

# **AIR QUALITY INFORMATION REPORT TO INFORM HABITATS REGULATIONS ASSESSMENT**

## **Post Regulation-19 Update report**

London Borough of Newham

February 2025

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## 1. Introduction

### 1.1 Integrated Impact Assessment (IIA) and Habitats Regulation Assessment (HRA)

The London Borough of Newham is refreshing its Local Plan, in response to updated objectives and strategies for the borough (including Building a Fairer Newham, an Inclusive Economy and the declaration of a Climate Emergency), changes in context and trends, as well as new national and regional planning policies.

Consultation on the Local Plan has occurred over three formal stages – Issues and Options from October to December 2021, Regulation 18 between January and February 2023 and Regulation 19 from July to September 2024.

As part of the development of the Local Plan, an [Integrated Impact Assessment \(IIA\)](#) has been developed alongside it, continuously assessing it to check how it, and possible alternative options, may impact social, economic and environmental factors within Newham. The Plan should be reducing and mitigating any potential negative effects in relation to these factors and seeking ways to deliver improvements and benefits. The London Borough of Newham commissioned WSP to undertake the IIA.

One of the assessments within the IIA is the Habitats Regulation Assessment (HRA), which considers the potential impact of the Local Plan on significant natural habitats.

Comments received on the IIA at the Issues and Options (IIA Scoping Report) and Regulation 18 stage were fed into the development of the IIA and Draft Local Plan at Regulation 19 stage.

Responding to the Issues and Options consultation on the Local Plan, Natural England stated that *“Epping Forest is one of the last examples of large-scale wood pasture in lowland Britain and has retained features such as ancient and semi-ancient natural woodland, old grassland and scattered wetland. Epping Forest SAC [Special Area of Conservation] is already subject to high levels of recreational pressures ... as well as the increase in traffic on several roads which cut through the SAC.*

*The site is therefore particularly sensitive to further increases to recreational pressure and traffic-related air pollution, which are both predicted to escalate due to planned development in the Authorities within the Zone of Influence of the SAC. The Local Plan should give great weight to the protection of Epping Forest SAC.”*

Furthermore, Natural England advised that *“the HRA will also need to consider Air Quality impacts on Epping Forest SAC”*.

Following these comments by Natural England, the London Borough of Newham commissioned WSP to produce a report to inform the HRA. The report produced by WSP – Air quality information report to inform Habitats Regulation Assessment – is referred to within this report as the WSP report. The WSP report considered whether or not planning policies or site allocations included within the new Local Plan had the potential to result in likely significant (adverse) air quality effects on the integrity of the Epping Forest SAC.

The WSP report concluded that it was not possible to demonstrate 'de-minimis' effects through the traffic data calculations alone, with 12 site allocations exceeding the precautionary decision making threshold (DMT). However, when taking into account the qualitative evidence, policy drivers (including London Plan and Local Plan policies which include the requirement for air quality positive design for large-scale development proposals and require largely car free development) and measures within Newham's Sustainable Transport Strategy, the supporting evidence pointed towards a conclusion of no likely significant (adverse) air quality effects (LSE).

The report then recommended that a project level HRA should be undertaken as Local Plan allocations come forward, including a more detailed assessment where there is an identified receptor pathway. Through this approach, it expected that greater detail (such as site-specific transport information within a Transport Assessment) would rule out other sites, especially those in Stratford with high Public Transport Accessibility Level (PTAL).

Between July and September 2024, LB Newham undertook a Regulation 19 consultation on the Draft Local Plan, with the WSP report [appended to the Regulation 19 HRA of the IIA](#).

In response to the Regulation 19 consultation on the Draft Local Plan, Natural England stated, *"Natural England appreciate the work by Newham Council in modelling the potential air quality impacts of the plan on Epping Forest SAC, and we note the ongoing challenges of this work."*

*Currently we are not able to agree with the conclusion that there will be no adverse effect on integrity of Epping Forest SAC as a result of air quality. We look forward to continuing conversations with the council over these issues and would welcome the opportunity to discuss the modelling and results further as updates are made."*

Following discussions with Natural England, it was suggested that LB Newham should review the WSP report against other Epping Forest air quality reports recently endorsed by Natural England, and to provide quantitative data to support the qualitative data presented in the WSP report to support their conclusions.

## 1.2 Post Regulation 19 review and update report

WSP make clear within their report that they took a conservative approach regarding risk and estimations, highlighting a large number of mitigating factors, limitations and assumptions made – such as in section 3.8 of the WSP report. WSP were not able to completely rule out no likely significant (adverse) air quality effects (LSE), because of the high trip rate on sites that resulted in higher than acceptable trips through and around Epping Forest SAC.

Following comments from Natural England that requested quantitative data to support the qualitative conclusions drawn by WSP, LB Newham have produced this report to demonstrate the validity of the conclusion of the WSP report that there will be no likely significant (adverse) air quality effects (LSE) on Epping Forest SAC resulting from the Local Plan.

Upon detailed reassessment of the WSP report and the underlying data behind it, LB Newham considers that some parts of the report can be reassessed, with the use of additional, more accurate data as well as quantifying some of the overestimations and mitigations made by WSP.

This report therefore:

- re-examines the baseline data of the WSP report, including checking the data and calculations behind it
- considers whether the benchmark trip rates are correct, and if alternatives are available
- where possible, quantifying the qualitative data within the WSP report to support the arguments put forward regarding limited trip rates
- considers additional evidence that supports limited trip rates from site allocations

This report is in addition to the WSP report, and does not seek to reproduce wider aspects of the report.

## 2. Setting a base for further assessment

LB Newham studied the WSP report and underlying data in detail, and considered that a new baseline of data should be set prior to further analysis and assessment being undertaken.

LB Newham built an equivalent trip-rate table to that at Tables 6.1 and 6.2 in the WSP report, using information provided by WSP and land use data from site allocations.

Within this report, LB Newham has only considered the 12 site allocations that had exceeded the precautionary decision making threshold (DMT) in Tables 6.1 and 6.2 of the WSP report, as all other site allocations had previously been screened out of the process by WSP or had not exceeded the precautionary DMT. Further information on how the other site allocations were screened out is available in section 3.3 of the WSP report.

### 2.1 Exclusion of retail trips from the assessment

Firstly, LB Newham agrees with the conclusions reached by WSP in section 6.1.3 of the WSP report, which considers that retail trips are likely to have been over estimated. The Local Plan will result in the replacement or consolidation of existing retail floorspace, rather than additional floorspace. This follows the [Retail and Leisure Study 2022](#), which highlighted minimal need for additional retail floorspace. Key factors influencing this conclusion include declining demand for comparison goods and evolving shopping habits, such as the shift toward online shopping.

New retail development within the borough is expected to cater primarily to local demand rather than generating a significant influx of external vehicle trips. For example, the transport assessment of the Pudding Mill development (approved in outline as 21/00574/OUT) states given the “*scale and likely type of retail units ... it is assumed that retail trips will be internalised. Therefore, the proposed retail is considered ancillary and as such has been assumed not to generate trips in their own right*”. For context, the permission proposes 51,738m<sup>2</sup> of Class E floorspace.

Section 6.1.3 of the WSP report therefore concludes that that “*there is no identified need for additional convenience floorspace over the plan period, and proposals for comparison goods led schemes within the LBN are unlikely to be required*”.

Retail uses, particularly convenience retail, have higher trip rates compared to other land uses specified in the Air Quality Neutral (AQN) guidance. In cases where the exact nature of the retail use was uncertain, a precautionary approach applied the highest trip rate, potentially inflating estimates.

Section 3.8.11 of the WSP report notes that “*following a discussion with Urban Shape (LBN’s retail consultant), trip generation data is also presented for each of the site allocations, excluding the retail trips (see Table 6.2), on the basis that the overall level of traffic generated by retail use in LBN is **unlikely to change significantly***” [LBN emphasis]

Given the above, LB Newham have excluded retail trips from the assessment, as it provides a more accurate and realistic estimate of the potential impacts.

## 2.2 Fixes to underlying land use data

Following checks of the data, LB Newham fixed several errors and omissions that would impact the trip rate for site allocations.

- At Stratford Town Centre West, the floorspace figures used were corrected, following checks of all site allocations to ensure accuracy of the floorspace data provided to WSP.
- At Sugar House Island, the employment uses within the site allocation were considered to fall into office/light industrial trip rate (1 annual trip per m<sub>2</sub> (GIA)) rather than an industrial trip rate (5.6 annual trips per m<sup>2</sup> (GIA)), and the floorspace figures were corrected to reflect this.
- At Stratford Waterfront South, the floorspace figures were corrected to reflect the built permission (18/00424/REM) on part of the site, reducing the quantity of educational floorspace by around 20%.
- At Rick Roberts Way, the floorspace figure was corrected from the external land area of the proposed school to the known internal floor area of the school.

The land use data provided by LB Newham to WSP was Gross External Area (GEA), however the benchmark trip rate from the Air Quality Neutral guidance use Gross Internal Area (GIA). The calculations in the WSP report were therefore overestimated by around 9%, as WSP acknowledge in section 3.8.4 of the WSP report.

LB Newham therefore converted land use data of site allocations from GEA to GIA using the established formula (91% of GEA = GIA), allowing more accurate calculations of trips to be made. Alongside this, other minor calculation and transposition errors were also fixed.

## 2.3 Distance from each site allocation to the Epping Forest SAC

Section 3.3 of the WSP report outlines how the site allocations were screened to determine which required further assessment. The distance from each site allocation to the Epping Forest SAC was measured by WSP, before the proposed uses of each site allocation were taken into account.

Section 3.3.10 of the WSP report details the methodology of how this was measured.

*“1) ‘As the crow flies’ applied from the boundary of the site allocation; and  
2) Via road, which was estimated using the route planner within Google Maps to identify the shortest route from the proposed site allocations to a road within 200m of Epping Forest SAC.”*

To check this data, LB Newham reproduced it using the same methodology as WSP.

At five sites, LB Newham could not achieve the same distance figure. The distance from each site allocation to the Epping Forest SAC for these schemes was therefore corrected, as per Table 1 below – with the changes marked in red. The changes are relatively minor – other than at N7.SA2 Twelvetees Park and Former Bromley By Bow Gasworks where the site is nearly 2 kilometres further away from the Epping Forest SAC.

**Table 1: Corrected distances from each site allocation to the Epping Forest SAC**

Site Reference	Site	Distance from each site allocation to the Epping Forest SAC	
		Distance measured as crow flies	Estimated distance measured 'on road'
N7.SA2	Twelvetreepark and Former Bromley By Bow Gasworks	5.2	8.7 (+1.8km)
N7.SA3	Sugar House Island	4.9	7.3 (+0.3km)
N8.SA1	Stratford Central	3.4	4.7
N8.SA2	Stratford Station	3.7 (+0.1km)	6.1
N8.SA5	Stratford Town Centre West	3.4	4.2
N8.SA6	Stratford Waterfront South	4.1	6.2 (+0.1km)
N8.SA7	Rick Roberts Way	4.6	6.7
N8.SA9	Pudding Mill	4.7	6.3
N13.SA3	Former East Ham Gasworks	4.8	6.9 (+0.3km)
N15.SA1	Lord Lister Health Centre	2.6	3.1
N15.SA2	Woodgrange Road West	2.8	3.2

## 2.4 Considering the decision making threshold (DMT)

Section 3.6 of the WSP report indicates why a precautionary decision making threshold (DMT) of 13 was chosen, with WSP explaining that they followed the [JNCC Guidance on Decision-making Thresholds for Air Pollution](#). Traffic data from the London Atmospheric Emissions Inventory for the major roads traversing Epping Forest SAC was obtained, with 0.15% of the baseline traffic flow (annual average daily traffic – AADT) used to obtain the DMT. As traffic data could not be distributed to specific roads, WSP chose a precautionary DMT figure of 13.

Natural England indicated to LB Newham that other LPAs had used other decision making thresholds.

LB Newham therefore studied the [LB Waltham Forest Air Quality Study 2](#), which was published in 2022. The LB Waltham Forest report was undertaken by WSP. In section 2.4 of that report, LB Waltham Forest explains why an indicative threshold of 50 AADT has been chosen.

*“the changes in AADT were considered against an indicative threshold of 50 AADT, which has previously been applied by the NE Thames Solent area team when considering the potential impacts of a Local Plan ‘alone’ and the subsequent need to consider in-combination effects. The rationale is that any increase in traffic below this threshold would result in increases in NO<sub>x</sub>, NH<sub>3</sub>, N-dep and acid-dep levels that are too small to be of consequence in-terms of sensitive ecological features; as such potential impacts ‘alone’ can be screened out as can the relative contribution of the Local Plan to ‘in combination’ effects.”*

LB Waltham Forest also notes that this was “discussed in consultations with [Natural England]” on two occasions. LB Newham has applied the indicative threshold of 50 AADT to the assessment, given its previous use by the Natural England Thames Solent area team, and the consistency with the approach taken by LB Waltham Forest.



### 3. Reassessing the estimated daily trip rate

Following these changes to the baseline data behind the WSP report, LB Newham then considered how to quantify the assertions in the WSP that the estimated daily trip rates were likely to be overly cautious.

These included:

- considering whether the distance travelled data was accurate or up to date, and rescreening site allocations if required
- considering whether the benchmark trip rate for particular land uses used by WSP was most appropriate, by using actual trip rate data from existing developments rather than using benchmark trip rate from the AQN guidance
- Providing quantitative data that would substantiate the arguments made by WSP in section 7 of the WSP report that the number of trips will be substantially lower than suggested.

LB Newham focused this assessment on the site allocations that exceeded the precautionary DMT, as set out in section 5 of this report.

#### 3.1 Considering the Air Quality Neutral Guidance – distance travelled

Section 3.3.3 of the WSP report notes that significant adverse effects are *“only likely to arise where there is a significant change in traffic flow (i.e., volume and/or composition) on roads located within 200m of the SAC”*.

The WSP report continues in section 3.3.4 *“Average journey length can be used to assess the likelihood for significant changes in traffic flow on any given road link”*.

##### 3.1.a Average distance data used in the WSP report

The WSP report quotes the JNCC de-minimis guidance, which states that *“for the purpose of decision making, unless local circumstances support a wider zone, plan HRA should take account of the potential effects of traffic emissions on European sites located within 10 km of the plan boundary.”*

In section 3.3.5 of the WSP report, they conclude that the average trip length and associated Zone of Influence will likely be smaller than the 10km mentioned above. WSP have therefore used the average journey lengths from the [London Air Quality Neutral Guidance](#), which provides average distance travelled for key land uses based on their location within London.

**Table 2: Average distance (km) travelled by car per trip from the [London Air Quality Neutral Guidance](#) (Table 5.2)**

Land use	CAZ	Inner London	Outer London
Residential	4.2	3.4	11.4
Office	3.0	7.2	10.8
Retail	9.2	5.5	5.4

In section 3.3.6 of the WSP report, they explain that the *“average distances [from the AQN guidance] have been used to calculate a bespoke ZOI for each of the site allocation, based on their proposed land use/the development description, with the distance applied from the boundary of the site allocation”*

### 3.1.b LB Newham concerns regarding distance data

WSP note in section 3.8.2 that these average distances are *“based on observed data from the London Travel Demand Surveys (LTDS) 2008 – 2010, that have subsequently been factored using data extracted from Figure 6.2 of TfL’s Travel in London Report (Issue 9) for the period 2010 – 2015.”*

This average distance data is at least 10 years out of date, pre-dating the London Plan (2021) and its policies for largely car free development.

Following study of a wide range of data sources, LB Newham consider that the number of car trips, distance travelled and car ownership in London has fallen over the last 10/15 years. This follows efforts to reduce and discourage car use (as detailed in sections 2.5 and Table 7.1 of the WSP report), including car-free development, the congestion charge, low traffic neighbourhoods and the Ultra Low Emission Zone.

[London Travel Demand Survey \(LTDS\) data](#) shows that car use per capita in London has declined, with the average London resident taking around 26 per cent fewer car driver trips in 2019/20 compared with 2009/10. LTDS data also shows that the long-term trend of car ownership in London is declining, with the proportion of households not owning a car increasing from 41 per cent in 2005/06 to 46 per cent in 2022/23, the lowest level of car ownership since the LTDS began.

[Census 2021 data](#) shows that Newham has one of the lowest levels of car ownership in London, with more than half (52%) of all households in Newham do not own or have access to a car. In 2021, Newham also had the greatest reduction in the number of registered vehicles, when compared to the other London Boroughs. This demonstrates that travel by car is not a priority mode-share within the borough.

[Travel in London 2024](#) notes that road traffic data for 2023 had *“still not yet recovered fully from the pandemic”*, with car traffic *“seven per cent lower than in 2019”*.

[Department for Transport \(DfT\) data](#) shows that between 2019 and 2023 (post COVID-19 pandemic), traffic in London has fallen by average of 5.4%. Traffic in LB Waltham Forest has fallen by average of 5.3%. Traffic in LB Newham has fallen by average of 5.6%. Officers do note that data for the Epping Forest DC is not available from DfT.

[Newham’s Sustainable Transport Strategy](#) – part of the evidence base of the Draft Local Plan – acknowledges that travel by car is not a priority mode-share within the borough, with LTDS data with the largest percentage of average daily trips being by public transport (Bus, DLR, Underground, Rail) with 41%, followed by walking with 33%. The growth assessment undertaken as part of the development of the Sustainable Transport Strategy states that *“only 6% of new trips are forecast to be generated by car, demonstrating the borough growth is achieving a relatively sustainable mode share utilising alternatives to the private vehicle”*.

### 3.1.c Up to date average distance data

In light of the above, LB Newham considered that data sources support that the number of car trips, distance travelled and car ownership in London has fallen over the last 10/15 years, and more up to date average distance data should be used in the assessment if available.

The most recent average distance data is available from the London Travel Demand Survey 2022/23, which was published by TfL in January 2024.

<b>Table 3: Travelled distance (kilometres per person per day) by mode and London area, from the <a href="#">London Travel Demand Survey 2022/23</a></b>		
Car	Inner London	2.66km
	Outer London	3.99km

This 2022/23 distance data is substantially less than the 3.4km and 11.4km for inner and outer London respectively in the AQN guidance. As the LTDS distance travelled data focuses on London residents, LB Newham considered that the residential aspect of the scheme could be screened in or out for assessment using this travel distance, as opposed to the AQN guidance distance data used by WSP.

### 3.2 Screening of site allocations

Using the up to date average distance data outlined in section 3.1.c, LB Newham reproduced the screening exercise for site allocations undertaken by WSP in section 5 of the WSP report.

As noted in section 2, LB Newham only considered the 12 site allocations that had exceeded the precautionary decision making threshold (DMT) in Table 6.1 and 6.2 of the WSP report, as all other site allocations had previously been screened out of the process by WSP or had not exceeded the precautionary DMT.

To undertake the screening process, site allocations were first checked to see if they were in the ZOI identified by WSP. N7.SA2 Twelvetrees Park and Former Bromley By Bow Gasworks and N7.SA3 Sugar House Island were screened out of the process at this point, as LB Newham's updated measurements (as set out in section 2.3 of this report) indicates that the sites were outside of the ZOI.

In the second stage of the screening process, LB Newham used the distance travelled data as identified in section 3.1.3 to screen in or out the residential aspect of the site allocations. LB Newham took a conservative approach, using the average distance data for outer London, and rounding the figure to 4km.

With regards to the residential aspects of the site allocations, all but 2 site allocations were screened out as the distance from them to the Epping Forest SAC exceeded 4km. The two sites with residential screened in were:

- N15.SA1 Lord Lister Health Centre
- N15.SA2 Woodgrange Road West

When assessing trip rates in the next stage of the assessment, these 2 sites will have their residential trip rate assessed alongside the non-residential trip rates, whereas the remaining 9 screened in sites will only have their non-residential floorspace assessed.

In addition to assessing site allocations, WSP assessed windfall sites across the borough as outlined in the housing trajectory. Windfall sites refer to development locations not specifically allocated in the Local Plan but that arise unexpectedly through opportunities in urban areas, such as previously developed land or sites that become available due to changes in land use. As these windfall sites do not have land uses other than residential, and they could be located across the borough – they have been screened out of the process. Officers consider that a small number of windfall sites could fall within the 4km distance, but are likely to be small enough in scale not to have an impact on the Epping Forest SAC.

**Table 4: Rescreening of site allocations**

Site Reference	Site	Proposed Land Use	Allocation lies within OAPF Area	Applicable / Refined ZOI	Residential ZOI	Habitat Zone within Refined ZOI? (Distance)	Habitat Site within Refined ZOI? (Estimated)	Non-residential Screened In / Out	Residential screened in/out
N7.SA2	Twelvvetrees Park and Former Bromley By Bow Gasworks	Residential development, employment uses, main town centre uses and social infrastructure including community facilities, health centre, education uses, and open space.	No	7.2km	4km	5.2	8.7	Out	Out
N7.SA3	Sugar House Island	Residential development, main town centre uses and social infrastructure, including community facilities, and employment uses and open space.	No	7.2km	4km	4.9	7.3	Out	Out
N8.SA1	Stratford Central	Residential, main town centre uses and social infrastructure, including community facilities and health centre, and civic uses, employment uses, and open space.	No	7.2km	4km	3.4	4.7	In	Out
N8.SA2	Stratford Station	Increased capacity at Stratford Station to be provided through the redevelopment of the ticket hall and new and improved station entrances from Montfichet Road and the Carpenters estate along with residential, employment uses, main town centre uses and social infrastructure including, community facilities and education facilities, and open space	No	7.2km	4km	3.76	6.1	In	Out
N8.SA5	Stratford Town Centre West	Residential, employment, other main town centre uses, particularly ground floor active frontages and social infrastructure including community facilities, and open space	No	7.2km	4km	3.4	4.2	In	Out
N8.SA6	Stratford Waterfront South	Higher education campus development for UCL East comprising academic floorspace, employment uses small-scale retail and residential. The employment uses should be consistent with Local Plan Policy J1 and prioritise office and commercial research space associated with the higher academic campus.	No	7.2km	4km	4.1	6.2	In	Out
N8.SA7	Rick Roberts Way	Residential, employment uses, sports and recreation uses, education and open space.	No	7.2km	4km	4.6	6.7	In	Out
N8.SA9	Pudding Mill	Residential, employment uses, main town centre uses and social infrastructure including community facilities and health centre, and open space.	No	7.2km	4km	4.7	6.3	In	Out
N13.SA3	Former East Ham Gasworks	Residential, community facility and open space	No	7.2km	4km	5.2	6.9	In	Out
N15.SA1	Lord Lister Health Centre	Residential, health and open space	No	3.4km	4km	2.6	3.1	In	In
N15.SA2	Woodgrange Road West	Residential, community, retail and industrial and employment	No	7.2km	4km	2.8	3.2	In	In

### 3.3 Considering the Air Quality Neutral Guidance – trip rate data

Section 3.4 of the WSP report details how the potential trip rates were calculated, using the trip rate benchmarks from the [London Air Quality Neutral Guidance](#).

These benchmark trip rates were used by WSP in their report to calculate the trip rate for each site allocation, as shown in Table 6.1 and 6.2 of the WSP report.

Land use	Annual trips per	Inner London (excluding CAZ)
Residential (including student accommodation and large-scale purpose-built shared living development)	dwelling	114
Offices/light industrial	m <sup>2</sup> (GIA)	1
Retail (superstore)	m <sup>2</sup> (GIA)	73
Retail (convenience)	m <sup>2</sup> (GIA)	139
Restaurants/café	m <sup>2</sup> (GIA)	137
Drinking establishments	m <sup>2</sup> (GIA)	8
Hot food takeaway	m <sup>2</sup> (GIA)	32.4
Industrial	m <sup>2</sup> (GIA)	5.6
Storage and distribution	m <sup>2</sup> (GIA)	5.5
Hotels	m <sup>2</sup> (GIA)	1.4
Care homes and hospitals	m <sup>2</sup> (GIA)	1.1
Schools, nurseries, doctors' surgeries, other non-residential institutions	m <sup>2</sup> (GIA)	30.3
Assembly and leisure	m <sup>2</sup> (GIA)	10.5

The benchmark trip rates were calculated in a [2019 report from Vectos](#), which is an update of a 2014 report by the same consultant – part of the evidence base for the London Air Quality Neutral Guidance. These were calculated by using TRICS data, which provides information based on observed trip rates from developments. They represent typical trip rates derived from observed data for various land uses.

LB Newham considered if this London-wide benchmark trip rate for land uses from the AQN guidance used by WSP was accurate when considered against the Newham context, by looking at proposed land uses as well as actual trip rate data from approved planning permissions. This could provide a more accurate estimate of trips on certain sites, where the site allocation has a known land use, and where the London Air Quality Neutral Guidance benchmark trip rate is a composite of various land uses.

Following the screening out of retail and the majority of residential land uses, LB Newham considered the largest land uses in the assessment – namely academic and industrial floorspace.

### 3.3.a Stratford Waterfront South

At Stratford Waterfront South, the academic floorspace in the site allocation was classified under the “Schools, nurseries, doctors’ surgeries, other non-residential institutions” benchmark. Officers considered that the trip rate in the WSP assessment was very high – far beyond what would be considered acceptable for an application to propose in a Transport Assessment.

The extant planning permission (18/00424/REM) had trip rates for the various approved uses in the transport statement. To allow direct comparison with the benchmark trip rate, LB Newham converted the AM peak and PM peak trip rate (0.066 and 0.121) for the D1 use class to an annual trip rate using the following methodology. This would allow comparison with the benchmark trip rate.

To calculate an annual trip rate, the following methodology was used:

- AM and PM peak trip rates (which typically represent 20% of daily trips) were combined.
- The combined peak trip rate was divided by 0.2 to estimate the total daily trip rate per 100 m<sup>2</sup>.
- The trip rate was converted from per 100 m<sup>2</sup> to per m<sup>2</sup> by dividing the daily trip rate by 100.
- The daily trip rate per m<sup>2</sup> was multiplied by the number of operational days in a year (e.g. 250 weekdays for offices).

This calculation indicated a trip rate of around 3.41 trips per m<sup>2</sup> per year for the D1 use. Comparing this to the benchmark trip rate of 30.3 trips per m<sup>2</sup> per year, officers considered 3.41 to be a fair assessment of the number of trips for a university development – with more trips per m<sup>2</sup> than an office, but substantially less than a school.

Officers have therefore updated the trip rate for the D1 use on Stratford Waterfront South to match the extant planning permission.

### 3.3.b Site allocations with industrial development

In the WSP report, site allocations that had industrial land uses proposed usually had the industrial benchmark trip rate (5.6 annual trips per m<sup>2</sup>) applied. LB Newham assessed the proposed land uses on each site allocation, to ensure that the most appropriate benchmark trip rate was used for each site.

In all cases, the benchmark trip rate was changed to 5.5 annual trips per m<sup>2</sup> (storage and distribution), as this was considered to more appropriately reflected the development that will come forward. Officers considered that the office/light industrial trip rate of 1 annual trip per m<sup>2</sup> may not correctly capture the number of trips that could come forward from an industrial land use.

## 4. Demonstrating that the estimated daily trip rates are lower

Following these changes and modifications to the data behind the report, LB Newham is able to demonstrate that the estimated daily trip rates are lower than the WSP report suggested, while also substantiating their overall conclusion. This follows the above changes and modifications to the equivalent trip-rate table to that at Table 6.1 and 6.2 in the WSP report, including:

- Exclusion of retail trips from the assessment (section 2.1 of this report).
- Fixes to underlying land use data (section 2.2 of this report).
- Changing the decision making threshold (DMT) to 50 (section 2.4 of this report).
- Screening out residential trips where the distance to/from the Epping Forest SAC exceeds 4km (as per LTDS distance travelled data) (sections 3.1 and 3.2 of this report).
- Consideration of using trip rate data from existing planning permission rather than using benchmark trip rate from the AQN guidance (section 3.3 of this report).

Table 6 below shows the predicted two-way increases for each of the screened in site allocations, along with the predicted number of trips travelling to/from in LB Waltham Forest (which contains the nearest part of Epping Forest SAC) and Epping Forest DC (which contains the majority of Epping Forest SAC).

Table 6 below indicates that, based on the trip generation calculations, the DMT (of 50 vehicles) could be exceeded on roads within 200m of Epping Forest SAC in LB Waltham Forest as a result of 4 sites, and on roads within 200m of Epping Forest SAC in Epping Forest DC as a result of 1 site.

<b>Table 6: LB Newham estimated trips for site allocations, based on Table 6.1 and 6.2 of WSP report</b>					
<b>Site</b>	<b>Estimated total trips (2 way)</b>	<b>Estimated total trips (2 way)</b>	<b>Estimated total daily trips within LBWF</b>	<b>Estimated daily trips within EFDC</b>	<b>Potential exceedances of the precautionary DMT (50)</b>
	<b>Residential screened in</b>	<b>Residential screened out</b>			
	<b>Retail excluded</b>	<b>Retail excluded</b>			
Stratford Central	N/A	417	51	10	Yes
Stratford Station	N/A	0	0	0	No
Stratford Town Centre West	N/A	73	9	3	No
Stratford Waterfront South	N/A	7301	275	51	Yes
Rick Roberts Way	N/A	962	73	13	Yes
Pudding Mill	N/A	1739	197	37	Yes
Former East Ham Gasworks	N/A	166	9	2	No
Lord Lister Health Centre	280	N/A	37	3	No
Woodgrange Road West	405	N/A	36	24	No



## 5. Consideration of sites that exceed the DMT

As per Table 6 above, 4 site allocations exceed the precautionary DMT threshold of 50.

- Stratford Central
- Stratford Waterfront South
- Rick Roberts Way
- Pudding Mill

Section 7 of the WSP report reviewed a large quantity of qualitative data to demonstrate that the number of estimated total daily trips will be lower than it estimated. However it used Newham or London data to support its conclusions, rather than focusing on particular site allocations.

In light of this and the comments received by Natural England, LB Newham has interrogated the sites that have exceeded the precautionary DMT, to demonstrate that the number of trips will be far lower than suggested by the trip rate modelling. This has used site specific data, including available scheme data for permitted schemes in or near these 4 site allocations.

### 5.1 Stratford Central

At Stratford Central, the estimated total daily trips within LB Waltham Forest is 51, just exceeding the precautionary DMT. This is due to the number of estimated trips from community facilities and health centre, civic uses and employment uses. The estimated total daily trips to Epping Forest DC does not exceed the precautionary DMT.

Any proposed development in Stratford Central would be a car-free development, with only blue badge parking spaces. This follows established London Plan policy, which notes at section 10.6.2 *“Developments in town centres generally have good access to a range of services within walking distance, and so car-free lifestyles are a realistic option for many people living there.”*

Stratford is one of the best connected locations in London, with a PTAL score of 6b (the highest score available) covering much of the central area of Stratford. Stratford has a wide range of public transport connections across London including London Underground, Overground, Docklands Light Railway (DLR), National Rail, and the Elizabeth Line. The area is also served by a large number of frequent bus routes both day and night, as well as high quality walking and cycling routes.

As of 2024, Stratford is the 5<sup>th</sup> busiest station in the UK, with connections to 19 London boroughs as well as East Anglia, Essex and Kent. In 2019, 128 million people used the station, up from 40 million in 2006.

A study of recent applications in the Stratford Central area (including 24/01956/FUL, 22/02117/FUL and 24/00652/FUL) demonstrates that developers are not providing car parking, and are relying on the high quality public transport available in this area. However, the recent applications studied do not match the land uses proposed in the site allocation, and therefore the trip rates cannot be used for direct comparisons.

In conclusion, the high quality public transport leads LB Newham to conclude that the estimated trip rate at Stratford Central is substantially higher than it will be in actuality. In addition, the small exceedance of the precautionary DMT also means that LSE from this site can be ruled out.

## 5.2 Stratford Waterfront South

At Stratford Waterfront South, the estimated total daily trips within LB Waltham Forest is 275 – substantially exceeding the precautionary DMT. The estimated total daily trips to Epping Forest DC exceeds the precautionary DMT by 1. The large estimated total daily trips is due to the number of estimated trips from academic floorspace and employment uses.

The site allocation at Stratford Waterfront South benefits from an extant outline planning permission (17/00235/OUT), with the first detailed phase (18/00424/REM) approved in March 2019. The first detailed phase has been built and occupied, with around 20% of the 160,060sqm D1 floorspace approved in the outline permission. The Proposed Submission Local Plan does not propose an additional quantity of office, educational or student accommodation land uses at Stratford Waterfront South, beyond those approved in outline (17/00235/OUT) in May 2018.

The trip rates used in the Transport Assessment of the 18/00424/REM permission are substantially lower than the AQN trip rate assumed for either school or assembly floorspace. As set out in section 3.3.a of this report, LB Newham changed the trip rate for the D1 use on Stratford Waterfront South to match the extant planning permission. However, the estimated trip rates are still significantly higher than the precautionary DMT.

Officers have studied the Travel Plan data submitted as part of the application, as well as survey data submitted by the applicant following completion and occupation of the building. This travel plan monitoring was submitted to the LLDC in January 2024 as 24/00014/AOD.

The travel plan data does not allow for a bespoke trip rate to be calculated, as it uses survey data from occupiers rather than trip rate data. This travel plan monitoring data indicates that the estimated trip rates in Table 6 of this report are substantially higher than reality, with the majority of users of the site using public transport, walking or cycling to site. Of those surveyed regarding how they travelled to the site (a D1 use), 12.9% walked, 10.5% cycled and 74% used public transport. No respondents drove a car or were a passenger in a car to travel to the site.

As noted in section 5.1 of this report, LB Newham considers that the estimated trip rates in Stratford are a substantial overestimation – given the density and availability of quality public transport, high public transport/active travel modal share and no car parking. Therefore, it is likely that future development at this site will continue to see the travel patterns substantiated in the travel plan monitoring.

As the Proposed Submission Local Plan does not propose an additional quantity of office, educational or student accommodation land uses at Stratford Waterfront South, beyond those approved in outline (17/00235/OUT) in May 2018, LB Newham therefore concludes that the lack of additional floorspace as a result of the Proposed Submission Local Plan will not lead to trips beyond those already approved.

In addition, the high quality public transport and available travel plan data therefore leads LB Newham to conclude that both the estimated trip rate at Stratford Waterfront South outlined in Table 6 and the estimates provided in the approved scheme's Transport Assessment are substantially higher than it will be in actuality.

LB Newham therefore concludes that LSE from this site can be ruled out.

### 5.3 Pudding Mill

At Pudding Mill, the estimated total daily trips within LB Waltham Forest is 216, exceeding the precautionary DMT. This is due to the number of estimated trips from employment uses and social infrastructure including community facilities and a health centre. The estimated total daily trips to Epping Forest DC does not exceed the precautionary DMT.

Officers consider that the land uses proposed at Pudding Mill are expected to cater primarily to local demand rather than generating a significant influx of external vehicle trips. The development will also be predominately car-free. Furthermore, as noted in section 5.1 of this report, LB Newham considers that the estimated trip rates in Stratford are a substantial overestimation – given the density and availability of quality public transport, high public transport/active travel modal share and no car parking.

Large parts of the site allocation at Pudding Mill were approved in outline (21/00574/OUT) in October 2022. The Proposed Submission Local Plan does not propose an additional quantity of development at Pudding Mill, beyond those approved in outline in October 2022.

Unfortunately, the transport assessment for the approved scheme does not have trip rates for land uses other than residential, outlining modal share per each land use proposed instead. A bespoke trip rate can therefore not be calculated.

The transport assessment of the application notes that the residential portion of the scheme has a 5% mode share for cars, reflecting the limited number of blue badge and car club bays. The office portion of the scheme has a 1% mode share for cars, and the health centre portion of the scheme has a 5% mode share for cars. The transport assessment concludes that the community, leisure and health centre will have *"a local catchment, with the vast majority of trips on foot"*. This conclusion shows that the proposed uses will not have a regional draw, contrary to the data in Table 6.

As the Proposed Submission Local Plan does not propose an additional quantity of development at Pudding Mill, beyond those approved in outline in October 2022 and as the data available from the extant planning permission as well as the high quality public transport in Stratford leads LB Newham to conclude that the estimated trip rate at Pudding Mill is substantially higher than it will be in actuality.

LB Newham therefore concludes that LSE from this site can be ruled out.

## 5.4 Rick Roberts Way

At Rick Roberts Way, the estimated total daily trips within LB Waltham Forest is 73, exceeding the precautionary DMT. This is due to the number of estimated trips from employment uses, sports and recreation uses and education. The estimated total daily trips to Epping Forest DC does not exceed the precautionary DMT.

LB Newham undertook a study of applications for new schools in Newham from the last 5/10 years. Some of these applications did have trip rates; however, others broke down the trips by modal share for pupils, teachers and visitors – preventing direct comparisons. These applications show that school trip rates can vary substantially depending on the location and catchment of the school, the age range of the school and type of school.

- The application at 259 Plaistow Road (21/03194/OUT) for a secondary school assumed cars would have a 3% modal split.
- The approved application at Stephenson Street (17/01847/OUT) for a secondary school forecast cars would have a 5% modal split.
- The approved application at Oasis Academy, North Woolwich (19/00281/FUL) for a secondary school forecast cars would have a 12% modal split. However, the school noted that the proportion of pupils travelling with parents / guardians by private car (i.e. dropped outside the school) has decreased from 16% to 9% over a period of 2.5 years, with a corresponding increase in pupils travelling by public transport.
- The approved application at Leyes Road and Royal Road for a Special Educational Needs and Disability (SEND) school (23/00023/OUT) has a trip rate of around 43, larger than the benchmark trip rate. This is due to the larger number of vehicle trips that are assumed to occur as a result of an SEND school.

Officers note that over 50 schools in the borough have active travel plans, with 58 schools having a TfL STARS accreditations – supporting sustainable travel, active travel and improved road safety. This suggests that policies are effective in securing sustainable school trips across the Borough, improving important local journeys and encouraging the development of sustainable travel behaviour at a young age.

LB Newham notes that the education use proposed is a SEND school, which could lead to a higher number of trips than a primary or secondary school. This is supported by the high trip rate at the Leyes Road and Royal Road SEND school, caveating that the location of that school is significantly less accessible by high quality public transport, with a PTAL of 3.

Following discussions with colleagues from the LB Newham education team, we understand that the vast majority of pupils will come from within the borough – given the [evidenced need for SEND school places in LB Newham](#). Pupil trips are therefore highly unlikely to travel within 200m of Epping Forest SAC in LB Waltham Forest or Epping Forest DC. Additionally, pupils (in general) travel to school in groups using LBN transport (i.e. minibuses) – this minimises individual trips and further reduces emissions.

Teachers and other staff attending the school will result in trips, which may go beyond the borough boundary; however, other school applications did not disaggregate these trips from the overall trip rate as they were considered to be a small percentage of the overall trips.

The approved application at Leyes Road and Royal Road (23/00023/OUT) includes a very small number of parking spaces for staff – with 8 operational spaces, 3 Blue Badge spaces and 2 minibuss parking spaces. In addition, LB Newham notes that the well-connected location of Rick Roberts Way (PTAL of 5 to 3) would result in transport colleagues seeking the lowest quantity of parking – further reducing the number of potential trips.

Given the well-connected location of Rick Roberts Way and the in-borough catchment of the SEND school, LB Newham considers that the number of trips will not exceed the precautionary DMT, and that LSE from this site can therefore be ruled out.

## 6. Conclusion

London Borough of Newham (LB Newham) understands the concerns that Natural England have raised regarding the potential air quality impacts of its Draft Local Plan on the Epping Forest SAC. LB Newham considers that the WSP report (as set out in section 8 of the WSP report) thoroughly assesses the impact of the Draft Local Plan on the Epping Forest SAC.

However, WSP make clear within their report that they took a conservative approach regarding risk and estimations, highlighting a large number of mitigating factors, limitations and assumptions. After studying the WSP report and the data behind it, LB Newham considers that the WSP report substantially overestimated the number of vehicle trips that would affect the Epping Forest SAC.

Building on the findings and methodology of the WSP report, LB Newham have reassessed some parts of the WSP report, applying a more nuanced approach to the assessment. As set out in sections 2 and 3 of this report, the reassessment incorporates updated data, refined assumptions, tailored trip rate calculations to better reflect the proposed land uses and the use of more up-to-date distance and travel behaviour data.

LB Newham considers that these changes have led to a more accurate representation of vehicle trips associated with the proposed site allocations, as set out in section 4 of this report. Despite this, four site allocations were identified as exceeding the precautionary Decision-Making Threshold (DMT) of 50 trips per day near the Epping Forest SAC.

Following their assessment of trip generation, the WSP report uses a qualitative assessment (section 7 of the WSP report) to conclude that *"trip generation from the short listed site allocations will be minimal."* As noted in section 1.3 of this report, Natural England requested quantitative data to support the qualitative data presented in the WSP report.

In section 5 of this report, LB Newham has interrogated the 4 sites that exceed the precautionary DMT, using planning application data, travel plan data and other information.

For the site at Stratford Central, this report concludes that as the high quality of public transport is likely to mean that the estimated trip rate at Stratford Central is substantially higher than it will be in actuality and that as the exceedance of the precautionary DMT is by 1 trip only, LSE from this site can be ruled out.

For the sites at Stratford Waterfront South and Pudding Mill Lane, this report concludes that the estimated trip rate is substantially higher than it will be in actuality – in light of their location and land uses proposed, and supporting data of travel plan and existing planning permissions available. Furthermore, as the Proposed Submission Local Plan does not propose any growth above that already permitted, proposals in the Plan will not lead to trips beyond those already approved and that LSE from these sites can be ruled out.

For the site at Rick Roberts Way, this report concludes that the number of trips will not exceed the precautionary DMT in light of the well-connected location of Rick Roberts Way and the in-borough catchment of the SEND school and therefore LSE from this site can be ruled out.