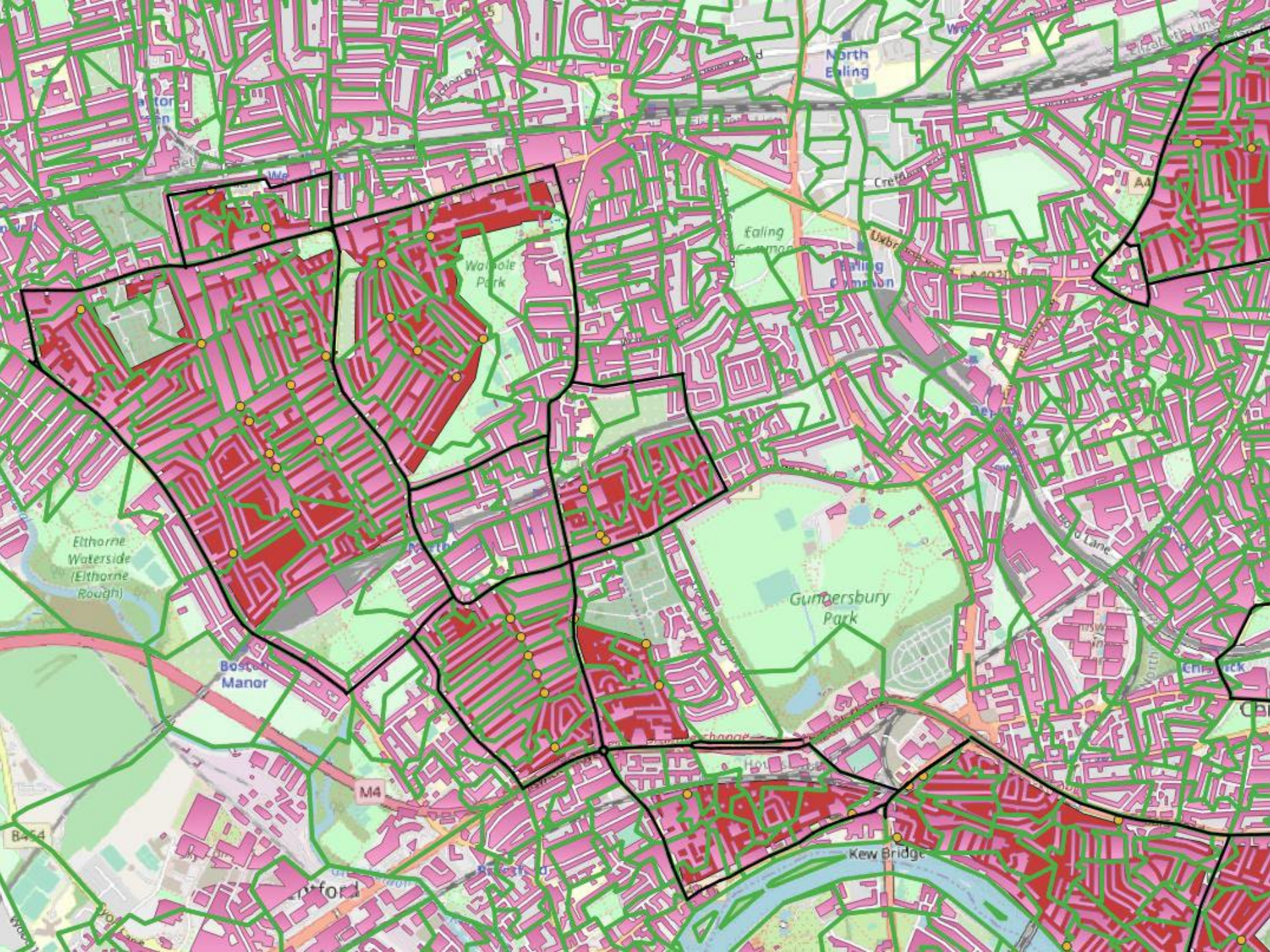
M4

Brentford

Brentford

Kew Bridge





North Ealing

Walsley Park

Ealing Common

Ealing Common

Etthorne Waterside (Etthorne Rough)

Boston Manor

Gundersbury Park

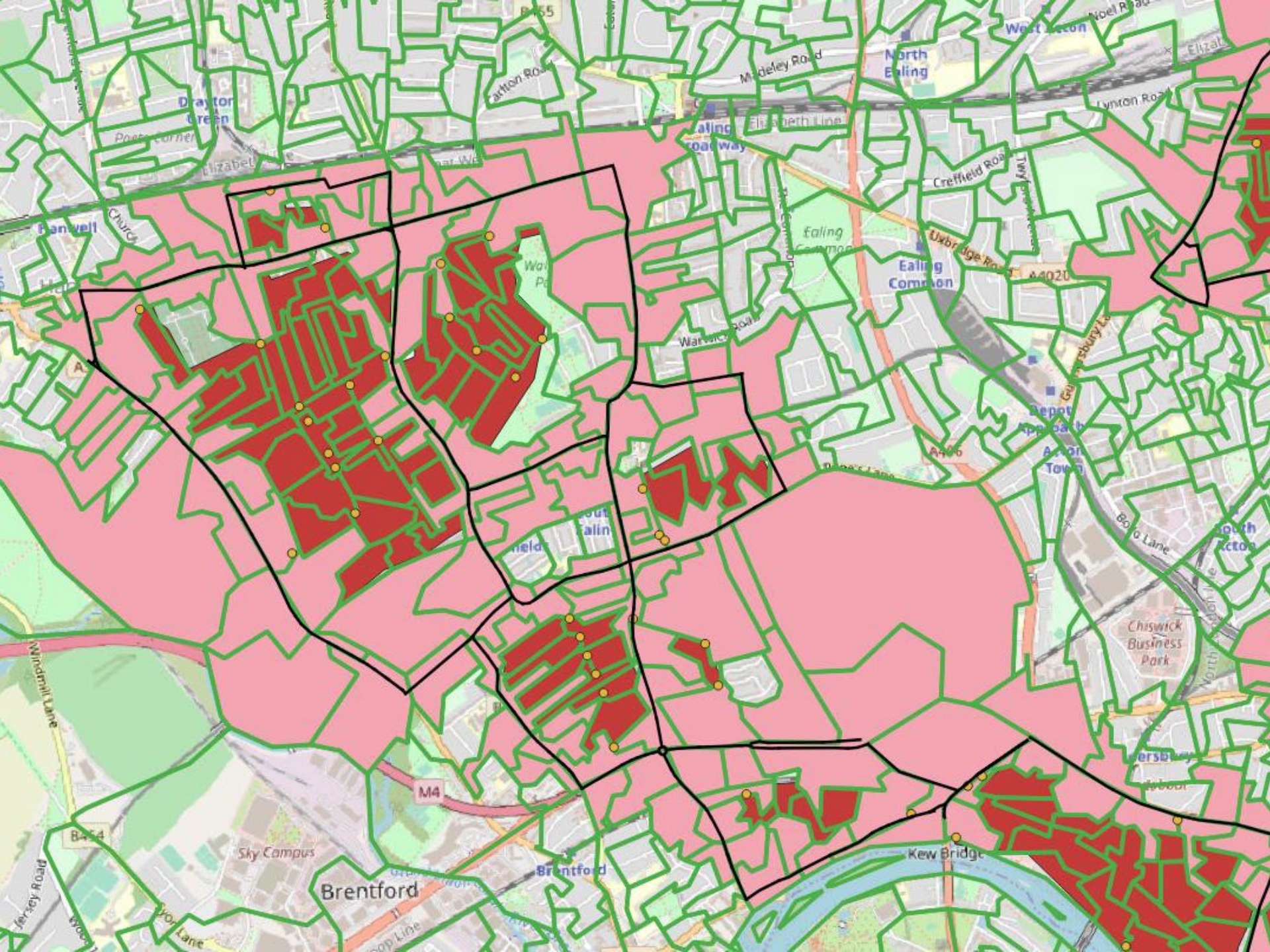
M4

Kew Bridge

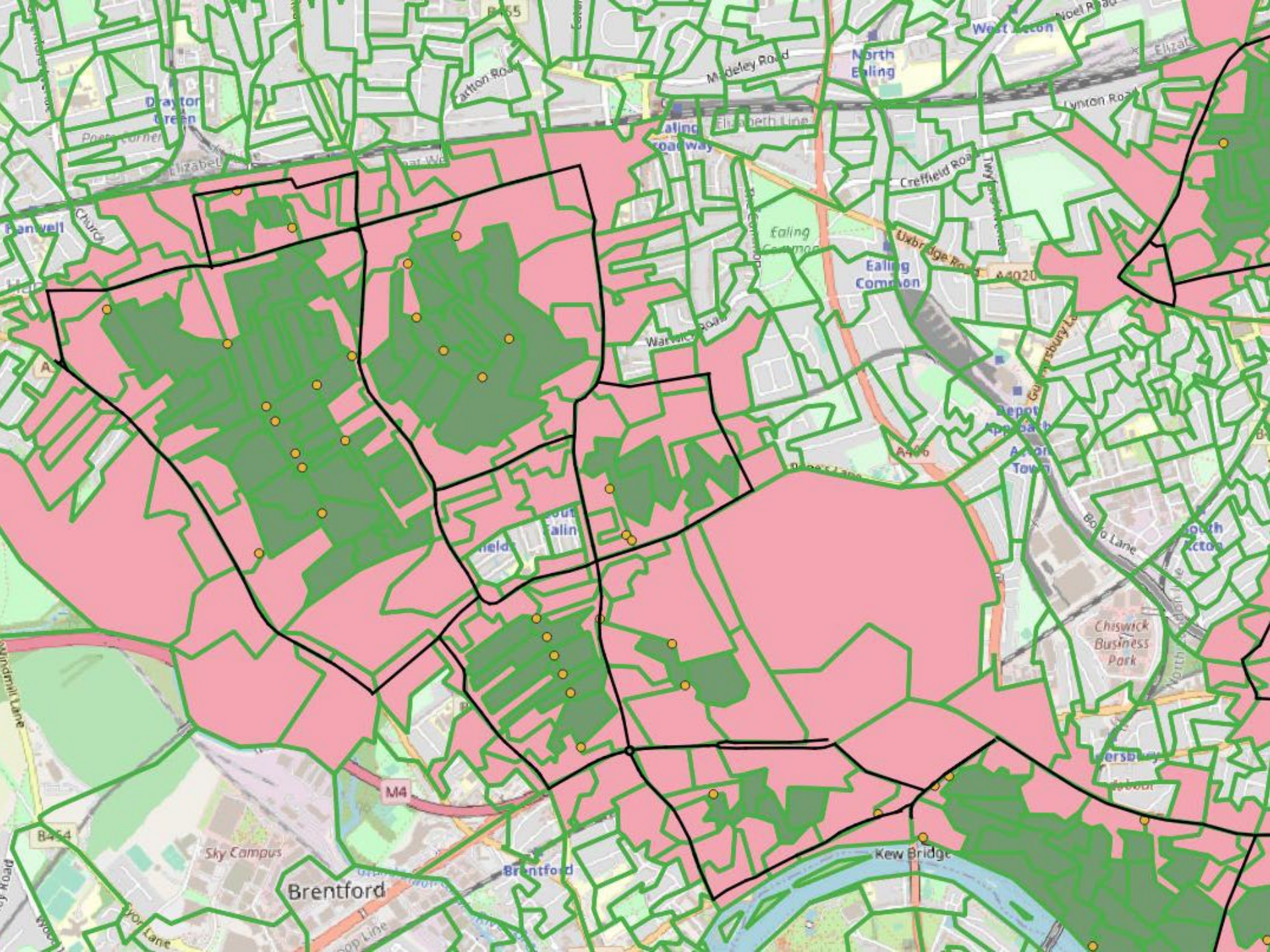
Uxbridge

Chiswick









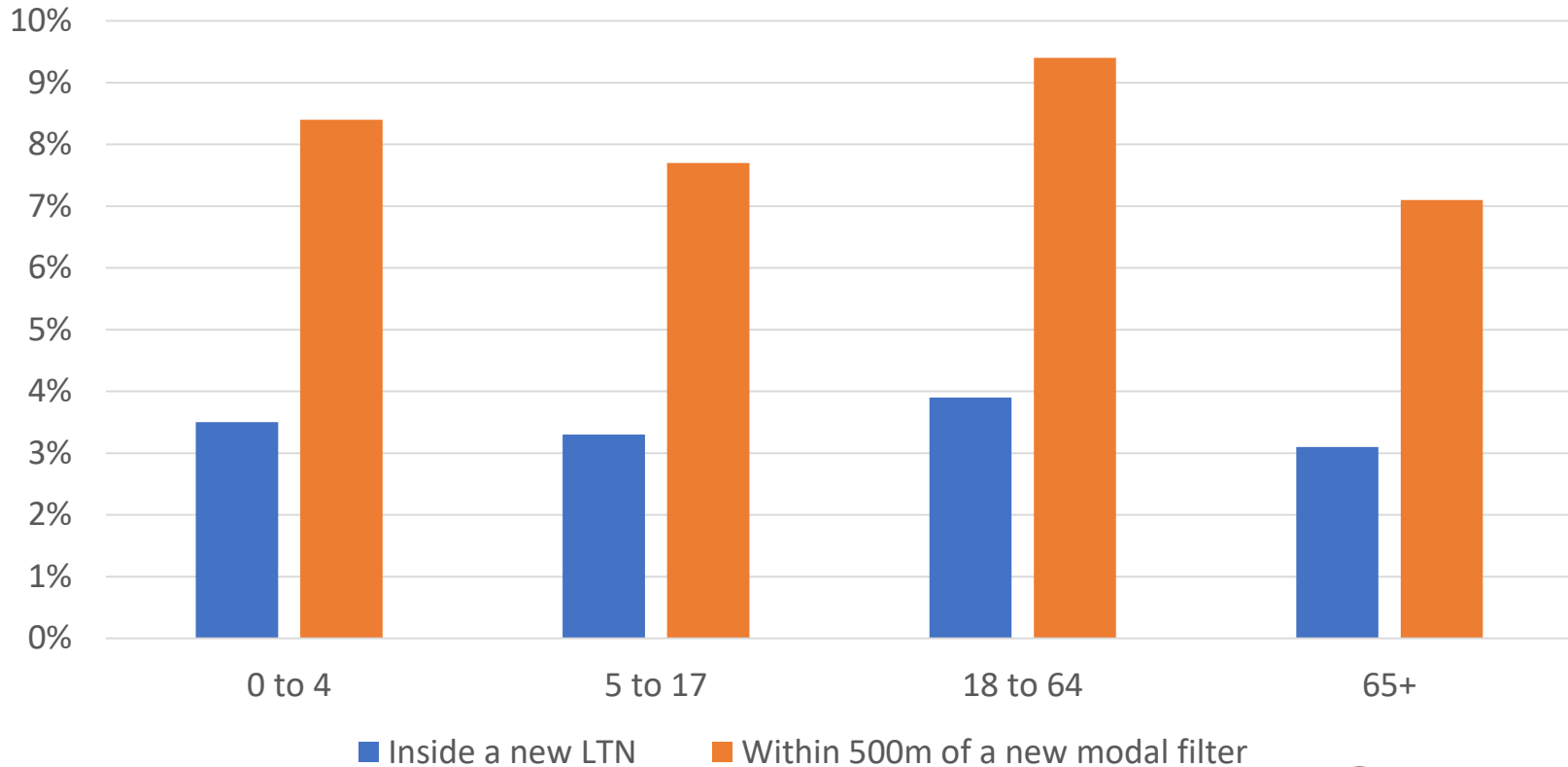


# SOME ANSWERS

1. With respect to key dimensions of equity (e.g. ethnicity, deprivation), how equitably are LTNs distributed across London? **Pretty equitably, particularly in relation to deprivation/car ownership**
2. Are there differences between LTNs and nearby surrounding areas in relation to these dimensions of equity? **Generally surrounding areas are quite similar demographically to LTN areas**
3. Are relationships (or lack thereof) observed for London as a whole in (1) also present within individual boroughs? **There is large variation between boroughs, suggesting a need to monitor spatial equity at different geographical levels.**

# PAN-LONDON EQUITY

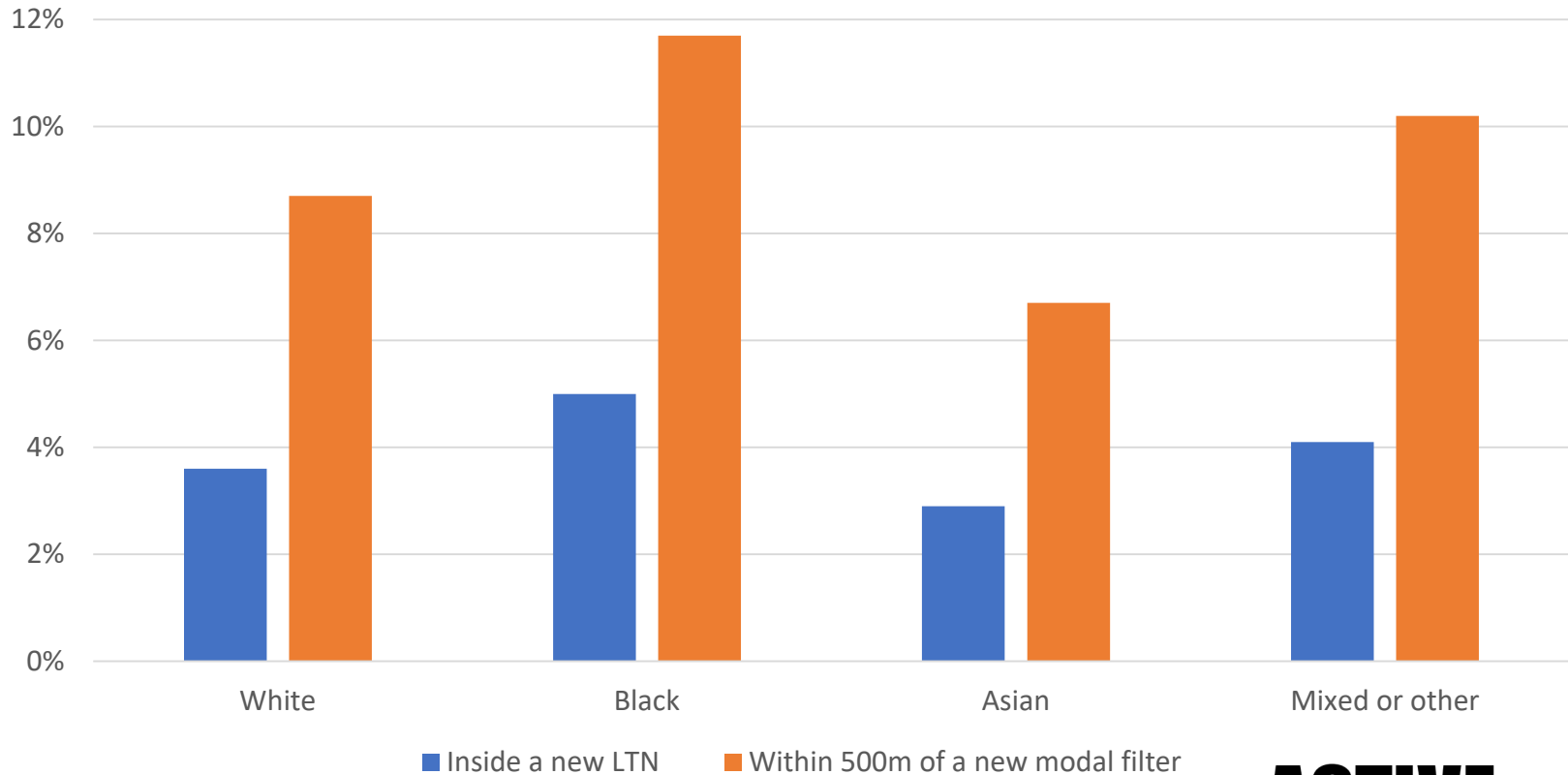
LTN distribution/access by age, pan-London





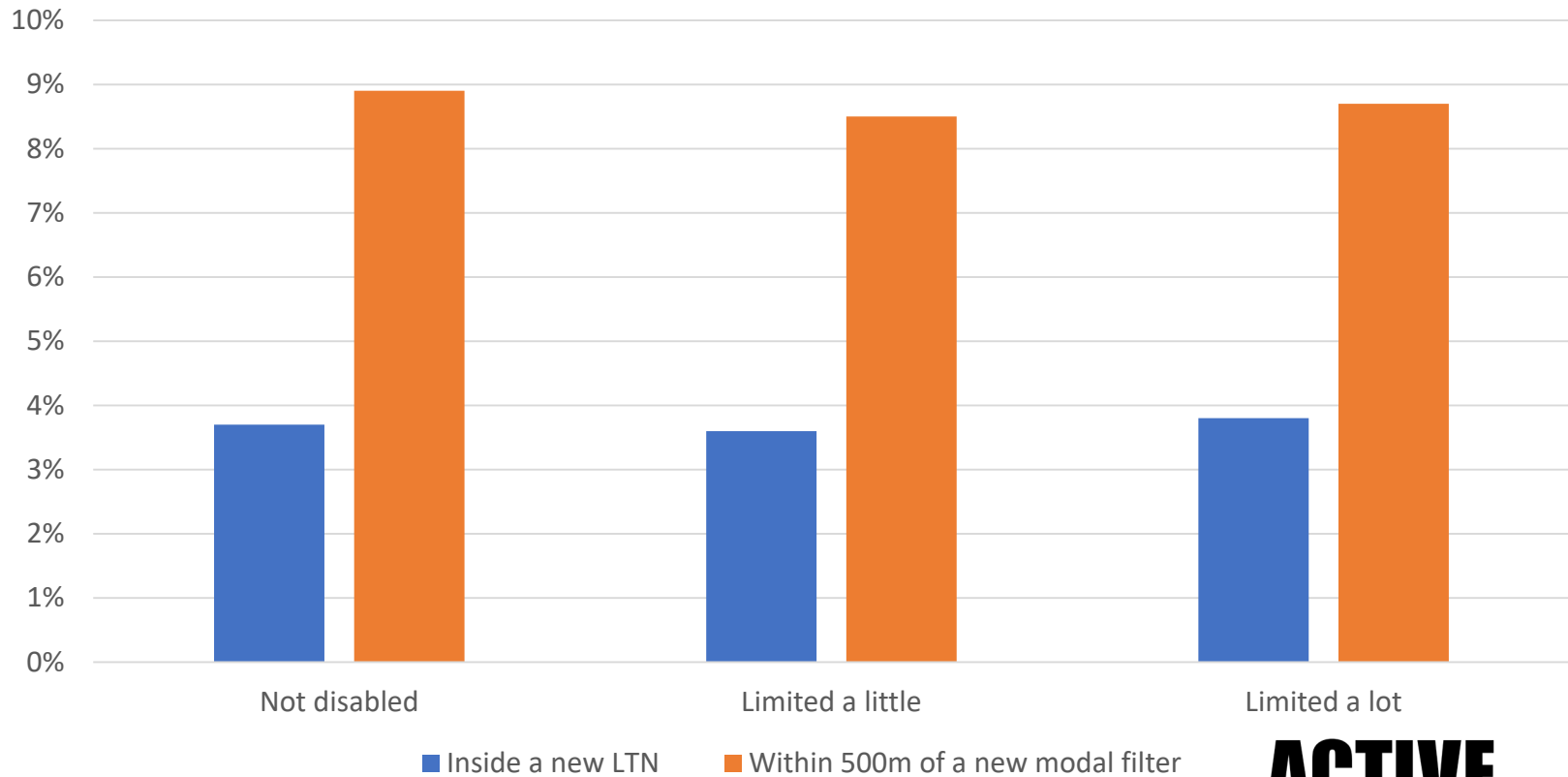
# PAN-LONDON EQUITY

LTN distribution/access by ethnicity, pan-London



# PAN-LONDON EQUITY

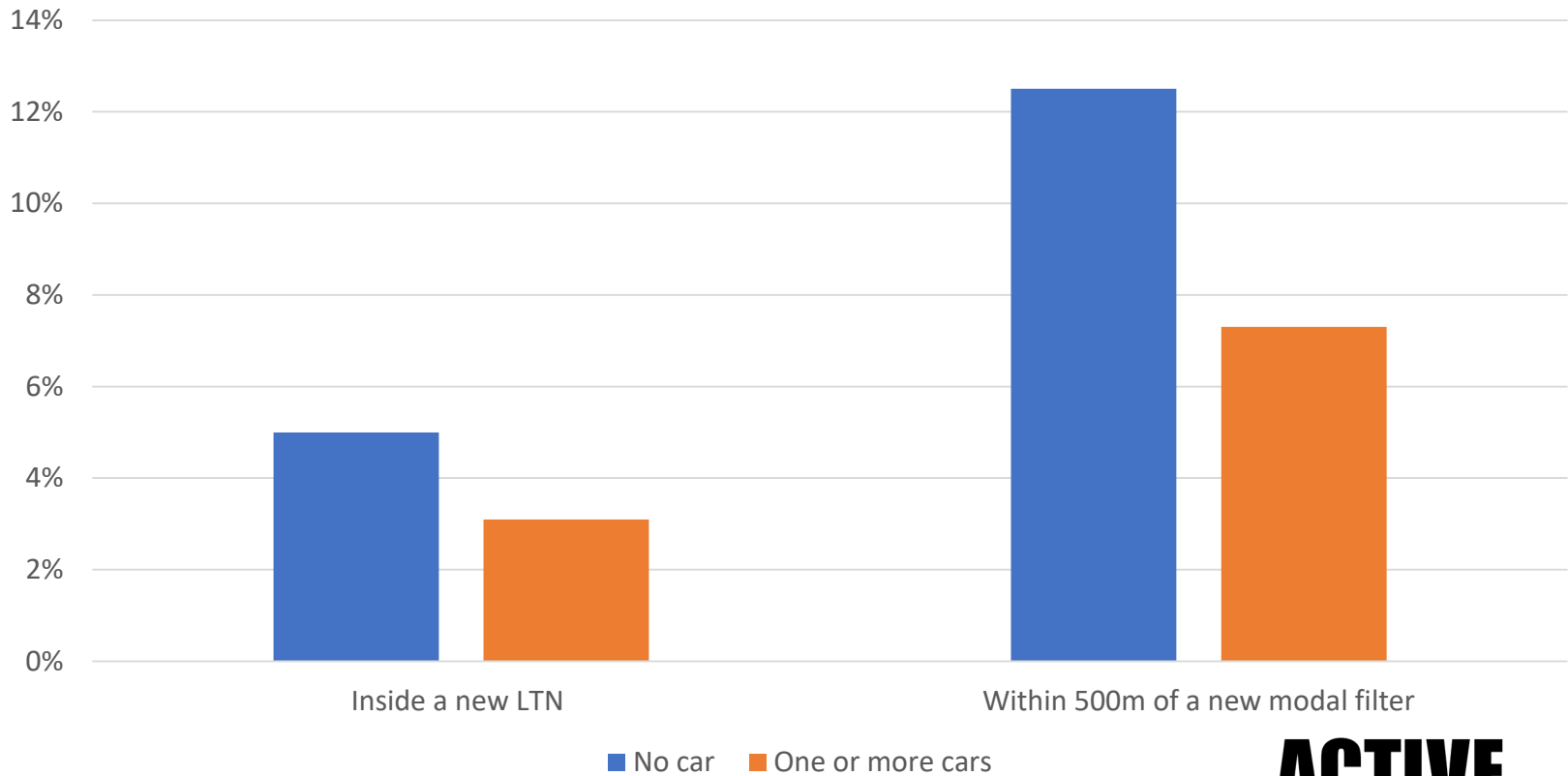
LTN distribution/access by disability, pan-London





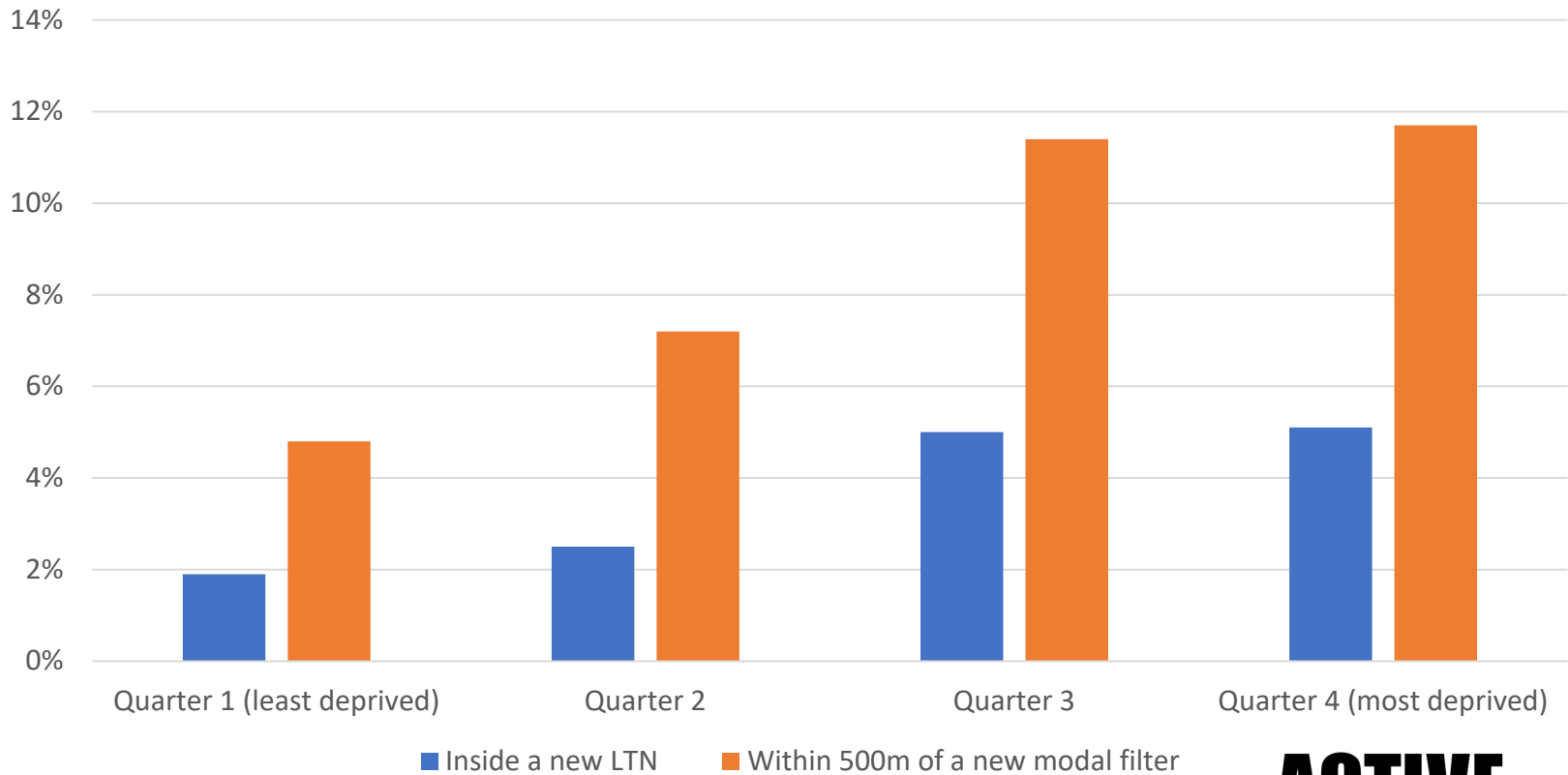
# PAN-LONDON EQUITY

LTN distribution/access by household car ownership, pan-London

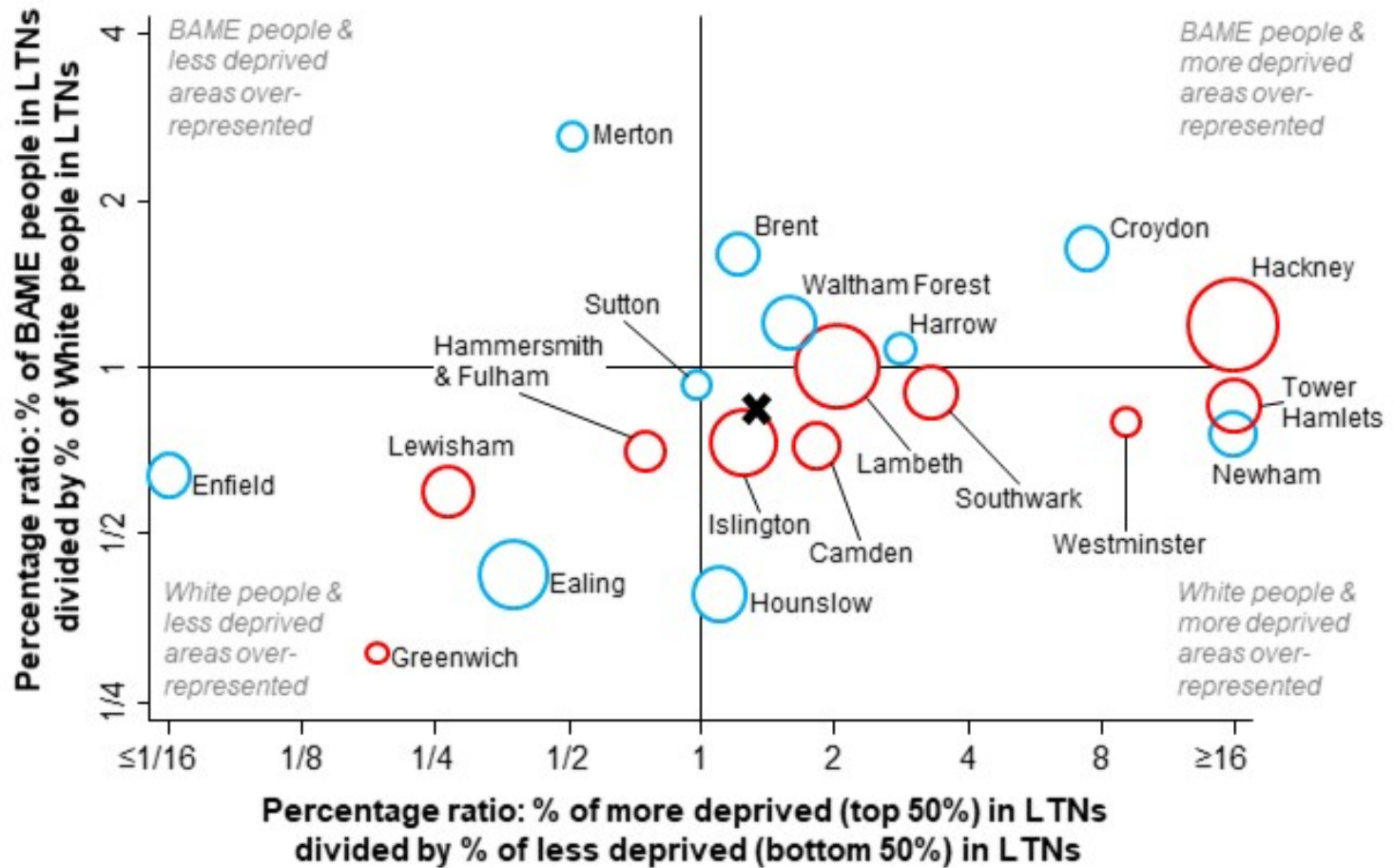


# PAN-LONDON EQUITY

LTN distribution/access by deprivation quartile (relative to London), pan-London







# SPATIAL EQUITY: MARCH-SEPT 2020 LTNS

“We found that the first wave of LTNs in London has been broadly equitable across London as a whole, and also at the micro-level comparing residents within LTNs to their immediate neighbours. There is, however, considerable variation between districts in the extent to which they have introduced LTNs in a way that is equitable with regard to ethnicity and deprivation. In particular, the district-led approach has left a third of London districts without any LTNs implemented during this period at all[...]

while LTNs may have strong potential to improve equity of access to high-quality active travel infrastructure, our results suggest that this will not automatically happen everywhere. The same may be true for other contexts with devolved governance and is a reason to monitor district-level as well as overall equity when similar initiatives are to be adopted.”





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