

# Household income in Tower Hamlets

## Insights from the 2013 CACI Paycheck data



### Summary of key findings

The Corporate Research Team has published the analysis of 2013 CACI Paycheck household income data to support the Partnerships knowledge of affluence, prosperity, deprivation and relative poverty and its geographical concentration and trends in Tower Hamlets.

The median household income in *Tower Hamlets* in 2013 was £ 30,805 which is around £900 lower than the *Greater London* average of £ 31,700. Both were

considerably above the *Great Britain* median household income of £27,500.

- The most common (modal) household annual income band in Tower Hamlets was £17,500 in 2013.
- Around 17% of households in Tower Hamlets have an annual income of less than £15,000 while just below half (48.7%) of all households have an annual income less than £30,000.
- 17% of Tower Hamlets households have an *annual income greater than* £60,000.
- 10 out of the 17 Tower Hamlets wards have a household income below the Borough's overall median income of £30,805.
- The lowest median household income can be found in East India & Lansbury (£24,000) and Bromley by Bow (£24,800) while the highest is in St Katherine's & Wapping (£42,280) and Millwall (£43,900).

#### **1** Tower Hamlets Household income <sup>1</sup>

#### 1.1 CACI Paycheck household income data – Methodology

CACI Information Solutions,<sup>2</sup> a market research company, produces *Paycheck data* which provides an estimate of household income for every postcode in the United Kingdom. The data modelled gross income before tax and covered income from a variety of sources, including income support and welfare.

Commercial sensitivity means that the methodology employed by CACI is not explicitly or exhaustively described in the literature. We recommend interpreting changes over time in the data very carefully because of the various unknowns in the methodology.

However, it was ascertained that the data used to produce the imputed household income data came from various sources which included lifestyle data, data from the census, the company's own population estimates, ACORN (the company's own geo-demographic classification) and market research data.

It is important to note that *Paycheck data* is *modelled annual household income data*, presented as modelled gross household income ('unequivalised'), and household income adjusted for household size ('equivalised'). This means that the data is not based on real administrative datasets. In this document we focus our analysis on 'equivalised' *Paycheck data*.

The Council does hold un-equivalised data which can be requested from the CRU team. However, the equivalised data is our preferred option compared to the actual household income presented in the 'unequivalised' *CACI Paycheck* dataset.

*Equivalising data* reflects the notion that a household of five, for example, will need a higher income than a single person living alone to enjoy a comparable standard of living. The data provider CACI calculated an 'equivalence value' for each household, based on the number and age of the household members. Equivalised income is then calculated by dividing the actual income by this equivalence value.

#### 1.2 What is household income data telling us?

On national and regional level official income and low income estimates are calculated using the Department for Work and Pensions' (DWP) Family Resources Survey (FRS) information. However, overall income information is patchy and not available for smaller geographies.

<sup>&</sup>lt;sup>1</sup> Please note that the map on the front page of the document shows the same content as the median income map by output area in Tower Hamlets on page 10.

<sup>&</sup>lt;sup>2</sup> For more information see www.caci.co.uk

Household income data matters because low household income is used as a proxy for poverty, with individuals being defined as in low income poverty if their equivalised household income is below a specified threshold, usually 60% of the median household income.<sup>3</sup>

Later in the paper we will analysis the household group below 15K income which is crucial because this income group is below the poverty threshold.<sup>4</sup> While the *CACI Paycheck* data cannot be broken down to reveal more socio-economic details about the individual households, we know already that poverty in Tower Hamlets is above the average and that 48.6% of children live in households who are in poverty.<sup>5</sup>

For analysts and policymakers, three main purposes for compiling information on income distribution are important. $^{6}$ 

- The first is driven by a desire to understand the pattern of income distribution and how this can be related to the way in which communities are organised.
- The second reflects the concern of policy makers to assess the impact of both universal and targeted actions on different socio-economic groups. Data on income distribution is important when discussing welfare, taxation and other fiscal policies, housing, education, labour market and health.
- The third is an interest in how different patterns of income distribution influence household well-being and people's ability to acquire the goods and services they need to satisfy their needs, for example, studies of poverty and social exclusion, and research on consumer behaviour.

In this factsheet we are explaining how household income is distributed and how the distribution compares to other London Boroughs. We will show that the distribution of income in Tower Hamlets is closely related to the concentration of wealth in high value areas and local deprivation levels.

Income data enables an understanding of whether residents have sufficient income in their lives to maintain an adequate standard of living, presuming that those with the lowest incomes often have the poorest material living standards and can face a range of disadvantages as a consequence.

For example, poor households are more likely to face barriers in accessing many consumer markets. In particular, low income households are disadvantaged in accessing products on the energy market, those offered by financial services and to some extent, the food market.<sup>7</sup>

<sup>&</sup>lt;sup>3</sup> For a full discussion of poverty in the Borough refer to the TH Poverty profile.

<sup>&</sup>lt;sup>4</sup> CACI Paycheck data is published in 5k bands so it is not possible to establish the exact number of households below or above the 60% threshold.

<sup>&</sup>lt;sup>5</sup> ONS Households in income poverty Modelled 2007/08 and HMRC, Child Poverty Statistics 2010

<sup>&</sup>lt;sup>6</sup> Source: Canberra Group (2011) Handbook of household income Statistics.

<sup>&</sup>lt;sup>7</sup> Source: Office for Fair Trading (Sept 2010): Markets and Households on Low incomes. While it is important to add that not all households in the lower income group will suffer these disadvantages, households in higher income groups may also be disadvantaged in the same way

#### 1.3 Household income in Tower Hamlets

The median household income in Tower Hamlets has increased above the 30K a year milestone. The median annual household income currently stands at **£30,800** which was above the 2012 median of £29,550.<sup>8</sup> The Tower Hamlets median household income is higher than the GB median income but still £900 below the London median household income.

See Table 1 below for the median income between 2008 and 2013 in Tower Hamlets, London and Great Britain.

Year	Tower Hamlets	London	<b>Great Britain</b>
2008	£29,758	£30,509	£25,486
2009	£28,199	£30,168	£26,518
2010	£29,385	£30,861	£27,288
2011	£29,659	£31,017	£27,349
2012	£29,550	£31,522	£27,580
2013	£30,805	£31,700	£27,512
(Source: CACI Paycheck 2008 - 20	013)		

Table 1: Median household income in Tower Hamlets (equivalised) in £

#### What is the single largest household income group in the borough?

The single largest household income group is the group earning 15-20K representing around 11.2% of all households in Tower Hamlets. This income group represents the modal *(most common)* household income group (17.5K). This group is also the most common in London (11.2% of all households) and Great Britain (13.1% of all households).

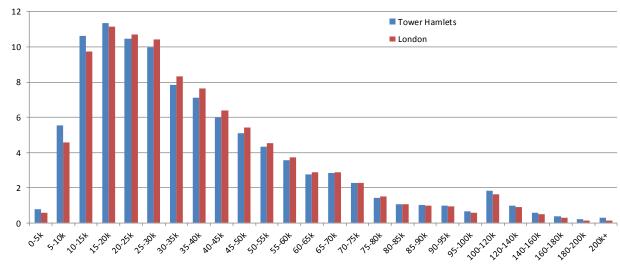
#### How does household income in Tower Hamlets compare to London?

Figure 1 shows a breakdown of household income groups for Tower Hamlets and London. The data shows that the proportion of households in Tower Hamlets with an income between 0-20K is larger than the London average. In comparison, households in London are more likely to be in the income groups 20K to 75K compared to the borough.

However, from 90K household income onwards, the proportion of households in Tower Hamlets is larger than the London average. This income structure represents some evidence of a 'missing middle'<sup>9</sup> in the borough, with large groups of the population either in the lower or in the higher income groups in relation to the average.

<sup>&</sup>lt;sup>8</sup> In our analysis we use the Median household income figure as key household income indicator because a mean figure could be pulled higher by the presence of a relatively small group of extremely high earners within the population. However, the household income as **Mean** (average) is available and was in 2013 £38,947.

<sup>&</sup>lt;sup>9</sup> A term first used in the TH Local Economic Assessment 2010 describing households in the middle income bracket.



#### Fig 1: Households by 5K income band Tower Hamlets and London (%) in 2013

(Source: CACI Paycheck 2013)

In terms of policy development, understanding the size of the household income group "Under 15K" enables an analysis of the prevalence and impact of poverty and income deprivation, while a focus on the income groups "Under 60K" <sup>10</sup> and "Above 60K" enables analysis of such issues as the extent to which households in the borough may have access to intermediate housing or affordable rents.

The data indicates that around half (48.7%) of Tower Hamlets households have an income below the median TH income of £30,805 (i.e., they are in the under £30K group). Within this, around 17% of households are in the under 15K group, and 31.7% are in the 15-30K income group. Meanwhile, 13% of households have an income of 60-100K.

In total, in Tower Hamlets, around 17.3% of households have an income of more than 60K. This figure is the same as the Inner London average and slightly above the London (16.7%) figure. The TH average is significantly above the GB average of 11.9%. See Table 2 below.

Around 4.3% of households have an income of above 100K in the borough, which is above the London rate of 3.6%. The highest proportion of households in the above 100K group can be found in the City of London (10.6%) and Richmond upon Thames (7.3%).

Table 2: Summary Household income (median) distribution in Tower Hamlets and Greater London 2013 (%)

	Under 15k	Under 30k	Under 45k	Under 60k	Over 60k	Over 100k
<b>Tower Hamlets</b>	17.0%	48.7%	69.7%	82.7%	17.3%	4.3%
London	14.9%	47.2%	69.6%	83.3%	16.7%	3.6%
(Source: CACI Paycheck 2013)						

<sup>&</sup>lt;sup>10</sup> 66k in London when accessing 1 to 2 bedroom properties and 80K when accessing 3 bedroom plus and more properties.

#### 1.4 Income deprivation – Household income less than 15K

Tower Hamlets has a considerable number of households with an income of less than £15K a year. While the proportion of households in that category is below the GB average it is still above the Inner London and London average. More than 18,000 households in Tower Hamlets have an income of 15K or less. See Table 3 below.

Table 3: Households with income of 15K and below in 2013								
	<b>Tower Hamlets</b>	Inner London	London	Great Britain				
%	17.0%	15.6%	14.9%	19.7%				
Total numbers (Source: CACI Paycheck	18,320 2013)	220,950	504,009	5,182,264				

The proportion of households with an income of less than 15K decreased between 2012 and 2013, and has now dropped to the 2010/2011 level.<sup>11</sup> The overall size of that group has dropped to 17.3%, the lowest percentage since 2005.<sup>12</sup>

	2005	2006	2007	2008	2009	2010	2011	2012	2013
15K less - Total	19,787	20,621	n/a	17,042	19,098	18,188	18,311	21,007	18,320
15K less (%)	21.2%	22.8%	n/a	18.5%	20.3%	18.8%	18.3%	20.7%	17.3%
(Source: CACI	Paycheck 2005	5 - 2013)							

The highest proportion of households in the 15K group in London was in Barking & Dagenham and Newham. Both boroughs recorded proportions above the GB average. For more information on the change of income groups see chapter 1.7 of this document.

#### 1.5 Household income on ward level

Household income levels vary significantly in different areas in the borough, taking into account the relationship of cost of living (house prices, rent level in the private market) and desirability of the area. For example, the median household income in Millwall (£43,186) is around £19,000 above the median household income in East India & Lansbury (£24,032).

Out of 17 wards, the household income in 6 wards was above the Tower Hamlets average while in 11 wards the household income was below the Borough's overall median income of £30,805.

<sup>&</sup>lt;sup>11</sup> Because of methodological changes to the CACI Paycheck data in 2012, the figure might be too high for that year.

<sup>&</sup>lt;sup>12</sup> The first time we had access to CACI data.

See Table 5 below for the household income data by ward and the proportion of households with less than 15K, and those above 60k in income. The data shows that the proportion of households with a household income of 15K and lower is high and above the average in East India & Lansbury (25%), Bromley by Bow (23.7%) or St Dunstan's & Stepney (23.3%). This group is especially small in Millwall (8.9%) and St Katherine's & Wapping (9.1%).

Ward Name	Median Income	Mode Income Band (Most common)	0 to 15K (%)	Above 60K (%)
Millwall	£43,186	£27,500	8.9	31.3
St Katharine's and Wapping	£42,284	£27,500	9.1	30.5
Blackwall and Cubitt Town	£39,172	£27,500	10.7	26.5
Whitechapel	£33,769	£17,500	14.1	19.9
Bow East	£31,641	£17,500	15.9	17.6
Spitalfields and Banglatown	£31,369	£17,500	15.7	16.4
Bow West	£30,864	£17,500	15.8	15.8
Weavers	£30,170	£17,500	16.4	14.6
Shadwell	£29,610	£17,500	18.6	17.0
Bethnal Green North	£29,254	£17,500	17.6	13.5
Limehouse	£28,980	£17,500	19.3	16.0
Mile End East	£26,527	£17,500	21.3	10.4
Bethnal Green South	£26,196	£17,500	22.0	10.4
Mile End and Globe Town	£26,188	£17,500	22.2	10.8
St Dunstan's and Stepney Green	£24,980	£17,500	23.3	8.3
Bromley-by-Bow	£24,802	£17,500	23.7	8.0
East India and Lansbury	£24,032	£12,500	25.0	7.6

Table 5: Household income (equivalised) by Tower Hamlets ward, London and Great Britain 2013

(Source: CACI Paycheck 2013)

#### Change over time 2009 and 2013

Data for the last 5 years shows that the median household income in most wards has increased, often above the London and Great Britain average.

The data also indicates that lower income wards have been catching up to some extent with the high income wards. This is partly related to new housing developments in these locations, attracting new higher income residents. However, a general increase in the household income of existing residents should also not be excluded.

The strongest increase took place in East India & Lansbury (15.4%), Whitechapel, (15.2%), Shadwell, (15.2%), Weavers (14.1%) and Millwall (12.7%). Changes in those areas are significantly above TH, London and GB average increases.

The lowest increase, even below London average, took place in Limehouse, St Katherine's & Wapping and Blackwall and Cubitt Town.

Ward Name	Median income 2009	Median Income 2013	Change 2009 to 2013
	in £	in £	in %
Millwall	£38,306	£43,186	12.7
St Katharine's and Wapping	£40,467	£42,284	4.5
Blackwall and Cubitt Town	£37,492	£39,172	4.5
Whitechapel	£29,301	£33,769	15.2
Bow East	£28,828	£31,641	9.8
Spitalfields and Banglatown	£29,460	£31,369	6.5
Bow West	£29,460	£30,864	4.8
Weavers	£26,442	£30,170	14.1
Shadwell	£25,703	£29,610	15.2
Bethnal Green North	£26,773	£29,254	9.3
Limehouse	£28,008	£28,980	3.5
Mile End East	£23,900	£26,527	11.0
Bethnal Green South	£25,028	£26,196	4.7
Mile End and Globe Town	£23,562	£26,188	11.1
St Dunstan's and Stepney Green	£22,804	£24,980	9.5
Bromley-by-Bow	£22,132	£24,802	12.1
East India and Lansbury	£20,829	£24,032	15.4
Tower Hamlets	£28,199	£30,805	9.2
Inner London	£30,766	£31,609	2.7
Outer London	£29,797	£31,762	6.6
London	£30,168	£31,700	5.1
Great Britain	£26,518	£27,512	3.7

Table 6: Median household income by ward and Change between 2009 and 2013

(Source: CACI Paycheck 2009 and 2013)

#### 1.6 Household income by small geographies

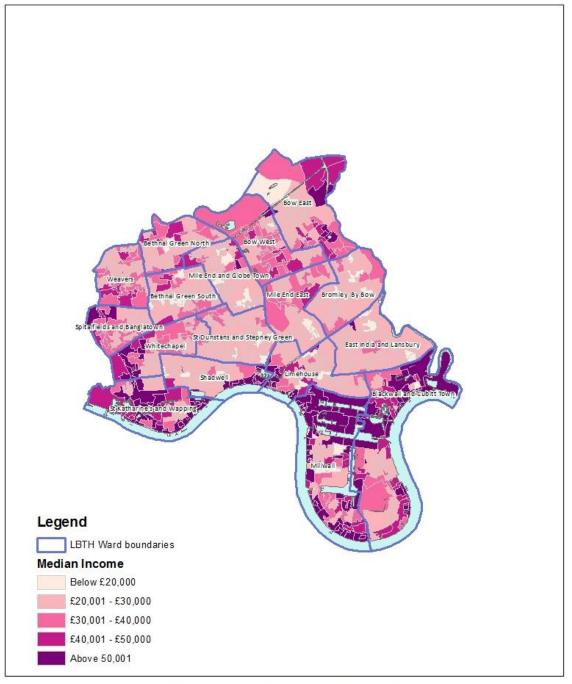
The map below shows a detailed geography of affluence and income deprivation by statistical output area.

The map illustrates that high median household income areas (above 50k) are located close to the desirable river side, in the City Fringe, around the Canary Wharf business district (with a few exceptions), near transport hubs, and / or are part of re-development or conservation areas.

Output areas (OAs) with the lowest household income dominate Bromley by Bow and East India & Lansbury, which are almost completely populated by households in the lowest income group. However, the low-income Output Areas stretch from the East and Central areas (Limehouse, St Dunstan's & Stepney and Mile End & Globe Town) to areas in Weavers, Spitalfields and Bethnal Green South. The OA with the lowest median household income was in the Millwall ward with only £16,000.

The Output Areas with the highest income levels were located in St Katherine's & Wapping, Millwall, Blackwall & Cubitt Town and parts of Shadwell, Bow East and Limehouse. The OA with the highest median income was in Blackwall & Cubitt Town with £62,000.

Map 1: Median household income by output area 2013



#### Median household income Tower Hamlets by OA in 2013 in £ (SOURCE:CACI PAYCHECK 2013)

N



1.740

1,160

580

2.320

#### 1.7 Household income change over time<sup>13</sup>

This section discusses the potential shift of income groups in the borough over time. Our hypothesis is that we are experiencing quite different trends in the lower and higher income groups and a potential decrease of lower income groups in the borough.

While we cannot answer this question with the *Paycheck* data alone, mainly because of its modelled nature, the data should help to understand the long term trends.

The above argument is supported by the fact that affluent household groups are growing overproportionally and lower income groups show signs of decline. We can observe that while the number of households in the borough is increasing, the size of some income groups is increasing more strongly than others.

Table 6 shows the overall household growth and change in selected income groups. The total number used by *CACI Paycheck* indicates an increase in households of 14.6% in the borough over the last 5 years. While *CACI Paycheck* data is not the preferable data set to show the change of the number of households, it is close to the GLA SHLAA projection of 14.2% and should be seen as reasonably robust.<sup>14</sup>

The number of Tower Hamlets households in the 0-15K group has decreased by 4.1%, mirroring the overall London trend of -5.7%. The income group 15K to 30K has grown slowly, below the Tower Hamlets average, while the same group decreased in London (-0.9%).

The strongest increase in the number of households took place in the income groups 45K to 60K (34.5%) and 60K to 80K (41.1%). Above (the Tower Hamlets) average growth has been recorded in the groups over 100K (21.2%), 80K to 100K (16.7%) and 30K to 45K (19.1%). Growth in these income groups outperformed London growth.

	Tower Hamlets total 2009	Tower Hamlets total 2013	Tower Hamlets Change in totals	Tower Hamlets Change in %	London Change in %
Under 15K	19,098	18,320	-778	-4.1	-5.7
15K to 30K	31,279	34,298	3,019	9.7	-0.9
30K to 45K	18,998	22,635	3,637	19.1	0.9
45K to 60K	10,423	14,020	3,597	34.5	12.2
60K to 80K	7,130	10,064	2,934	41.1	20.9
80K to 100K	3,437	4,013	576	16.7	2.3
Over 100K	3,806	4,613	807	21.2	14.7
All households	94,179	107,962	13,783	14.6	2.8

Table 7: Households by income group in 2009 & 2013 – Change in Tower Hamlets & London (total & %)

(Source: CACI Paycheck 2009 & 2013 for TH and London)

<sup>&</sup>lt;sup>13</sup> For this analysis no CACI Paycheck data for 2007 data was available.

<sup>&</sup>lt;sup>14</sup> GLA SHLAA Household projection 2011: Projection Tower Hamlets between 2011 and 2016.

#### What does it mean?

The total numbers and the proportion of higher income groups in the borough are growing. In comparison, households with income below 30K are growing slowly in numbers and declining proportionally.

While the growth of households with an income of 80K and more was less pronounced, it can be argued that the formerly mentioned "missing middle" (i.e. those households earning £30K - £80K) is increasing in the borough, moving the household income structure towards the London average. Aligning with the London structure would mean further increases in the number households earning between 30K and 80K. It can be assumed, that changes in the housing market, such as development of new high value housing, private rent inflation, further development of Canary Wharf and City Fringe, and the general desirability of inner London areas for higher income groups, will support this trend in the future.

#### 1.8 Household income by London Boroughs

Compared to the other Olympic boroughs, the household income in Tower Hamlets is comparably higher. The lowest household income (median) in London is concentrated in the East London Boroughs Barking & Dagenham (£25,833), Newham (£26,364) and Hackney (£28,293).

The household income in Hounslow (£31,333) and Ealing (£32,049) are closest to the London average of £31,700.

The highest median household income can be observed in affluent London Boroughs like Richmond upon Thames (£39,898), Kensington & Chelsea (£ 36,651), Wandsworth (£36,913), Kingston upon Thames (£36,230) and the City of Westminster (£35,468). However, the City of London tops the list with a median household income of £43,829.

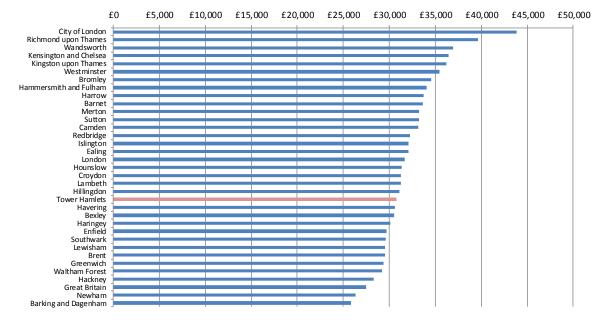


Fig 2: Median household income by London borough, London and Great Britain in 2013 (£)

(Source: CACI Paycheck 2013)

#### **Further information**

This Briefing was produced by the Council's Corporate Research Unit, which is based in the Chief Executive's directorate. Research briefings provide timely and in depth analysis of data about Tower Hamlets.

Briefings can be downloaded on the LBTH Borough statistics web pages.

Readers can contact the research team via email: CRU@towerhamlets.gov.uk

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