Chapter 1: Population

1.1 Demographics

Thurrock is situated south of Essex and lies to the east of London on the north bank of the River Thames with an area of 165 square kilometres. It has a very diverse and growing population with a population density of 977 persons per square kilometre. A summary of the resident population distribution for Thurrock is shown below, based on both the 2001 census; for some aspects, and the mid-2010 population estimate updated with the components of population change in between.

1.1.1 Population

Population composition is the description of the population characterised by age, gender or marital status, and race. These descriptions are necessary for understanding the social dynamics of an area from history and for showing trends that depict the growth within a particular population.

Table 1.1 shows the distribution of the mid-2010 population estimate by sex and age-group. In 2010 the total estimated population of Thurrock UA is 159,658 of which 78,549 (49.2%) were male and 81,109 (50.8%) female. The population has increased by 2,500 (1.57%) since 2009 (more than the national increase 0.82%) and 13,500 (9.22%) over the past 8 years. The largest age-group is in the 40 - 44 age-group with a median age of 37.2 years.

Table 1.1: Mid-2010 Population Estimate by Age-Group

Age-Group	Males		Females		Persons	
	Number ('000s)	%	Number ('000s)	%	Number ('000s)	%
0-4	5.9	7.5	5.7	7.0	11.6	7.3
5-9	5.1	6.5	4.7	5.8	9.8	6.1
10-14	5.2	6.6	4.8	5.9	10.0	6.3
15-19	5.0	6.4	4.9	6.0	9.9	6.2
20-24	5.2	6.6	5.1	6.3	10.3	6.5
25-29	5.3	6.8	5.8	7.2	11.1	7.0
30-34	5.7	7.3	6.3	7.8	12.0	7.5
35-39	6.3	8.0	6.3	7.8	12.6	7.9
40-44	6.6	8.4	6.5	8.0	13.1	8.2
45-49	5.8	7.4	5.7	7.0	11.5	7.2
50-54	4.9	6.2	4.5	5.5	9.4	5.9
55-59	4.1	5.2	4.4	5.4	8.5	5.3
60-64	4.5	5.7	4.5	5.5	9.0	5.6
65-69	3.1	3.9	3.3	4.1	6.4	4.0
70-74	2.3	2.9	2.7	3.3	5.0	3.1
75-79	1.7	2.2	2.2	2.7	3.9	2.4
80-84	1.1	1.4	1.8	2.2	2.9	1.8
85+	0.9	1.1	2.0	2.5	2.9	1.8
All Ages	78.5		81.1		159.6	

Figure 1.2 represents the mid-2010 quinary age and sex population estimate of Thurrock against National and CIPHA comparator groups. As shown in figure 1.2, the Thurrock population age structure follows a similar pattern to that of its CIPFA comparator group, regional and national figures but with a larger infant population 0-4, and a significantly larger population in their 30s and early to mid-40s than both England and CIPFA comparator groups. Conversely, Thurrock's older population is smaller as a percentage of total population than both England and the CIPFA comparator groups.

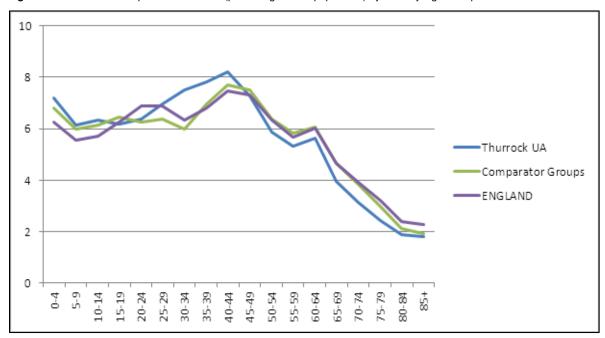


Figure 1.2: All Persons Population Structure (percentage of the population) by Quinary Age-Group in Thurrock and its CIPFA Comparator Group

Source: Mid-2010 ONS Population Estimate

Figure 1.2 shows the percentage of each Lower Super Output Area (LSOA) within Thurrock that is under 15, based on the Mid-2010 population estimate.

Figure 1.3 illustrates that the highest percentage of under 15s in Thurrock is heavily clustered around the south of the Borough in the areas of Tilbury and St Chads, Chafford and North Stifford, South Chafford and Thurrock West and South Stifford. (23% - 34%).

Figure 1.3: Population Distribution for under 15 based on the Mid-2010 Population estimate

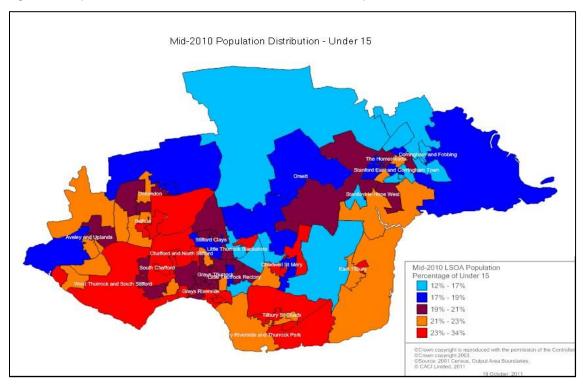
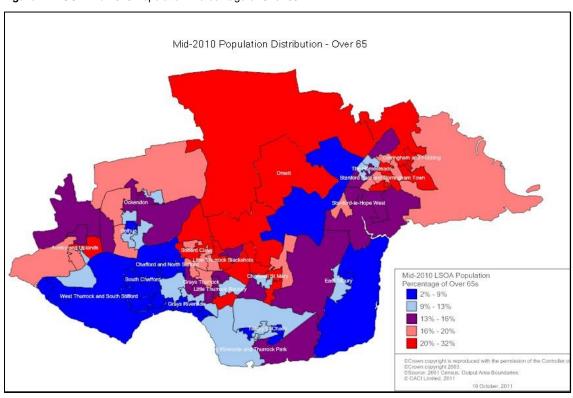


Figure 1.4 shows population density of those aged 65 and over by LSOA across Thurrock. The highest rate of the over 65s (20% - 32%) reside in the north of the Borough in areas such as Orsett, Corringham and Fobbing.

Figure 1.4 LSOA Mid-2010 Population: Percentage of Over 65



1.1.2 Population Projections.

Population projection is an estimate of the future population of an area that can be used to inform commissioners of major trends that may affect health, social and economic development of an area and assess future demands on services. It enables commissioners to incorporate these demands and trends in planning processes to meet population need / demand and service provision.

Figure 1.5 below shows the mid-year population estimates and projected estimates from 2001 to 2031 based on the 2001 census population. The population is projected to grow to 184,900 by 2021 and 203,900 by 2031. The latter figure equates to an increase of 28% or 44,242 additional people by 2031. This will require health and local government partners to ensure appropriate additional levels of service provision and supporting infrastructure, e.g. transport, housing, health, schools, leisure and cultural facilities.

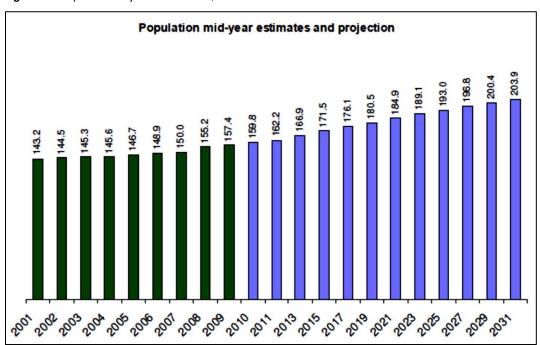
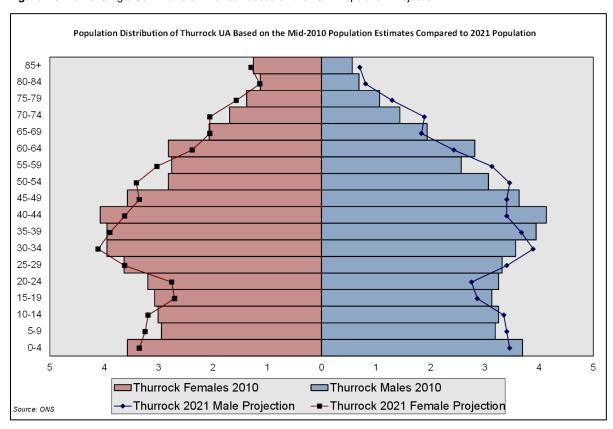


Figure 1.5 Population Projection Estimates, 2008

Source: Population projections; ONS; 2008

Figure 1.6 shows the 2010 percentage distribution, by age and sex, of Thurrock projected against the percentage distribution of age and sex, of the 2021 population estimate. This suggests that Thurrock will have a higher population distribution occurring in the 5–14, 30–34, 50–59, and the older age-group, with percentages falling into the 50-60 age group and the 70-85+ age groups for both sexes. The percentage of the population in the 15-24 age groups for both sexes also reduces.

Figure 1.6 Mid-2010 Age/ Sex Profile of Thurrock based on the 2021 Population Projection

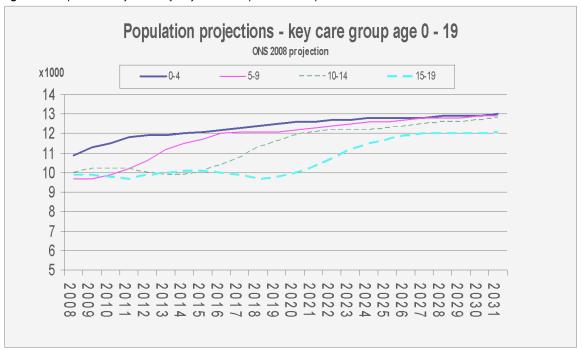


1.1.2.1 Absolute Population Projections – Key Care Groups

0-19 year olds:

Figure 1.7 shows absolute population projections by four age bands for the 0-19 population. Thurrock currently has a significantly greater proportion of young people than England and as figure 1.7 shows, this trend is likely to continue into the future.

Figure 1.7 Population Projections by Key Care Group - Older People



50-85 year olds:

Figure 1.8 shows the absolute population projects for four age bands for the population aged 50 plus. As figure 1.8 shows, Thurrock will see a significant ageing of its population among the key older care groups – 50+, 65+, 75+ and 85+ all of which will increase as a proportion of the population.

By 2033, the population group aged 50-64 is projected to increase by 50%, and the population group aged 85 plus is projected to double.

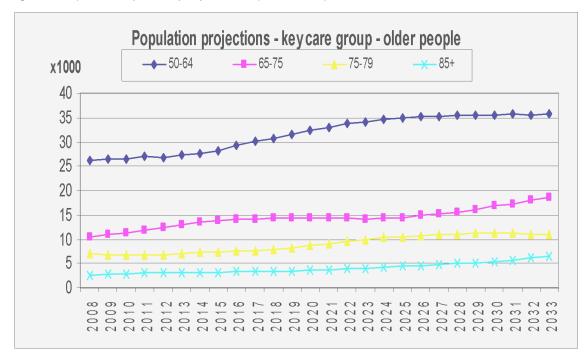


Figure 1.8 Population Projections by Key Care Group - Older People

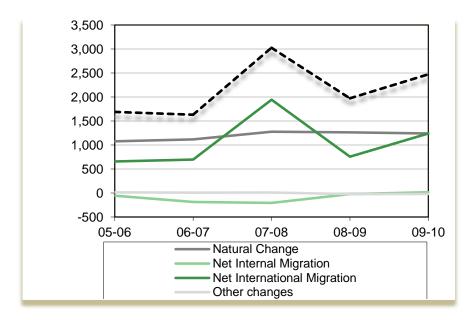
Population ageing is not only due to great numbers of people living longer but also due to lower fertility rates resulting in the younger population not entering the population.

1.1.3 Components of Population Change

By 2021, the population of Thurrock is expected to rise by a further 15.8% to 184,900 and growth will largely be driven by natural change (high birth rates and falling death rates) and by internal migration. In particular Thurrock has seen a significant net gain of people migrating from east London, driven by the availability of the housing stock.

The arrival of economic migrant workers from the EU accession states (particularly Poland), and from parts of Africa has also contributed to population growth and new and complex demands on local services. Figure 1.9 demonstrates this.

Figure 1.9 Components of population change between 2005-06 and 2009-2010

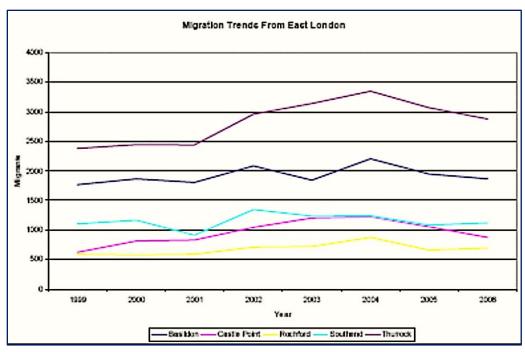


Source: Components of population change; ONS; 2010

1.1.3.1 Migration from East London

As a key part of the Thames Gateway regeneration area, Thurrock has seen significant migration from east London – driven by the housing market conditions. Between 1999 and 2006 over 22,000 people migrated to Thurrock from east London – a net gain of over 14,000. Figure 1.10 demonstrates this. This rate is much higher than the corresponding rate across the south Essex sub-region and the trend is likely to continue alongside the on-going availability of housing.

Figure 1.10: Trend in Migration from East London



1.1.3.2 Economic Migration – National Insurance Number Registrations

The number of new national insurance number registrations by non-UK nationals provides an indication of the extent of international migration. This data suggests that economic international migration has been increasing in Thurrock in recent years.

During the period 2007 – 2009 almost 1500 non-UK nationals registered each year for a new NI number in Thurrock. The number fell to 1040 in 2009-10. Figure 1.11 demonstrates this.

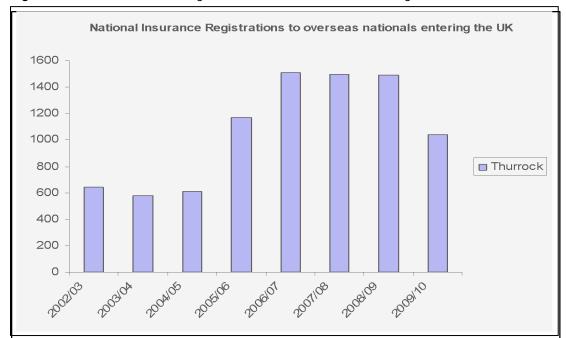


Figure 1.11 National Insurance Registration to Overseas nationals entering the UK

The majority of newly registered immigrants in Thurrock, came from Eastern Europe and Africa. In addition to placing, potentially new and complex demands on local services, this immigration is also contributing to the change in social and ethnic mix of Thurrock.

In summary, the increase in population exerts a positive influence on economic development but exerts more pressure on health and social care services within an area due to increased demand.

1.1.4 Summary - Demographics

- In 2010 the total estimated population of Thurrock UA is 159,658 of which 78,549 (49.2%) were male and 81,109 (50.8%) female.
- Thurrock population age structure follows a similar pattern to that of its CIPFA comparator group, regional and national figures but with a larger infant population 0-4, and a significantly larger population in their 30s and early to mid-40s than both England and CIPFA comparator groups. Conversely,

Thurrock's older population is smaller as a percentage of total population than both England and the CIPFA comparator groups.

- Younger people (under 15) are more densely populated in wards in the south of the Borough in the areas of Tilbury and St Chads, Chafford and North Stifford, South Chafford and Thurrock West and South Stifford. (23% - 34%).
- Conversely the population density of those aged 65 and over the over 65s is greatest in the north of the Borough in areas such as Orsett, Corringham and Fobbing.
- The population is projected to grow to 184,900 by 2021 and 203,900 by 2031. The latter figure equates to an increase of 28% or 44,242 additional people by 2031.
- Thurrock will see a significant ageing of its population among the key older care groups 50+, 65+, 75+ and 85+ all of which will increase as a proportion of the population.
- By 2033, the population group aged 50-64 is projected to increase by 50%, and the population group aged 85 plus is projected to double.
- There has been a significant increase in economic migration into Thurrock in recent years. During the period 2007 – 2009 almost 1500 non-UK nationals registered each year for a new NI number in Thurrock. The number fell to 1040 in 2009-10.

1.2 Birth and Deaths Rates

Variations in live births and fertility rates are important factors that drive population change in addition to migration and death rates.

1.2.1 Birth Rate

Population change is affected by the counts of births in an area and in Thurrock there were 2,380 live births -68.67 births per 1000 women aged 15-44 in 2009 - 2010 (significantly higher than the regional and national rates). Figure 1.12 shows an increase in birth rate across the age bands under 20 to 25-29, with the highest birth rate occurring in the 25-29 age group, after which birth rates decrease with age. Birth rates in the 25-29 age groups were significantly greater in 2007 and 2008 compared to other years.

Figure 1.12 Trends in Birth Rate per 1,000 Women in Age Group

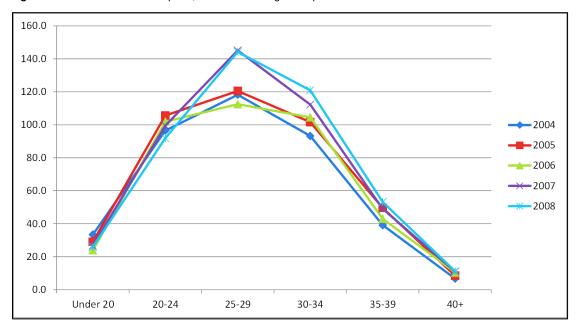


Figure 1.13 represents a trend in birth rates from 2004 – 2008. Thurrock has had a consistently higher birth rate over the years 2004-2008 compared to England or the East of England.

80.0 70.0 60.0 50.0 Thurrock 40.0 East of England 30.0 <u>←</u> England 20.0 10.0 0.0 2004 2005 2006 2007 2008

Figure 1.13 Trend in Birth Rate per 1,000 Women in Age-group 2004 – 2008

1.2.2 Mortality

Mortality is a measure of the number or proportion of deaths, in general or due to a specific cause, in a given population scaled to the size of that population at a particular time. The tables and charts below show overall mortality and mortality due to specific causes within Thurrock.

Figure 1.14 shows the All Age, All-Cause Directly Standardised Mortality rate (DSR) for Thurrock in both males and females over time. As figure 2.4 shows, the All Age, All Cause DSR has been falling for both males and females since 1993 and has fallen at a faster rate for males than females. However the DSR for males is still larger than for females in Thurrock.

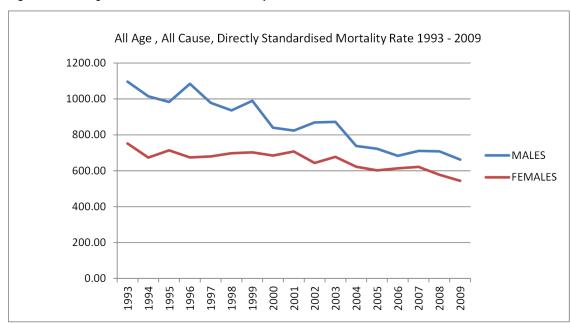


Figure 1.14: All Age, All-Cause Standardised Mortality

Source: Compendium of Clinical and Health Indicators; NCHOD March 2011

Figure 1.15 shows pooled (2007 - 2009) all age, all cause directly standardised mortality rates in Thurrock compared to its CIPFA comparator groups, Essex, the East of England Region and England. Thurrock has a mortality rate for males that is statistically significantly greater than Essex and the East of England Region (at 95% confidence) but statistically significantly less than seven of its CIPFA local authority comparators. For females, Thurrock's mortality rate is again statistically significantly greater than both Essex and the East of England but statistically significantly less than six of its CIPFA local authority comparators.

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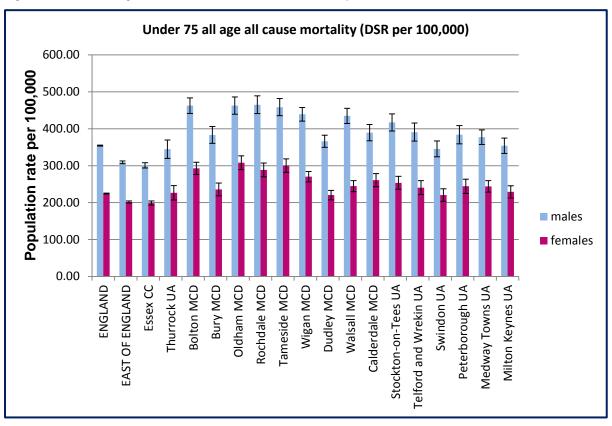
All age all cause mortality (DSR per 100,000) 2007-2009 1000.00 900.00 Population rate per 100,000 800.00 700.00 600.00 500.00 400.00 males 300.00 ■ females 200.00 100.00 0.00 ENGLAND Essex CC Thurrock UA **Bolton MCD** Oldham MCD Rochdale MCD **Fameside MCD** Wigan MCD **Dudley MCD** Calderdale MCD Swindon UA Peterborough UA EAST OF ENGLAND Walsall MCD Stockton-on-Tees UA -elford and Wrekin UA **Medway Towns UA** Milton Keynes UA **Bury MCD**

Figure 1.15 Pooled All Age, All-Cause Standardised Mortality

Source: Compendium of Clinical and Health Indicators; NCHOD March 2011

Figure 1.16 shows pooled (2007 - 2009) all age, all cause directly standardised premature (under 75) mortality rates in Thurrock compared to its CIPFA comparator groups, Essex, the East of England Region and England. For males, Thurrock's under 75 mortality rate is statistically significantly greater than both Essex and the East of England but statistically significantly less than six of its CIPFA local authority comparators. Thurrock's female under 75 mortality rate is statistically significantly greater than Essex and the East of England's rates but statistically significantly less than seven of its CIPFA local authority comparators.

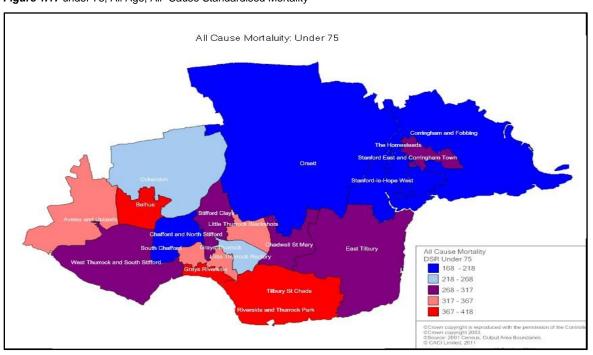
Figure 1.16 Pooled All Age, All-Cause Standardised Premature Mortality



Source: Compendium of Clinical and Health Indicators; NCHOD March 2011

Figure 1.17 shows under 75 all age all cause directly standardised mortality rates for Thurrock at ward level. As figure A shows, the greatest under 75 mortality rates occur in Tilbury St. Chads, Riverside and Thurrock Park, Grays Riverside and Belhus. Chafford and North Stifford, South Chafford, Orsett, Corringham and Fobbing, Stanford-le-Hope West has the lowest under 75 mortality rates.

Figure 1.17 under 75, All Age, All -Cause Standardised Mortality



1.2.3 Summary – Births and Death Rates

 All age, all cause DSR has been falling for both males and females since 1993 and has fallen at a faster rate for males than females. However the DSR for males is still larger than for females in Thurrock.

- Thurrock has all age, all cause directly standardised mortality rates and under 75 mortality rates that are statistically significantly greater than Essex and the East of England but statistically significantly less than many of its CIPFA local authority comparators.
- Wards in the south of the borough such as Tilbury St. Chads, Grays Riverside, Belhus and Riverside
 and Thurrock Park have under 75 mortality rates that are much greater than wards in the north of the
 borough, such as Orsett, Corringham and Fobbing and Stanford-le-Hope.

1.3 Ethnicity

An understanding of a population's ethnic mix is important as it is recognised that there is variation on the impact of some wider determinants of health, health behaviour and health conditions across different ethnic groups.

Over that last decade, ethnic diversity in Thurrock has increased at a rate faster than the national average as the population grows. It is important to note that the census ethnic classification does not separate the white category into separate ethnic groups. The non-white ethnic population estimate in 2009 was estimated at 15.7% - a significant increase from the 2001 Census of 4.7% which suggested a less ethnically diverse population than today. Figures 1.18, 1.19 and 1.20 show the estimated ethnic make-up of Thurrock in 2001, 2007 and 2010.

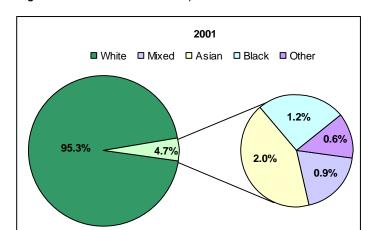


Figure 1.18 2001 Census Ethnic Population

Figure 1.19: 2007 Ethnic Population Estimate

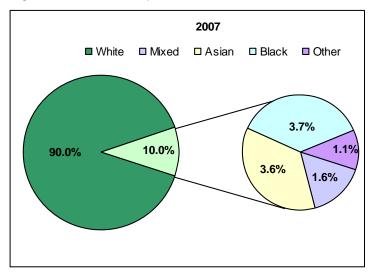
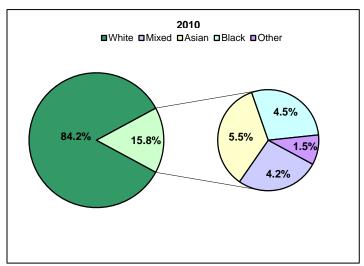


Figure 1.20: 2010 Ethnic Population Estimate



The increase in the ethnic mix can in part be attributed to substantial inward migration to Thurrock from East London and also rising levels of international, economic, migration from parts of Africa and Eastern Europe.