The English Indices of Deprivation 2010

Summary of findings for Torbay

This paper presents a brief overview of modelled deprivation in Torbay. The data is taken from the government's 2010 English Indices of Deprivation (<u>http://www.communities.gov.uk</u>). The paper presents some of the findings and illustrates the changing picture of relative deprivation over time.

Overview:

Torbay's relative position within the national model of deprivation shows a negative direction. This could be considered as a worrying trend for Torbay. Whilst there is no single local authority level measure favoured over another, if we consider the rank of local concentration (population weighted based on most deprived LSOAs containing 10% of population); Torbay's relative position has moved from 119 in 2004, to 75 in 2007 to 61 in 2010. Torbay's relative position has continued to be a worsening one, even after adjusting for the reduction in the number of local authority areas, from 354 to 326.

The number of geographies across England has remained constant over time at 32,482, with 89 areas in Torbay. These areas are called LSOAs, or Lower Super Output Areas. LSOAs are comparable geographies with a mean population of approximately 1,500.

Whilst the relative levels of deprivation have increased for Torbay, deprivation within Torbay shows noticeable variation. At town level both Torquay and Paignton could be perceived to show a worsening in relative deprivation between 2007 and 2010. However, levels in Brixham could be perceived as improving.

Key findings:

- Torbay is within the top 20% most deprived local authority areas in England for the rank of average score and the rank of local concentration.
- The number of LSOAs in Torbay in the top 10% most deprived has increased over time from 4 in 2004, to 10 in 2007 and 12 in 2010.
- Numbers of areas in the top 10% most deprived in England has increased in Torbay, whilst conversely Torbay now has an area considered within the least 10% deprived in England. This could suggest a widening of the inequality gap across Torbay.
- Overall levels of relative deprivation have worsened in Torbay, with an estimated 21,000 (15%) residents living in areas considered in the top 10% most deprived in England, compared to an estimated 15,500 (11%) in 2007.
- Some areas within Torbay have shown noticeable increases in levels of relative deprivation, Watcombe for example has seen a 10% increase in relative deprivation between 2007 and 2010.
- Croft Hall remains the practice drawing its registered patients from the most deprived communities.
- It appears that the populations in Torbay mostly living in areas in the top 10% most deprived in England are young families.
- 1 in 5 of Torbay's 20 to 29 population live in areas in the top 10% most deprived in England.



Summary of district level findings:

The summary measures at district level focus on different aspects of multiple deprivation in the area. No single summary measure is favoured over another, as there is no single best way of describing or comparing districts.

In all rankings throughout this paper, a rank of 1 indicates the most deprived in England.

Area & Year		Rank of Average Score	Rank of Average Rank	Rank of Extent	Rank of Local Concentra -tion	Rank of Income Scale	Rank of Employme -nt Scale	Total number of authoritie s
2	2010	61	49	82	61	97	99	326
England	2007	71	57	89	75	93	94	354
	2004	94	89	113	119	95	94	
	2010	1	2	3	2	6	7	37
South West Authorities	2007	3	4	4	3	4	4	45
	2004	7	8	6	8	4	4	45

Table 1: Ranking for Torbay with all authorities in ...

Torbay's overall position as 61st most deprived local authority for the rank of average score and rank of local concentration places Torbay within the top 20% most deprived local authorities in England, between the 18th and 19th percentile. This position is, relatively, worse than that for 2007, even when considering the reduction in the denominator from 354 to 326 local authority areas. In 2007 Torbay was on the cusp of the top quartile most deprived between the 20th and 21st percentile.

Overview of the six summary measures:

Average score is the population weighted average of the combined scores for the SOAs in a district.

Average rank is the population weighted average of the combined ranks for the SOAs in a district.

Extent is the proportion of a district's population living in the most deprived SOAs in the country.

Local concentration is the population-weighted average of the ranks of a district's most deprived SOAs that contain exactly 10% of the district's population.

Income scale is the number of people who are income deprived.

Employment scale is the number of people who are employment deprived.



Small area deprivation

The Index of Multiple Deprivation is constructed from a weighted quantitative model. The model is weighted in favour of income and employment. Where the rationale is that without an income or employment, levels of deprivation will be higher. The weighted model is illustrated in figure 1 below, including the weightings per domain.



Figure 1: Construct of Index of Multiple Deprivation

Details of the indicators within each of these respective domains can be viewed in appendix B.

Each domain consists of a score which is then ranked. The scores for the Income Deprivation Domain and the Employment Deprivation Domain are rates. So, for example, if an LSOA scores 0.38 in the Income Deprivation Domain, this means that 38% of the LSOA's total population is income deprived. The same applies to the Employment Deprivation Domain where the rate refers to the percentage of the working age population that is employment deprived.

The scores for the remaining five domains are not rates. Within a domain, the higher the score, the more deprived a LSOA is, although because the distribution of the data has been modified, it is not possible to say how much more deprived one area is than another The IMD 2010 score is the combined sum of the weighted, exponentially transformed domain rank of the domain score. Again, the bigger the IMD 2010 score, the more deprived the LSOA. However, because of the transformations undertaken, it is not possible to say, for example, that an LSOA with a score of 40 is twice as deprived as an LSOA with a score of 20.

Over recent years the relative levels of deprivation within Torbay's population have shown a slight worsening, as can be seen in the Index of Multiple Deprivation columns below (table 2). The worsening levels of deprivation are most noticeable for the employment domain, where the number of LSOAs in the most deprived end of the spectrum has shown continued increase.



Table 2 (4 tables) presents the counts of LSOAs by deprivation decile. The tables also graphically present the numbers with a coloured bar (there is no meaning associated to the colour used), the larger the number the larger the bar. If the respective domain was evenly distributed across the population, we would expect to see '9' in each decile.

The least equal distribution compared to the national is the health domain, where on the distribution is centred on the 30+% to 40% most deprived.

The most evenly distributed domain is the crime domain, this shows a pattern of crime deprivation in line with the national perspective.

The picture of income deprivation affecting children shows pockets of acute deprivation, whilst the overall picture could be perceived as an improving picture. As the numbers in the most deprived increased, more noticeably the numbers in the least deprived increased in larger volume.

LSOAs are statistical building blocks, and not natural communities. It should also be noted that discrete pockets of severe deprivation may potentially be hidden at the population level.

Count of SOAs	Index of	Multiple De	privation	Inco	me depriva	tion	Employ	yment depr	ivation
by decile	2004	2007	2010	2004	2007	2010	2004	2007	2010
Top 10%	4	10	12	6	6	6	7	12	13
10+% to 20%	8	4	4	8	10	13	17	15	20
20+% to 30%	16	24	23	25	22	24	20	23	19
30+% to 40%	22	18	12	16	21	11	22	11	13
40+% to 50%	12	8	12	14	12	15	11	18	11
50+% to 60%	11	15	14	11	9	11	6	3	9
60+% to 70%	9	5	6	6	6	6	4	6	4
70+% to 80%	4	4	4	1	2	2	2	1	0
80+% to 90%	3	1	1	2	1	1	0	0	0
90+% to 100%	0	0	1	0	0	0	0	0	0

Table 2: Distribution of LSOAs by decile of deprivation per domain - 'change over time'

Table 2 cont.

Count of SOAs	Health deprivation			Education deprivation			Barriers to housing		
by decile	2004	2007	2010	2004	2007	2010	2004	2007	2010
Top 10%	0	7	8	3	4	4	1	1	1
10+% to 20%	4	8	6	7	7	7	4	7	6
20+% to 30%	10	20	14	15	16	20	7	6	7
30+% to 40%	23	22	25	15	17	18	8	19	14
40+% to 50%	18	17	15	16	12	11	18	20	18
50+% to 60%	20	12	14	11	16	14	22	16	20
60+% to 70%	12	3	5	12	8	7	15	13	13
70+% to 80%	2	0	1	6	4	3	11	6	8
80+% to 90%	0	0	1	2	4	5	3	1	2
90+% to 100%	0	0	0	2	1	0	0	0	0

Table 2 cont.



Count of SOAs	Crir	ne deprivat	tion	Living environment			
by decile	2004	2007	2010	2004	2007	2010	
Top 10%	4	7	9	19	17	16	
10+% to 20%	4	10	8	12	18	16	
20+% to 30%	3	6	8	13	12	14	
30+% to 40%	7	12	9	12	11	9	
40+% to 50%	9	12	10	4	7	9	
50+% to 60%	10	11	7	5	7	6	
60+% to 70%	17	5	6	8	7	7	
70+% to 80%	9	13	12	5	2	3	
80+% to 90%	13	10	10	6	7	4	
90+% to 100%	13	3	10	5	1	5	

Table 2 cont.

Count of SOAs		IDAC		IDAOP			
by decile	2004	2007	2010	2004	2007	2010	
Top 10%	5	2	7	4	5	3	
10+% to 20%	9	10	8	16	12	13	
20+% to 30%	15	19	18	13	16	16	
30+% to 40%	20	17	12	15	11	13	
40+% to 50%	19	23	19	11	17	19	
50+% to 60%	11	9	8	10	12	9	
60+% to 70%	6	5	10	11	10	11	
70+% to 80%	4	3	4	3	2	1	
80+% to 90%	0	1	3	4	2	3	
90+% to 100%	0	0	0	2	2	1	



Map 1 illustrates the geographical distribution of relative deprivation in Torbay for the Index of Multiple Deprivation. The small coloured areas are the LSOAs, where areas in red are areas considered within the top 10% most deprived in England.

Maps for the domains are presented in appendix A.

Map 1: 2010 Index of Multiple Deprivation



Source: Department for Communities and Local Government

Modelling deprivation at ward level was undertaken by attributing the average score to the each of the estimated population. The aggregated score then being divided by the total population provides the average score per ward. No confidence intervals are presented in this paper.

Table 3 shows the average score per ward for 2007 and 2010 (consistent methodology used to calculate), where the higher the score the higher the relative deprivation. The proportionate change is also presented. Watcombe shows a net (relative) position of being 10% worse in 2010 compared to 2007.

Ward	2007 Score	2010 Score	Change
Berry Head-with-Furzeham	22.6	22.1	-2.1%
Blatchcombe	29.2	30.5	4.7%
Churston-with-Galmpton	12.4	12.0	-3.1%
Clifton-with-Maidenway	22.1	21.3	-3.9%
Cockington-with-Chelston	19.1	18.7	-1.9%
Ellacombe	35.1	38.0	8.3%
Goodrington-with-Roselands	19.2	18.3	-4.7%
Preston	20.0	18.6	-7.0%
Roundham-with-Hyde	42.8	44.0	2.7%
Shiphay-with-the-Willows	16.4	17.6	7.5%
St Marychurch	25.6	25.9	1.0%
St Mary's-with-Summercombe	25.8	24.8	-4.0%
Tormohun	43.5	44.7	2.7%
Watcombe	32.8	36.2	10.1%
Wellswood	27.7	27.3	-1.6%
Torbay Resident	26.4	26.8	1.5%

Table 3: Ward level findings

There are areas in Torbay within the top 2% most deprived in England. For example, one LSOA in Roundham with Hyde is ranked as the 340th most deprived in England, just outside the top 1% most deprived in England. Table 4 summarises the most deprived LSOA per domain in Torbay and identifies the electoral ward and the relative position.

Table 4: Summary of most deprived LSOAs in Torbay

Deprivation domain		Most deprived rank			
		Top %	Ward		
Index of Multiple Deprivation	446	1.4%	Ellacombe		
Income deprivation domain	1,192	3.7%	Ellacombe		
Employment deprivation domain	340	1.1%	Roundham with Hyde		
Health deprivation and disability domain	1,149	3.5%	Roundham with Hyde		
Education, skills and training deprivation domain	1,054	3.2%	Blatchcombe		
Barriers to housing and services domain	1,742	5.4%	Blatchcombe		
Crime domain	428	1.3%	Roundham with Hyde		
Living environment deprivation domain	472	1.5%	Roundham with Hyde		
Income deprivation affecting children	1,258	3.9%	Ellacombe		
Income deprivation affecting older people	1,131	3.5%	Watcombe		



GP practice deprivation scores have been calculated by attributing all registered persons within each practice, the IMD score for the area they live. This is based on postcode of residence and assumes a normal distribution of deprivation and patients per area. The cumulative score is then divided by the population of the practice to give an overall practice score. This is consistent with previous methodologies and allows comparisons of relative deprivation scores per practice in Torbay.

Name	2007 IMD Score	2010 IMD Score	2010 IMD Practice Rank	Change on 2007
Barton Surgery	29.4	31.0	5	5.4%
Bishops Place Surgery	30.6	31.3	4	2.3%
Brunel Medical Practice	25.3	25.8	11	2.2%
Chelston Hall	22.8	23.3	15	2.2%
Cherrybrook Medical Centre	15.4	15.0	20	-2.6%
Chilcote Surgery	27.8	28.9	7	4.1%
Compass House Medical Centre	21.0	20.3	19	-3.5%
Corner Place Surgery	26.4	26.3	10	-0.4%
Croft Hall Medical Practice	34.5	35.4	1	2.7%
Grosvenor Road Surgery	25.4	25.1	14	-1.1%
Mayfield Medical Centre	25.6	25.7	12	0.5%
Old Farm Surgery	26.7	27.5	8	3.0%
Old Mill Surgery	26.7	26.5	9	-0.9%
Parkhill Medical Practice	28.8	29.1	6	1.0%
Pembroke House	21.9	21.3	18	-2.5%
Shiphay Manor Surgery	30.4	32.1	2	5.5%
Southover Surgery	30.3	31.8	3	5.1%
St Luke's Medical Centre	22.8	22.6	17	-0.8%
The Greenswood Surgery	24.0	23.1	16	-3.7%
Withycombe Lodge Surgery	24.8	25.3	13	2.2%
Torbay Registered	26.2	26.6	-	1.5%
Approximate England Average	21.7	21.5	-	-

Table 5: Practice level findings

Levels of relative deprivation are highest for Croft Hall; this suggests that Croft draws their registered patients from the more deprived communities. Levels of relative deprivation for Croft have worsened between 2007 and 2010.

Relative levels for the practices in Brixham have all decreased. This does not mean they are more affluent, more that the relative levels of deprivation are worse in other areas.

Barton, Shiphay Manor and Southover have all seen an increase in terms of their patient's relative levels of deprivation between 2007 and 2010.



Understanding the population.

The population living in the areas of Torbay in the top 10% most deprived in England is illustrated in figure 2, and detailed further in table 6.

Figure 2 shows a clear younger structure living in the more deprived areas, when compared to the rest of Torbay's population structure.

Table 6 presents a breakdown of the population, and includes the proportion of that age group residing in the most deprived communities. For example, we can see that 20% (or 1 in 5) of the 20 to 24 population living area of Torbay in the top 10% most deprived in England.

Figure 2: Population pyramid

Population pyramid showing the population structure between the population living in the top 10% most deprived and the rest of Torbay



Table 6: Population structure

Population by quinary age banding and	Persons living in Top 10% most deprived in England				
gender	F	м	Total		
0 to 4	500	550	1,050		
5 to 9	500	500	1,000		
10 to 14	500	500	1,000		
15 to 19	650	600	1,250		
20 to 24	800	800	1,600		
25 to 29	850	850	1,700		
30 to 34	650	750	1,400		
35 to 39	600	750	1,350		
40 to 44	650	900	1,550		
45 to 49	700	900	1,600		
50 to 54	700	800	1,500		
55 to 59	550	700	1,250		
60 to 64	550	700	1,250		
65 to 69	450	450	900		
70 to 74	400	450	850		
75 to 79	350	300	650		
80 to 84	300	200	500		
85+	500	200	700		
Total	10,200	10,900	21,100		

	st of Torb populatio	-	Proportion of Torbay's residents living in Top 10%
F	м	Total	most deprived in England
2,500	2,650	5,150	16.9%
2,700	2,950	5,650	15.0%
3,150	3,250	6,400	13.5%
3,450	3,600	7,050	15.1%
3,050	3,350	6,400	20.0%
3,050	3,100	6,150	21.7%
2,950	2,900	5,850	19.3%
3,350	3,500	6,850	16.5%
4,050	4,200	8,250	15.8%
4,300	4,400	8,700	15.5%
3,950	3,900	7,850	16.0%
3,900	3,750	7,650	14.0%
4,750	4,400	9,150	12.0%
3,900	3,800	7,700	10.5%
3,350	3,050	6,400	11.7%
2,800	2,400	5,200	11.1%
2,450	1,700	4,150	10.8%
3,300	1,550	4,850	12.6%
60,950	58,450	119,400	15.0%

Source: 2010 Registered Patients list









Map 4: 2010 Employment deprivation



ie Bay Intelligence Torbay 'working in partnership'



Source: Department for Communities and Local Government

Map 6: 2010 Education, skills and training deprivation



Source: Department for Communities and Local Government



Map 7: 2010 Barriers to housing and services deprivation



Source: Department for Communities and Local Government

Map 8: 2010 Crime deprivation



Source: Department for Communities and Local Government





Source: Department for Communities and Local Government

Map 10: 2010 Income deprivation affecting children



Source: Department for Communities and Local Government



Map 11: 2010 Income deprivation affecting older people





Appendix **B**

Income Deprivation Domain

This domain measures the proportion of the population in an area that live in income deprived families. The definition of income deprivation adopted here includes both families that are out-of-work and families that are in work but who have low earnings (and who satisfy the respective means tests).

The indicators

A combined count of income deprived individuals per Lower layer Super Output Area (LSOA) is calculated by summing the following five indicators:

- Adults and children in Income Support families. August 2008
- Adults and children in income-based Jobseeker's Allowance families. August 2008
- Adults and children in Pension Credit (Guarantee) families

• Adults and children in Child Tax Credit families (who are not claiming Income Support, incomebased Jobseeker's Allowance or Pension Credit) whose equivalised income (excluding housing benefits) is below 60% of the median before housing costs

• Asylum seekers in England in receipt of subsistence support, accommodation support, or both.

The combined count of income deprived individuals per LSOA forms the numerator of an income deprivation rate which is expressed as a proportion of the total LSOA population.

Employment Deprivation Domain

This domain measures employment deprivation conceptualised as involuntary exclusion of the working age population from the world of work. The employment deprived are defined as those who would like to work but are unable to do so through unemployment, sickness or disability.

The indicators

A combined count of employment deprived individuals per LSOA is calculated by summing the following seven indicators:

• Claimants of Jobseeker's Allowance (both contribution-based and income based), women aged 18-59 and men aged 18-64. Quarterly average for 2008

- Claimants of Incapacity Benefit aged 18-59/64. Quarterly average for 2008
- Claimants of Severe Disablement Allowance aged 18-59/64. Quarterly average for 2008

• Claimants of Employment and Support Allowance aged 18-59/64 (those with a contribution-based element). Quarterly average for 2008



• Participants in New Deal for 18-24s who are not claiming Jobseeker's Allowance. Quarterly average for 2008

• Participants in New Deal for 25+ who are not claiming Jobseeker's Allowance. Quarterly average for 2008

• Participants in New Deal for Lone Parents aged 18 and over (after initial interview). Quarterly average for 2008

The combined count of employment deprived individuals per LSOA forms the numerator of an employment deprivation rate which is expressed as a proportion of the working age population (women aged 18-59 and men aged 18-64) in the LSOA.

Health Deprivation and Disability Domain

This domain measures premature death and the impairment of quality of life by poor health. It considers both physical and mental health. The domain measures morbidity, disability and premature mortality but not aspects of behaviour or environment that may be predictive of future health deprivation.

The indicators

• Years of Potential Life Lost: An age and sex standardised measure of premature death. 2004/08

• Comparative Illness and Disability Ratio: An age and sex standardised morbidity/ disability ratio. 2008

- Acute morbidity: An age and sex standardised rate of emergency admission to hospital. 2006/08
- Mood and anxiety disorders: The rate of adults suffering from mood and anxiety disorders. 2005/08

The indicators within the domain were standardised by ranking and transforming to a normal distribution.

Education, Skills and Training deprivation Domain

This domain captures the extent of deprivation in education, skills and training in an area. The indicators fall into two sub-domains: one relating to children and young people and one relating to adult skills. These two sub-domains are designed to reflect the 'flow' and 'stock' of educational disadvantage within an area respectively. That is, the 'children and young people' sub-domain measures the attainment of qualifications and associated measures ('flow'), while the 'skills' sub-domain measures the lack of qualifications in the resident working age adult population ('stock').

The indicators

Sub-domain: Children and Young People



• Key Stage 2 attainment: The average points score of pupils taking English, maths and science Key Stage 2 exams.

• Key Stage 3 attainment: The average points score of pupils taking English, maths and science Key Stage 3 exams.

• Key Stage 4 attainment: The average capped points score of pupils taking Key Stage 4 (GCSE or equivalent) exams.

• Secondary school absence: The proportion of authorised and unauthorised absences from secondary school.

• Staying on in education post 16: The proportion of young people not staying on in school or nonadvanced education above age 16.

• Entry to higher education: The proportion of young people aged under 21 not entering higher education.

Sub-domain: Skills

• Adult skills: The proportion of working age adults aged 25-54 with no or low qualifications.

Barriers to Housing and Services Domain

This domain measures the physical and financial accessibility of housing and key local services. The indicators fall into two sub-domains: 'geographical barriers', which relate to the physical proximity of local services, and 'wider barriers' which includes issues relating to access to housing such as affordability.

The indicators

Sub-domain: Wider Barriers

• Household overcrowding: The proportion of all households in an LSOA which are judged to have insufficient space to meet the household's needs.

• Homelessness: The rate of acceptances for housing assistance under the homelessness provisions of housing legislation.

• Housing affordability: The difficulty of access to owner-occupation, expressed as a proportion of households aged under 35 whose income means that they are unable to afford to enter owner occupation.

Sub-domain: Geographical Barriers

• Road distance to a GP surgery: A measure of the mean distance to the closest GP surgery for people living in the LSOA.

• Road distance to a food shop: A measure of the mean distance to the closest supermarket or general store for people living in the LSOA.



• Road distance to a primary school: A measure of the mean distance to the closest primary school for people living in the LSOA.

• Road distance to a Post Office: A measure of the mean distance to the closest post office or sub post office for people living in the LSOA.

Crime Domain

Crime is an important feature of deprivation that has major effects on individuals and communities. The purpose of this domain is to measure the rate of recorded crime for four major crime types – violence, burglary, theft and criminal damage – representing the risk of personal and material victimisation at a small area level.

The indicators

- Violence: The rate of violence (19 recorded crime types) per 1000 at-risk population.
- Burglary: The rate of burglary (4 recorded crime types) per 1000 at-risk properties.
- Theft: The rate of theft (5 recorded crime types) per 1000 at-risk population.
- Criminal damage: The rate of criminal damage (11 recorded crime types) per 1000 at-risk population.

Living Environment Deprivation Domain

This domain measures the quality of individuals' immediate surroundings both within and outside the home. The indicators fall into two sub-domains: the 'indoors' living environment, which measures the quality of housing, and the 'outdoors' living environment which contains two measures relating to air quality and road traffic accidents.

The indicators

Sub-domain: The 'indoors' living environment

• Housing in poor condition: The proportion of social and private homes that fail to meet the decent homes standard.

• Houses without central heating: The proportion of houses that do not have central heating.

Sub-domain: The 'outdoors' living environment

• Air quality: A measure of air quality based on emissions rates for four pollutants.

• Road traffic accidents: A measure of road traffic accidents involving injury to pedestrians and cyclists among the resident and workplace population.



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