

# **Technical Note 01 – Lewisham Local Plan Transport Assessment: Updated Housing Quantum Analysis**

## **Date: 24 October 2023**

### **1. Introduction**

WSP were commissioned to support the London Borough of Lewisham (LBL) with the transport modelling element of their Local Plan. This technical note picks up on the work WSP previously undertook between 2018 and 2020 to produce the LBL Local Plan Transport Assessment document, titled:

LBL Local Plan Transport Assessment Transport Modelling Final Report\_Draft\_August 2020

Chapter 3 of this Transport Assessment (TA) document detailed the growth assumptions within the 2026 and 2041 London Transportation Study (LTS) model and compared them to the LBL growth. LTS was Transport for London's (TfL) Four Stage Demand Model at the time the work was undertaken. TfL provided WSP in 2018 the housing and development quantum within LTS 7.1 scenarios for the following years: 2011, 2016, 2026 and 2041.

Within that TA, a comparison was made between the housing quantum within LTS model (from 2016 to 2026) to the LBL housing predictions across the same time period. This comparison showed relatively small differences between the two, as a total across the borough, both in absolute and percentage values. It was deemed that these differences were not significant to warrant any refinements to housing and employment growth within LTS. This is all documented in Chapter 3 of the TA.

However, since this TA was completed in August 2020, an updated housing quantum has been adopted for the LBL Local Plan Regulation 19, which necessitates a review of the data and analysis that had been provided within Chapter 3 of the TA; particularly Section 3.3 onwards.

This updated housing quantum was provided to WSP by LBL planning team in the form of:

- GIS shapefiles showing the Local Plan Regulation 19 site allocations and other large, consented sites that form part of the housing trajectory from 2019/20 to 2033/34.

- The latest LBL housing trajectory Excel spreadsheet up to the year 2039/40 was also provided to WSP.

However, the updated housing quantum information only started from 2019 onwards, whereas previous analysis within the TA spanned from 2016 onwards. The reason for requiring data from 2016 onwards was because the LTS model had a base year of 2016 and therefore future year growth captures all housing and employment changes since 2016.

To enable direct comparisons with the LTS data, upon further request from WSP, LBL planning team then provided up-to-date housing completions data across the borough from 2016/17 to 2021/22.

It is important to note that since this strategic transport modelling work was undertaken between 2018 and 2020, TfL have generated a new four stage strategic model which has replaced LTS called MoTiON.

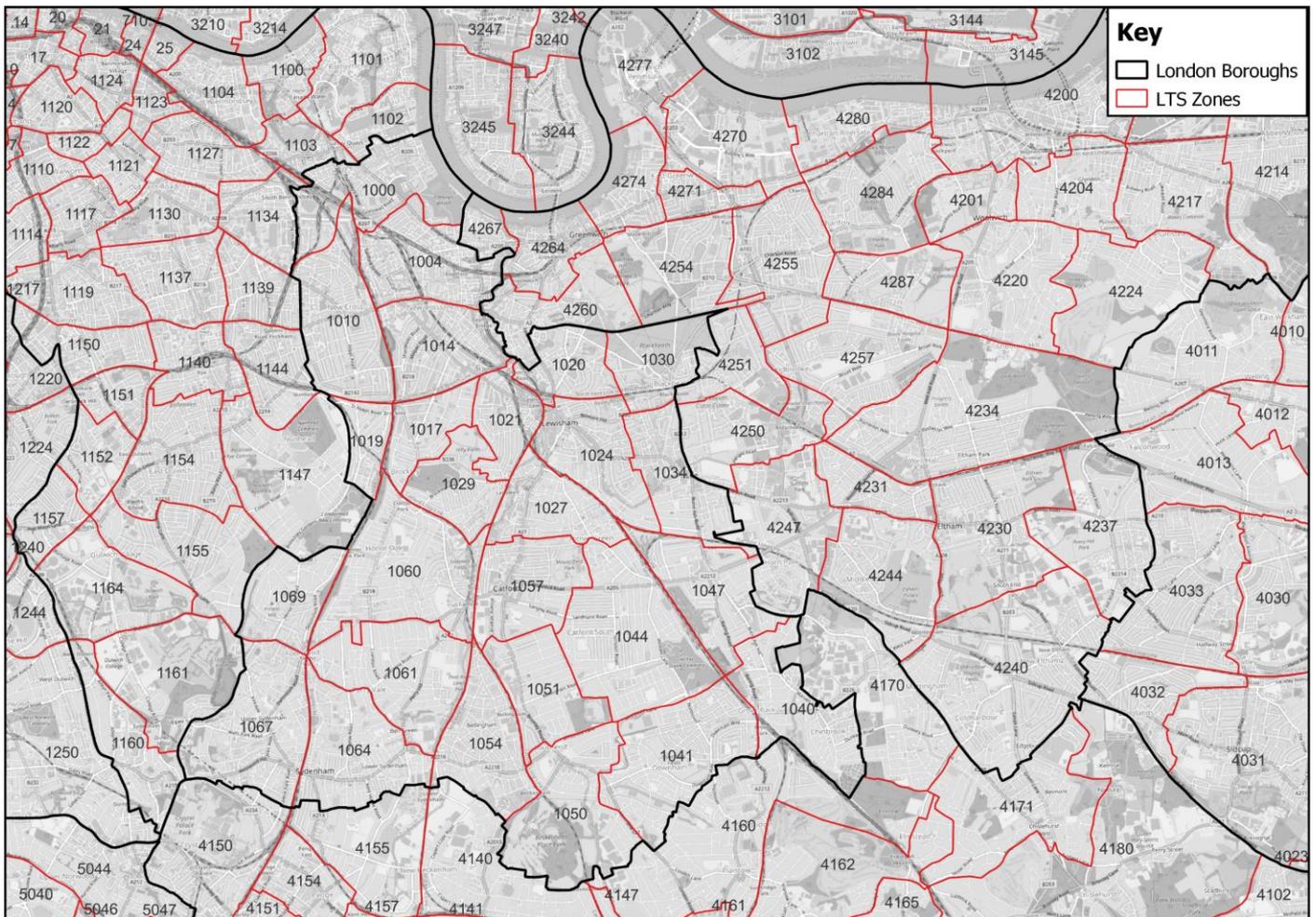
In order to provide a high-level comparison, the household quantum has been extracted from TfL's publicly-accessible Travel Demand Forecast MoTiON dashboard for the 2019 base year and 2026 and 2041 forecast years. This allows for a pragmatic approach to compare the total LBL Regulation 19 housing forecasts to the MoTiON forecasts, albeit without providing an understanding of the spatial distribution differences of this forecast growth, across the Borough.

This technical note will highlight the updates in housing quantum and provide high level analysis of the likely impacts of these changes. Recommendations will then be made as the necessary next steps which may be required.

Following discussions with the LBL planning team, a number of reasons were provided that help to collectively explain and provide context to the change in housing quantum within the LBL Regulation 19 forecasts, as compared to LBL data that had been previously analysed. This list of explanatory reasons can be found within Section 4.2 of this document.

## **2. LTS Zones**

The London Borough of Lewisham is represented in LTS by 26 individual zones which are illustrated below in Figure 1.



**Figure 1: London Borough of Lewisham LTS Zones**

### 3. LBL Growth

#### 3.1. Growth in Houses

LBL planning team have provided WSP with their latest housing trajectory information. To enable direct comparisons with the LTS model information they also provided the housing completions between 2016/17 to 2021/22.

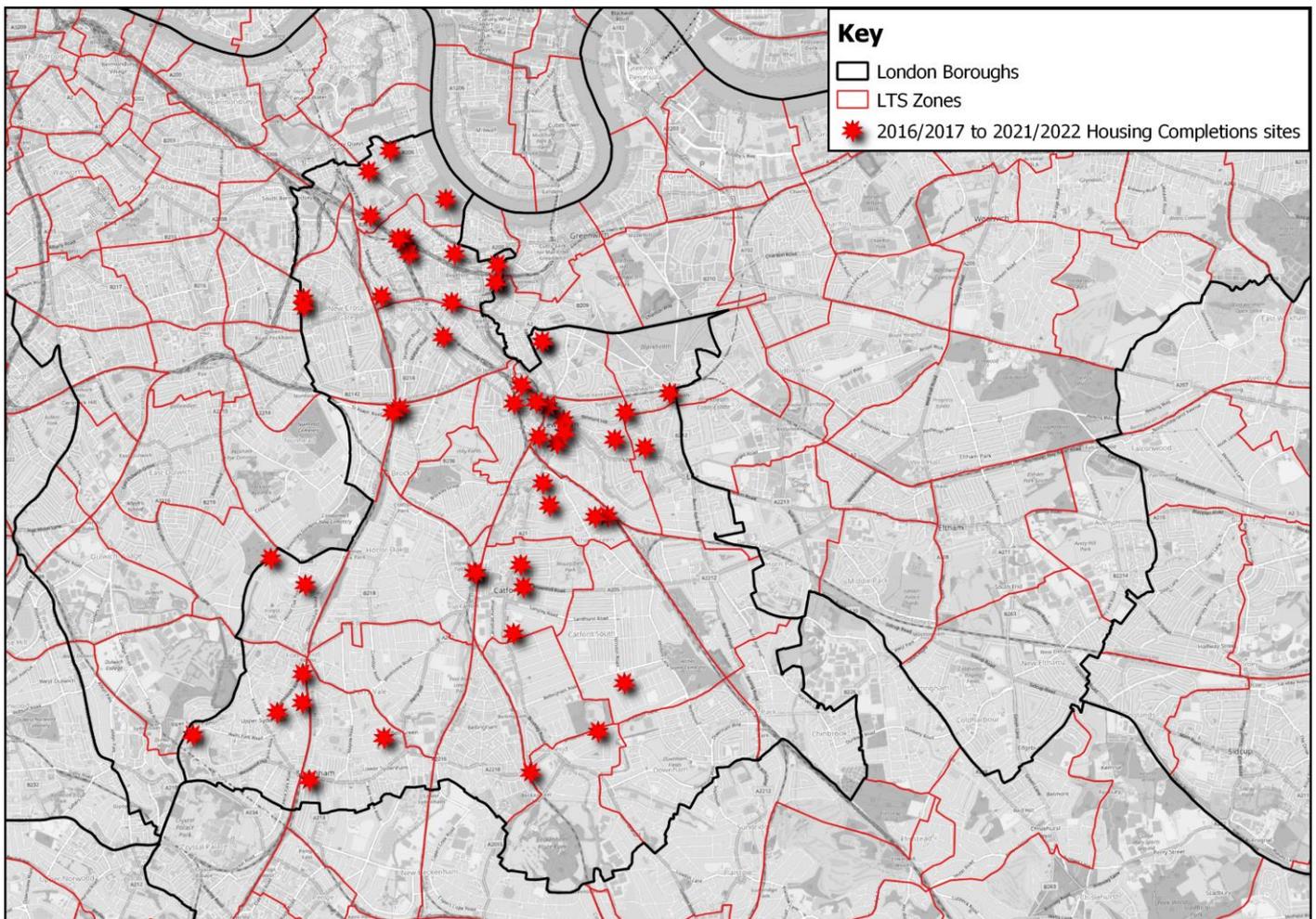
Data from the latest LBL Local Plan housing trajectory from 2022/23 to 2033/34 has been used within this updated analysis, alongside the 2016/17 to 2021/22 housing completions.

Table 1 shows how the housing completions and housing trajectory information provided by LBL used to generate 2016 to 2026 and 2016 to 2034 updated housing quantum across the Borough.

**Table 1: Updated LBL Housing Quantum Information**

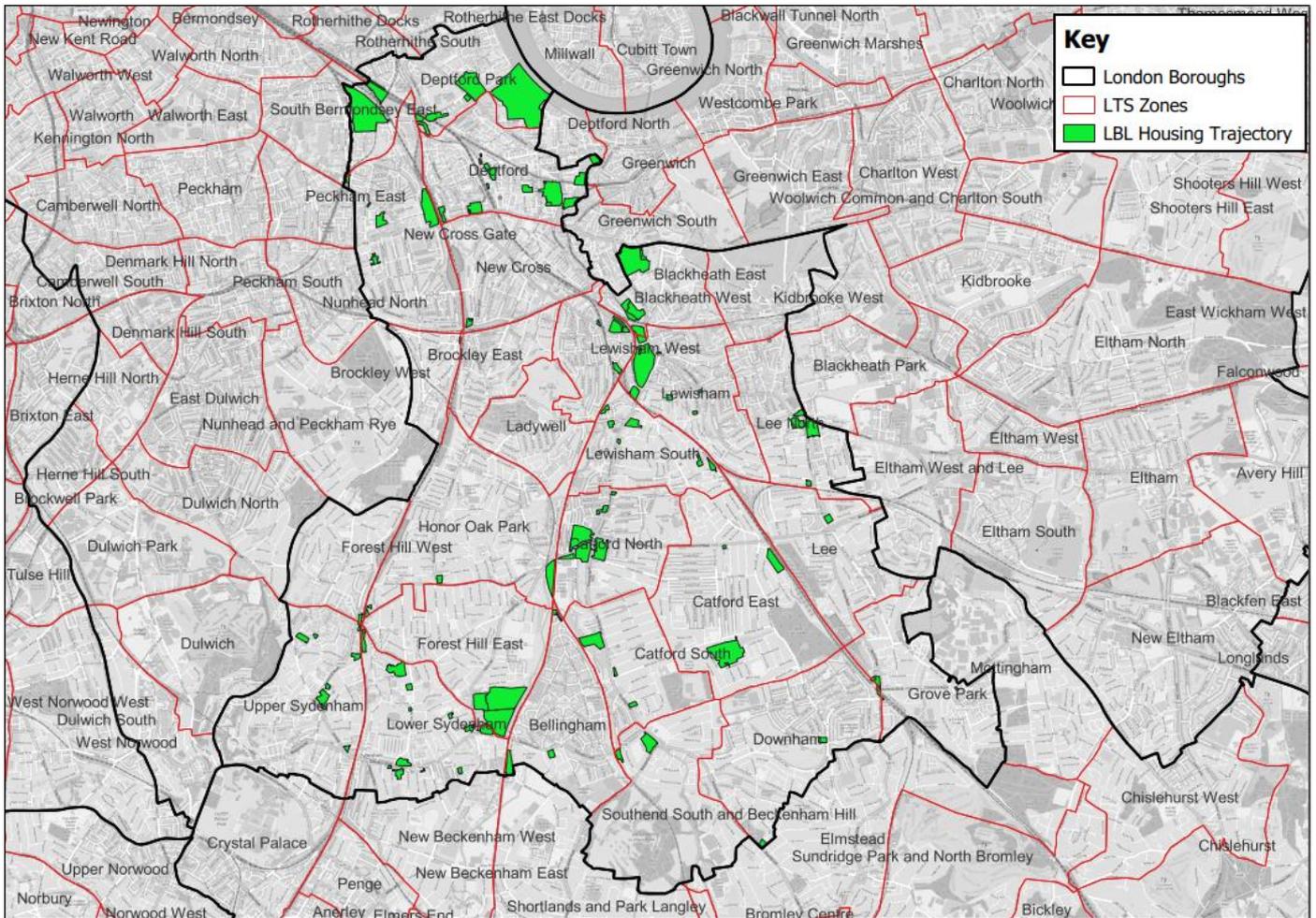
LBL 2016 to 2026	LBL 2016 to 2034
Housing Completions data from LBL between 2016/17 to 2021/22	Housing Completions data from LBL between 2016/17 to 2021/22
Housing Trajectory data from LBL between 2022/23 to 2025/26	Housing Trajectory data from LBL between 2022/23 to 2033/34 (includes uplift from Bell Green sites)

Figure 2 shows the locations of the housing completions provided by LBL across the Borough between the period 2016/17 to 2021/22.



**Figure 2: LBL Housing Completions sites from 2016/17 to 2021/22**

Figure 3 shows the locations for the growth in housing provided by LBL (showing Local Plan Regulation 19 site allocations and other large, consented sites) across the Borough as part of the LBL housing trajectory up until 2034.



**Figure 3: LBL Housing Trajectory Growth to 2034**

Between 2016 and 2026 the LBL are predicting a growth in houses across the Borough of 12,885 houses and from 2016 to 2034 30,630 houses. There are 10,340 houses currently planned between 2034/35 and 2039/40 (including uplift from Bell Green sites).

The LBL housing information has been associated to the LTS zones. However not all sites have a known geographic location and there are small sites, windfall sites and uplift for the Local Plan where these cannot be located to a LTS zone. The growth in houses across the LTS model zones is shown in Table 2 and illustrated in Figure 4 and Figure 5.

**Table 2: Growth in Houses in LBL Local Plan Regulation 19 by LTS Zone**

LTS Zone	LBL Increase 2016 to 2026	LBL Increase 2016 to 2034
1000	2,629	8,892
1004	1,822	8,892
1010	381	2,884
1014	58	1,026

<b>LTS Zone</b>	<b>LBL Increase 2016 to 2026</b>	<b>LBL Increase 2016 to 2034</b>
1017	25	115
1019	30	25
1020	2,336	50
1021	308	2,743
1024	357	837
1027	239	1,644
1029	0	436
1030	16	0
1034	25	16
1040	20	475
1041	0	20
1044	20	0
1047	0	250
1050	37	21
1051	18	178
1054	0	409
1057	172	6
1060	441	1,683
1061	0	953
1064	185	741
1067	299	253
1069	85	474
Small sites/ Windfall/ Uplift for Local Plan	3,382	6,414
<b>Total</b>	<b>12,885</b>	<b>30,630</b>

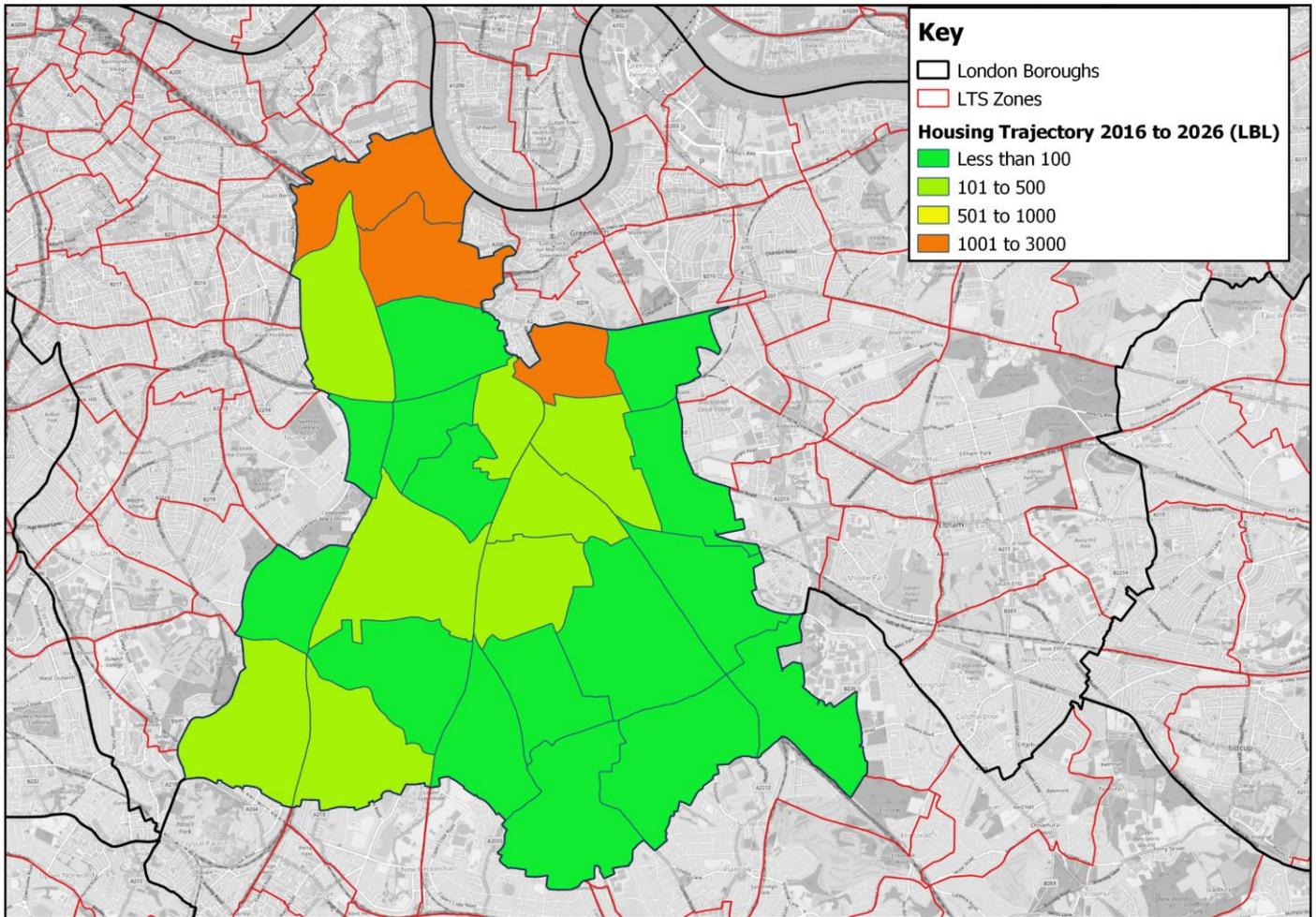


Figure 4: LBL Household Growth 2016 to 2026 provided by LBL

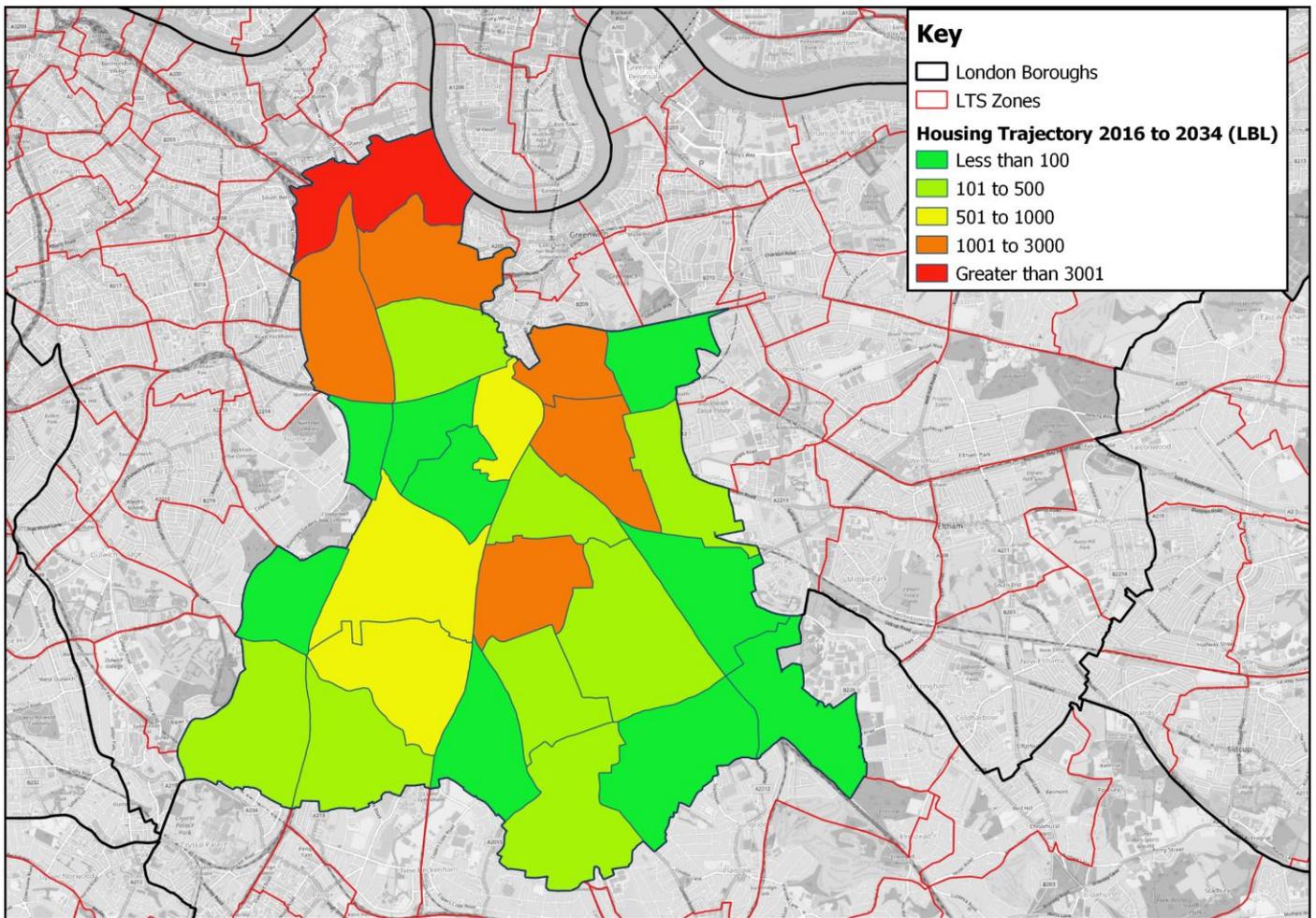


Figure 5: LBL Household Growth 2016 to 2034 provided by LBL

## 4. Comparison in Growth of Housing

### 4.1. LTS vs LBL (2016 to 2026)

A comparison has been undertaken in the growth in houses between LTS and the LBL Local Plan Regulation 19 predictions from 2016 to 2026. Table 3 shows that across the Borough, the growth in houses in LTS is higher compared to those predicted by LBL by 27%.

Table 3: Comparison between LTS and LBL Housing Growth

Year	LTS	LBL	Absolute Difference	Percentage Difference
2016 to 2026	17,756	12,885	4,871	27%

A comparison has been undertaken in the growth in houses between the LTS zone and LBL predictions from 2016 to 2026, these can be found in Table 4 and graphically illustrated in Figure 6.

**Table 4: Comparison between LBL and LTS Housing Growth by LTS Zone**

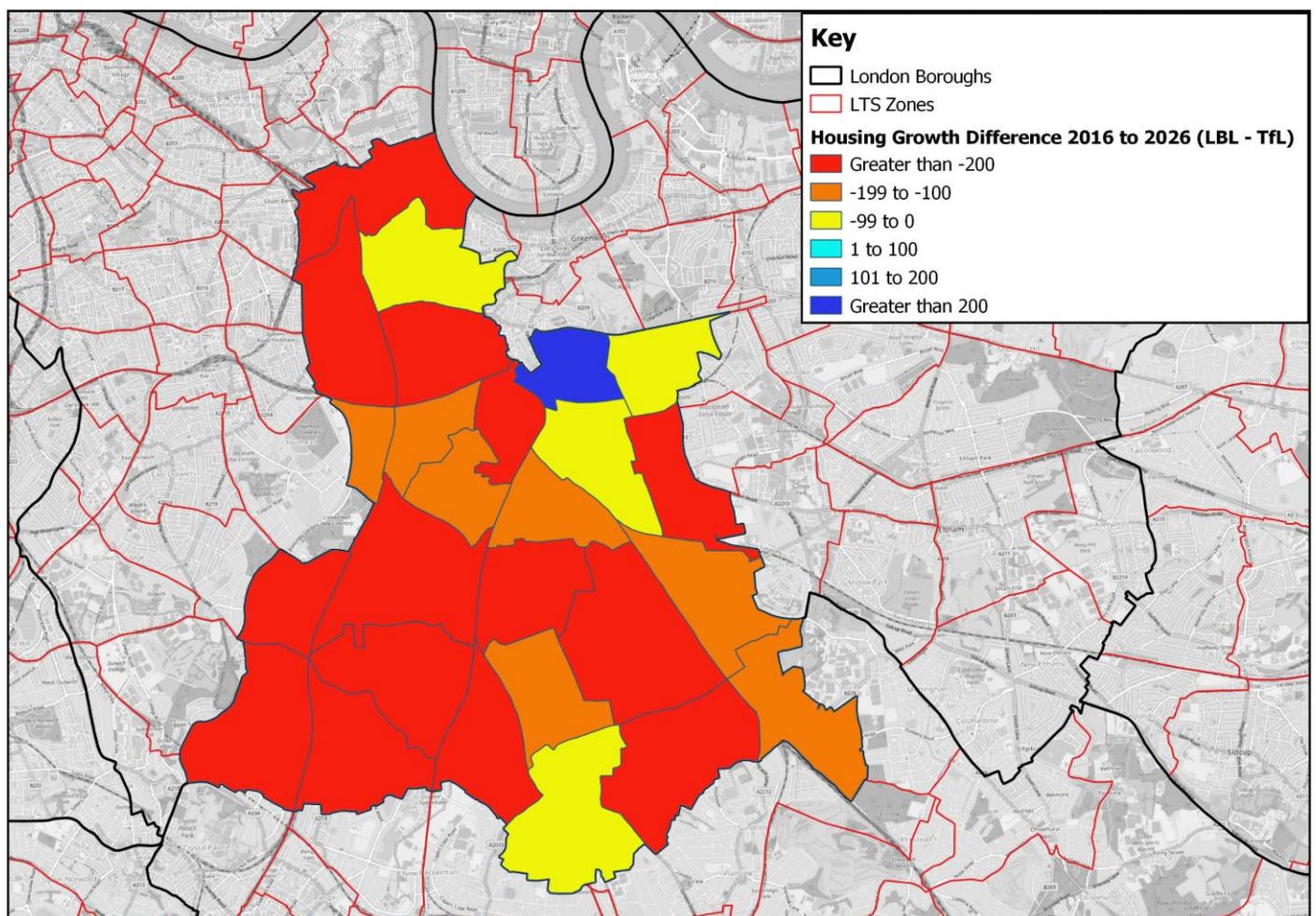
<b>LTS Zone</b>	<b>LTS Increase 2016 to 2026</b>	<b>LBL Increase 2016 to 2026</b>	<b>LBL - LTS Difference</b>	<b>LBL - LTS Percentage Difference</b>
1000	5,440	2,629	-2,811	-52%
1004	1,849	1,822	-27	-1%
1010	698	381	-317	-45%
1014	423	58	-365	-86%
1017	189	25	-164	-87%
1019	172	30	-142	-83%
1020	1,682	2,336	654	39%
1021	781	308	-473	-61%
1024	408	357	-51	-12%
1027	388	239	-149	-38%
1029	114	0	-114	-100%
1030	73	16	-57	-78%
1034	431	25	-406	-94%
1040	194	20	-174	-90%
1041	283	0	-283	-100%
1044	698	20	-678	-97%
1047	192	0	-192	-100%
1050	84	37	-47	-56%
1051	176	18	-158	-90%
1054	215	0	-215	-100%
1057	617	172	-445	-72%
1060	1,010	441	-569	-56%
1061	280	0	-280	-100%
1064	442	185	-257	-58%
1067	545	299	-246	-45%
1069	372	85	-287	-77%
Small sites/ Windfall/ Uplift for Local Plan	0	3,382	3,382	100%
<b>Total</b>	<b>17,756</b>	<b>12,885</b>	<b>-4,871</b>	<b>- 27%</b>

Table 4 shows the difference in housing growth by LTS zone, by absolute and percentage difference. The absolute range of differences between LBL and LTS data by LTS zone ranges from:

- An increase of 654 (39%) houses in zone 1020
- A decrease of 2,811 (52%) houses in zone 1000

Overall, this is a relatively large difference, both in absolute terms (4,871) and as a percentage (27%).

Figure 6 graphically illustrates the spatial differences between the housing growth LBL is predicting compared to LTS data, between 2016 to 2026. Overall this shows that LTS has a lot more housing growth across LBL compared to the Local Plan Regulation 19 predictions with only one LTS zone having more dwellings than LTS.



**Figure 6: Comparison between LBL and LTS Housing Growth by LTS Zone, between 2016 to 2026**

## 4.2. LBL Latest vs Prior Housing Quantum

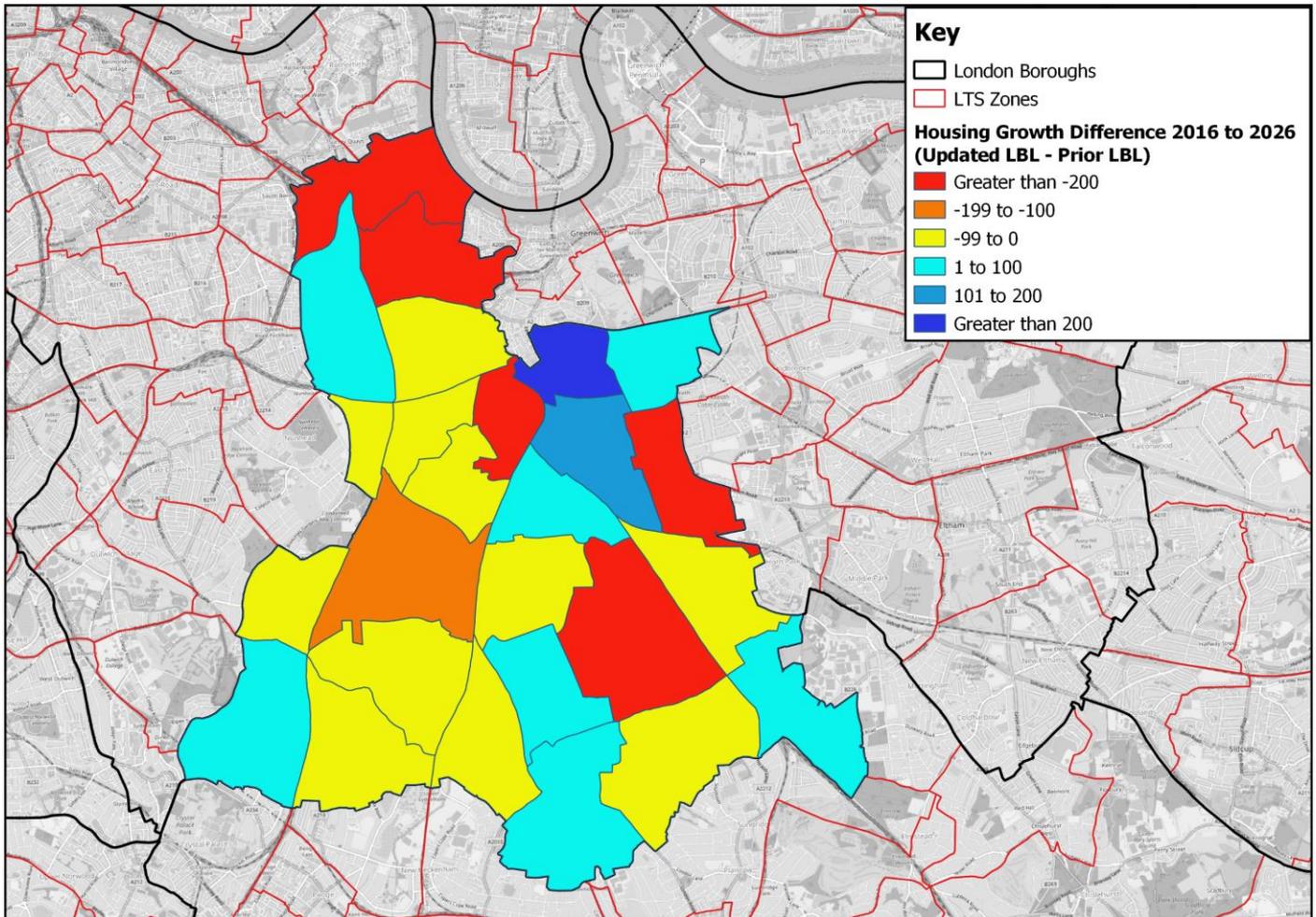
A comparison has been undertaken between the Local Plan Regulation 19 housing growth across the Borough provided by the LBL planning team, and the housing numbers that were previously analysed within the August 2020 TA document, as shown in Table 5.

**Table 5: Comparison between latest LBL and prior LBL Housing Growth LBL**

<b>Year</b>	<b>LBL August 2020</b>	<b>LBL Local Plan Reg 19</b>	<b>Difference</b>	<b>% Difference</b>
<b>2016 to 2026</b>	18,187	12,885	-5,302	-29%
<b>2016 to 2034</b>	34,008	30,630	-3,378	-10%

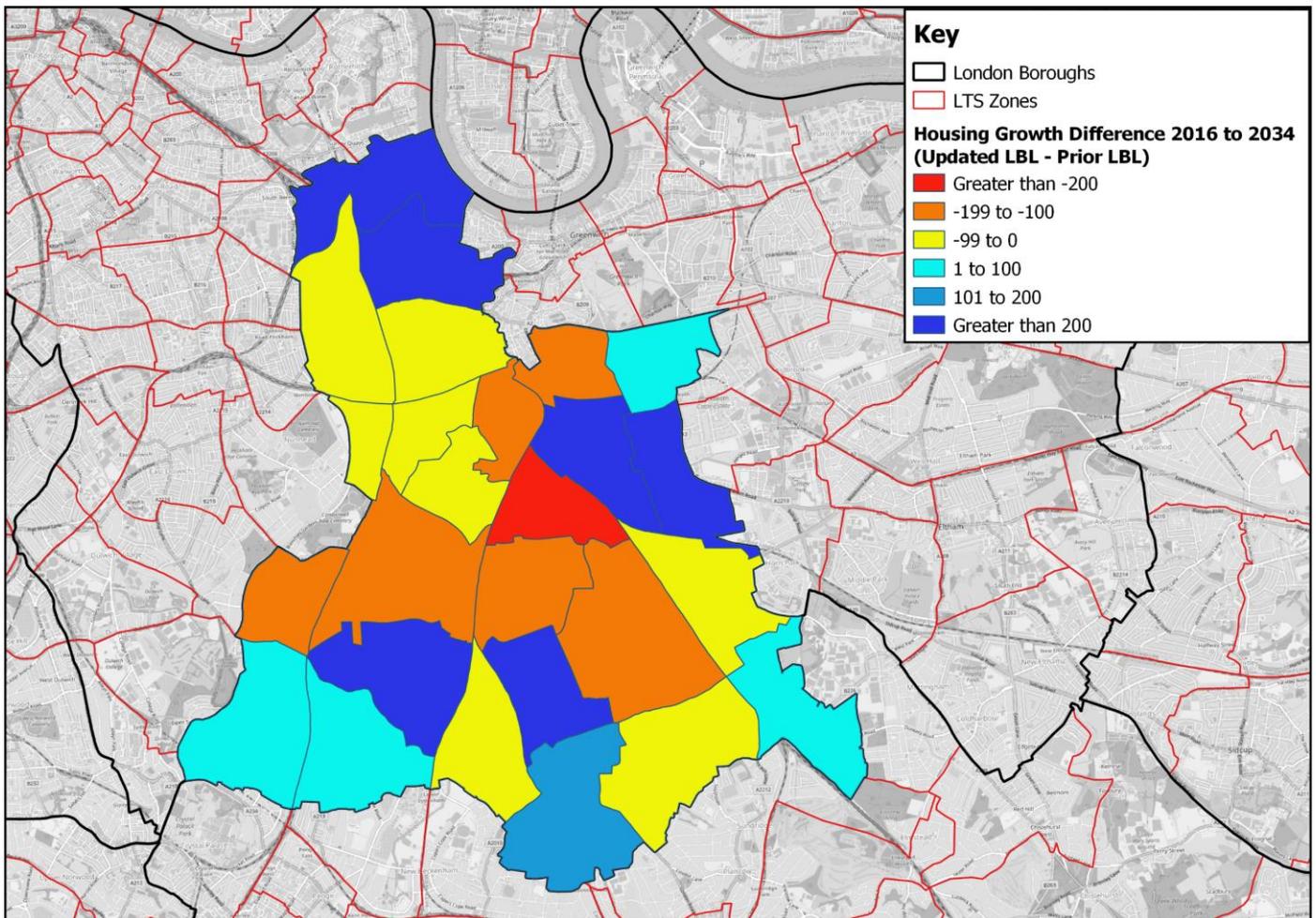
This shows how the LBL housing growth has reduced in the latest Local Plan Regulation 19 compared to the housing growth which was used in the August 2020 TA.

Figure 7 graphically illustrates the actual differences by LTS zone between the LBL Local Plan Regulation 19 housing growth across the Borough, compared to the LBL housing growth used in the August 2020 TA, from 2016 to 2026. Across LBL there are mainly reductions in housing growth in the Local Plan Regulation 19 numbers with a few areas experiencing some increases.



**Figure 7: Comparison between Local Plan Regulation 19 vs August 2020 TA housing growth by LTS Zone, between 2016 to 2026**

Figure 8 graphically illustrates the actual differences by LTS zone between the LBL Local Plan Regulation 19 housing growth across the Borough, compared to the LBL housing growth used in the August 2020 TA, from 2016 to 2034. Across LBL there is a mixture of housing increases and decreases in the latest housing growth compared to what was previously assessed.



**Figure 8: Comparison between updated LBL vs prior LBL housing by LTS Zone, between 2016 to 2034**

Following discussions with the LBL planning team a number of reasons were provided that collectively explain the reduction in the housing quantum, between 2016 to 2026 and 2016 to 2034 in the Local Plan Regulation 19 growth. These reasons include:

- LBL has experienced a significant reduction in the amount of completions recently. On average LBL has delivered 1,048 per annum in the last six years (2016/17-2021/22) compared to an average of 1,349 per annum in the preceding five years (2011/12-2015/16)
- COVID 19 had a negative impact on the ability of the construction industry to deliver housing, especially during the periods of national lockdown.
- Brexit also had a negative impact through shortages in the supply of labour and materials.
- More of LBL's sites are now including tall buildings and these take a while to construct, which can result in a lumpy delivery, with minimal completions one year and then full site delivery of a couple of hundred the next year.

- Some sites are experiencing long lead in times, especially where very large sites seek planning permission in phases, need to negotiate complex S106 agreements, or require decontamination or infrastructure prior to the start of building residential units.
- There have been changes in the site allocations between Reg 18 and Reg 19. Five sites were deemed not deliverable taking into account land owner aspirations, flood risk assessment, need to retain SIL land, alternative re-development options and objection from the local community.
- Recently, some sites have been stalling. Due to the current state of the economy, inflation and the rising costs in construction materials the viability of residential schemes is being squeezed, leading to developers either stalling their delivery or rethinking what can be delivered on their sites. Despite some sites having already gained planning consent, some developers are seeking to amend schemes or come back in with new applications in order to deliver a more profitable scheme, for instance by increasing the amount of residential units, or by swapping the residential element for Purpose Built Student Accommodation (PBSA) which is currently a more viable housing product. This is actually leading to an increase in the overall amount of homes to be built, albeit it is pushing the delivery back a few years.
- The requirement to build a 2nd staircase for tall buildings is having a similar impact, with developers re-evaluating what can be delivered on existing consented sites.

#### **4.3. LTS (2016 to 2041) vs LBL (2016 to 2040)**

Within the August 2020 TA document analysis, the LTS housing data was compared to LBL data between 2016 to 2026 time period. The available LTS models included 2026 and 2041 models, and the LBL housing trajectory data provided to WSP at the time spanned until 2034 (year 2033/34). As a result, only LTS housing data from 2026 model was compared.

However, the latest updated housing trajectory provided by LBL planning team to WSP spans until the year 2040 (2039/40).

Table 6 details how the 2016 to 2040 LBL data has been sourced from the latest housing completions and planning trajectory data provided.

**Table 6: Updated LBL Housing Quantum Information**

<b>LBL 2016 to 2040</b>
Housing Completions data from LBL between 2016/17 to 2021/22
Housing Trajectory data from LBL between 2022/23 to 2039/40 (includes uplift from Bell Green sites)

A comparison has been undertaken in the growth in houses between the 2016 to 2041 LTS predictions, and the LBL growth between 2016 to 2040. While these two sets of data do not span the exact same time period, it still provides a useful comparison, as shown in Table 7, and illustrated graphically in Figure 9.

**Table 7: Comparison between LBL and LTS Housing Growth by LTS Zone**

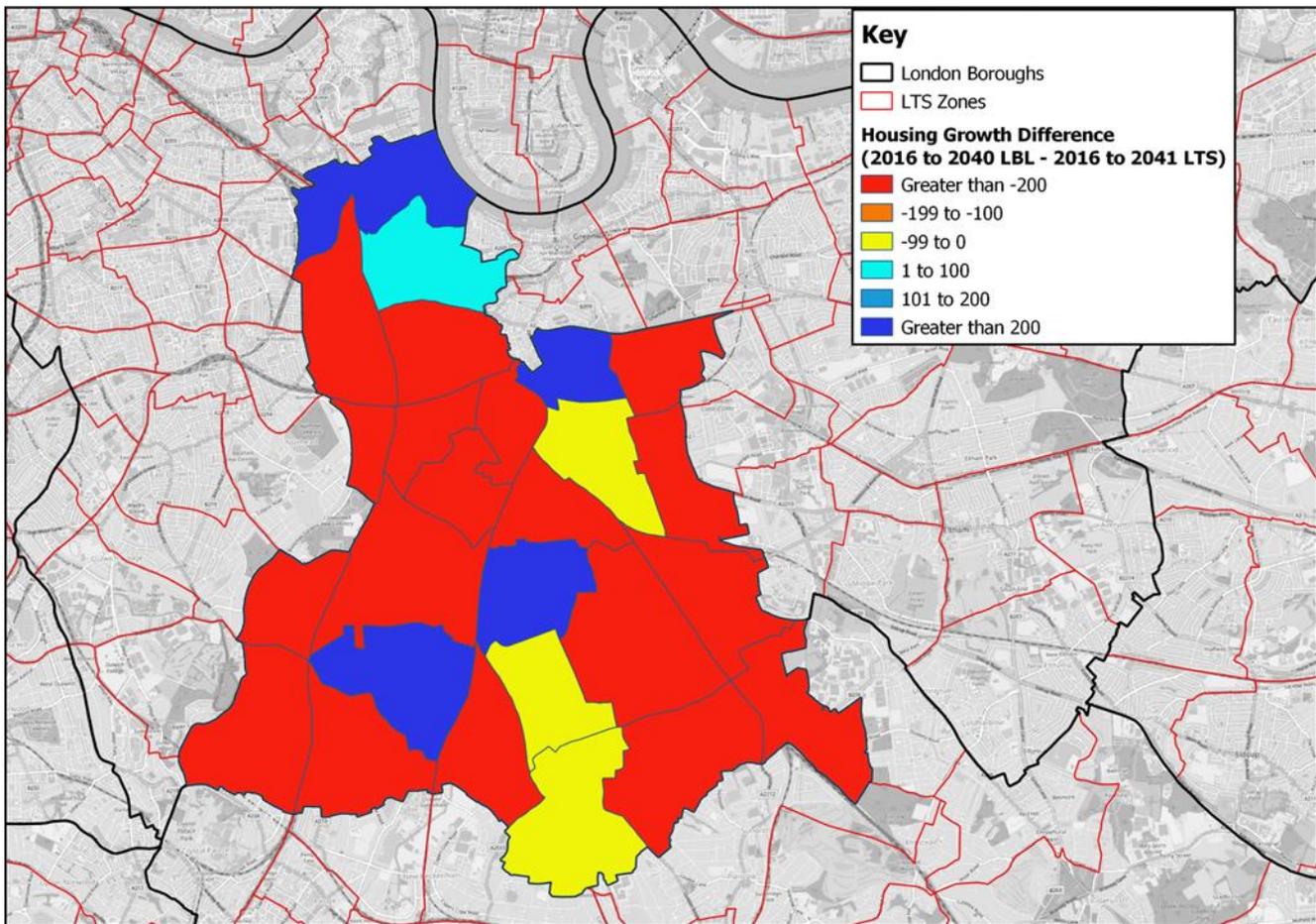
<b>LTS Zone</b>	<b>LTS Increase 2016 to 2041</b>	<b>LBL Increase 2016 to 2040</b>	<b>LBL - LTS Difference</b>	<b>LBL - LTS Percentage Difference</b>
1000	9,028	10,773	1,745	19%
1004	2,931	3,028	97	3%
1010	2,366	1,376	-990	-42%
1014	1,578	115	-1,463	-93%
1017	728	25	-703	-97%
1019	563	50	-513	-91%
1020	2,301	2,743	442	19%
1021	1,682	867	-815	-48%
1024	2,272	2,230	-42	-2%
1027	1,610	476	-1,134	-70%
1029	453	0	-453	-100%
1030	255	16	-239	-94%
1034	958	664	-294	-31%
1040	592	98	-494	-83%
1041	731	67	-664	-91%
1044	1,878	386	-1,492	-79%
1047	602	21	-581	-97%
1050	271	178	-93	-34%

<b>LTS Zone</b>	<b>LTS Increase 2016 to 2041</b>	<b>LBL Increase 2016 to 2040</b>	<b>LBL - LTS Difference</b>	<b>LBL - LTS Percentage Difference</b>
1051	480	409	-71	-15%
1054	600	202	-398	-66%
1057	1,844	2,208	364	20%
1060	2,008	1,024	-984	-49%
1061	826	3,618	2,792	338%
1064	1,296	1,015	-281	-22%
1067	1,516	528	-988	-65%
1069	857	165	-692	-81%
Small sites/ Windfall/ Uplift for Local Plan	0	8,688	8,688	100%
<b>Total</b>	<b>40,226</b>	<b>40,970</b>	<b>744</b>	<b>2%</b>

Table 7 shows the difference in housing growth by LTS zone, by absolute and percentage difference. The absolute range of differences between LBL and LTS data by LTS zone ranges from:

- An increase of 2,792 (338%) houses in zone 1061
- A decrease of -1,492 (79%) houses in zone 1044

Overall, across the Borough this is a relatively small difference, both in absolute terms (744) and as a percentage (2%). However, there are spatial differences in how this housing is distributed across the Borough, as shown in Figure 9, with most zones experiencing a reduction in housing.



**Figure 9: Comparison between LBL (2016 to 2040) vs LTS (2016 to 2041) housing, by LTS Zone**

#### 4.4. TFL MoTiON Housing Forecasts

TfL's LTS model, since the work WSP undertook in August 2020, has been replaced by the MoTiON (Model of Travel in London) model.

TfL's publicly-accessible Travel Demand Forecast dashboard has been interrogated and, alongside the 2019 base year housing quantum, the forecast household numbers have been extracted within the LBL for the following forecast model years:

- 2026
- 2041

These housing forecasts stemmed from the 2022 Annual Update of the MoTiON Suite, v 3.1 and the forecasts only represent policies and investments that are fully funded committed and defined. The MoTiON hybrid forecast models align to the 2022 central GLA growth projections and are informed by patterns of travel behaviour observed in late 2020.

The LTS model data spanned from 2016 onwards, whereas the MoTiON housing development data has a 2019 base year. It should be noted that the MoTiON forecasts extracted from TfL's Travel Demand Forecast dashboard show the total numbers of households across the Borough and are not split into zones. Additionally, the MoTiON zoning system differs from the LTS zoning system. As such, zonal differences have not been generated, and the spatial distribution difference between MoTiON forecasts and the LBL housing growth has not been calculated.

A comparison of the LBL housing growth from 2019 onwards and the MoTiON housing growth within the London Borough of Lewisham has been undertaken, as shown in Table 8.

**Table 8: Comparison of LBL and MoTiON housing growth from 2019 onwards**

<b>Year</b>	<b>MoTiON Hybrid Forecast</b>	<b>LBL</b>	<b>Difference</b>	<b>% Difference</b>
<b>2019 to 2026</b>	15,356	8,820	-6,536	-43%
<b>2019 to 2040 (LBL)</b>	Not Applicable	36,905	Not Applicable	Not Applicable
<b>2019 to 2041 (MoTiON)</b>	39,742	Not Applicable	Not Applicable	Not Applicable
<b>2019 to 2040 (LBL) - 2019 to 2041 (MoTiON)</b>	Not Applicable	Not Applicable	-2,837	-7%

Table 8 shows a difference, both in absolute values (6,536 fewer houses) and as a percentage (43%) between 2019 to 2026 time period, when comparing these two sets of housing growth forecasts.

When comparing the 2019 to 2040 LBL housing growth to the 2019 to 2041 MoTiON planning forecast household growth, the difference is reduced both in absolute values (2,837 fewer houses) and as a percentage (7%).

## 5. Summary

The growth in houses predicted by LBL (currently for Local Plan Regulation 19 and previously reported on in the August 2020 TA) between 2016 to 2026 has been analysed and mapped to the LTS zones. Comparisons have been drawn between the LTS and LBL growth.

Between 2016 to 2026, compared to LTS predictions, the growth in houses for Local Plan Regulation 19 across the LBL is significantly different, both in absolute terms (4,871 fewer houses) and as a percentage (27%).

A number of reasons behind this significant difference in housing predictions have been provided, following discussions with the LBL planning team.

The growth in houses predicted by LBL between 2016 to 2040 has been analysed and mapped to the LTS zones. Comparisons have been drawn between the 2016 to 2040 LBL and 2016 to 2041 LTS housing growth. As a total, the growth in houses across the Borough has relatively small differences, both in absolute terms (744 more houses) and as a percentage (2%). However, there are spatial differences in where the housing sites are located.

The distribution of housing across the Borough has changed within the latest LBL Local Plan Regulation 19 housing trajectory, and the delivery of housing in the Borough has shifted to be delivered later within the Local Plan.

The strategic transport modelling work that was undertaken previously, reported on in the August 2020 TA, can be considered a worst-case scenario, as it anticipated the delivery of housing within the Borough to be earlier. Therefore, the traffic impacts are likely to be worse within the transport modelling predictions than what will occur in reality in 2026 and 2034. WSP recommend that this Technical Note is shared with TfL so they are aware of the changes in growth in the Local Plan Regulation 19 to obtain their agreement that no further analysis or strategic transport modelling work is required at this stage. Nick Stockman was previously our key TfL contact for the study and WSP are happy to initiate this conversation.