

Key Profile for Tipperary North

This County Profile draws out the significant trends from a vast amount of available data. It is kept deliberately short, such as to draw attention to only the most important of observations. In some instances, the profile refers to a wider set of data spanning the four census waves from 1991 to 2006. For space reasons, this data could not be fully included in the GAMMA baseline reports, but is included in digital format on the disk accompanying the report.

Administrative Arrangements

There is a single Partnership company operating within Tipperary North, covering the whole local authority area. The County Childcare Committee area also covers the entire area.

- A point on naming conventions for the purpose of this profile: In urban areas, we will largely refer to individual Electoral Divisions (EDs). If we are referring to a set of EDs surrounding a single urban entity, we will indicate this by a suffix 'UD' (Urban District). In rural areas, referring to individual EDs is not as useful, due to the large number of rural EDs and the relatively small number of people living in each. For this reason we utilise the aggregation to larger rural areas or 'Rural Districts' as these used to be called. If a reference is made to the rural area, we will denote the area name with the suffix 'RD'.

Absolute and Relative Deprivation

- Overall, the Mid West Region is the fourth most affluent region of Ireland, and Tipperary North is the third most affluent local authority area within the region and the thirteenth most affluent county in Ireland as a whole. The relative affluence of Tipperary North has marginally declined over the past fifteen years from a score of 2.9 in 1991 to 2.3 in 2006.
- As is the case in any county, there exist a degree of variation within Tipperary North, but overall the county is not characterised by particular extremes either with regard to affluence or deprivation. The most affluent areas are situated in concentric rings around the main towns of Nenagh, Templemore and Thurles, but excluding the towns themselves. The remainder of the county is entirely in the middle field of the overall affluence to deprivation spectrum.
- At a local level, the most disadvantaged EDs are Graigue (-9.8) and Ballymurreen (-9.3). The most disadvantaged urban ED is Rosrea (-6.3). There are only five EDs which fall into the 'marginally below the average' category, and none into the 'disadvantaged', 'very disadvantaged' or 'extremely disadvantaged' categories, making the county one of particular absence of disadvantaged areas.

Population

- Ireland has experienced a population growth of 20.3% over the past fifteen years whilst the Mid West Region has grown at the slower rate of 16.2%. Tipperary North had a rate of growth of 14.1.0%; i.e. well below the national and regional rate of growth.
- Where growth did occur, this was strongly concentrated in Nenagh UD (34.2%) and Nenagh RD (26.8%). All other areas grew below ten per cent. At ED level, the highest growth rate was in Ballina, which population grew by 170.8% over the fifteen year period.

Demographic Characteristics

- There has been a continuous decline in the age dependency rate (the proportion of population under 15 years of age or over 64 as part of the total population) throughout Ireland over the past 15 years, from 38.1% in 1991 to 31.4% in 2006. A similar decline applies to Tipperary North

(40.4% to 34.1%). But the 2006 age dependency rate for Tipperary North remains nearly three percentage points above the national average, in line of it being a comparatively rural county.

- Within Tipperary North, there exist the typical urban-rural differential, with age dependency being lowest in Templemore UD (30.2%) and Nenagh UD (31.3%), and about 4-5 percentage points higher in all of its rural areas. Age dependency rates exceed forty per cent in two EDs, Rathnaveoge (40.9%) and Borrisnafarney (40.1%).
- The proportion of lone parents (as a proportion of all households with dependent children) in Ireland has exactly doubled over the past 15 years, growing from 10.7% in 1991 to 21.3% nationally in 2006. There are marked differences between urban and rural areas, and lone parent rates in the major cities are again up to twice the national average (e.g. Limerick City 39.1%). Tipperary North had a rate of 17.6% in 2006; i.e. well below the national average and reflecting the more rural character of the county as a whole. Reflecting the urban-rural dichotomy within the county, Nenagh West Urban (30.8%), Thurles Urban (30.4%) and Nenagh East Urban (30.1%) have all rates which are high even by national comparison. In contrast, there are 44 EDs, all of which are rural, where the rate is under 10 per cent.

Education

- There has been a continuous improvement in the level of education amongst adults over the past 15 years throughout Ireland. In 1991, 36.7% of the adult population had primary education only. This dropped to half that level (18.9%) in 2006, thus indicating a strong cohort effect. The rate for Tipperary North has fallen from 36.4% in 1991 to 19.0% in 2006. This is a reduction of 17.4 percentage points (compared to -17.8 percentage point nationally), and represents a similar level and rate of change as those applying for Ireland as a whole.
- Despite the considerable improvement at county level, there remain several rural EDs where still considerable parts of the adult population have primary education only. These are Templederry (33.0%), Ballymurreen (32.9%), Foilnaman (31.9%), Dolla (31.5%) and Graigue (31.2%).
- The reverse applies with regard to third level education, which has more than doubled over the past 15 years. In 1991, 13.0% of the national adult population had completed third level education. This grew to 30.5% in 2006. The proportion of Tipperary North's population with third level education has grown from 10.8% to 24.3%, a growth which is well below that which has occurred nationally (13.5% compared to 17.4%). Within the county, and mirroring the incidence of low education, the proportion of adults with higher education in some areas, Roscrea No 1RD (19.1%) and Templemore RD (19.3%) remain considerably lower than is the case for, for example, Nenagh RD (29.8%), which has the highest levels of third level education amongst its adult population.
- At ED level, and again mirroring the situation with regard to the higher incidences of low levels of education, there are particularly low shares of population with third level education in Templederry (10.4%), Littleton (13.6%) and Templetohy (13.8%), but none falling below the 10 per cent level.

Social Class Composition

- The changes in social class composition experienced throughout Ireland over the past 15 years largely parallels those in educational achievement, with a gradual increase in the number of professionals and an even greater decline in the proportion of semi- and unskilled manual workers. At the national level, the proportion of professionals in all classes rose from 25.2% in 1991 to 32.9% in 2006, whilst the proportion of the semi- and unskilled classes declined from 28.2% to 18.6% over the same period.
- In Tipperary North, the proportion in the professional classes (32.0%) and the proportion in the lower skilled professions (19.1%) mark a class composition just marginally below the national average. Differences in the social class composition within the county reflect those of educational

attainment, with Nenagh RD having the highest composition (39.0% professionals, 15.4% semi- and unskilled manual classes), and Templemore UD having the lowest (19.4%, 24.8%).

Unemployment

- Unemployment rates throughout Ireland have broadly halved over the past 15 years. Female unemployment rates have tended to be slightly below male unemployment rates, but have not fallen at the same pace due to the increasing levels of female labour force participation (i.e. reflecting the trend of increased female participation in the labour force with more women registering their unemployed status). The male unemployment rate fell from 18.4% in 1991 to 8.8% in 2006, whilst the female unemployment rate fell from 14.1% to 8.1%.
- Unemployment rates for Tipperary North have fallen at a marginally lower rate than the nationally prevailing ones between 1991 and 2006 (-9.4% male / -3.5% female compared to -9.6% male / -6.0% female nationally), but also remained below the national rates in 2006 at 7.3% male unemployment and 7.7% female unemployment.
- Below the county level, unemployment rates are by far the highest in Thurles UD (11.3%^m/11.3%^f) and Nenagh UD (11.0%^m/12.5%^f).
- Unemployment rates in individual EDs are highest in Littleton (12.8%^m/9.1%^f), followed Roscrea (12.1%^m/11.5%^f), Graigue (11.4%^m/2.3%^f), Thurles Urban (11.3%^m/11.3%^f) and Nenagh East Urban (11.2%^m/13.0%^f). Notably, with the exception of Graigue, all of these are urban areas.

Housing

- There has been a 2.3 percentage point decline in the proportion of local authority housing in Ireland over the past 15 years, from 9.8% in 1991 to 7.5% in 2006. The proportion in the Mid West Region has declined by 2.0 percentage points, from 8.5% to 6.4%. Tipperary North has seen a lesser decline of 1.5 percentage points, albeit from a lower base (8.1% to 6.6%). Within Tipperary North, local authority housing in Templemore UD (15.9%) and Thurles UD (12.6%) is considerably higher than any other area, but still not exceptional by comparison to other urban areas throughout the country.
- At ED level, the highest concentrations of local authority housing are found in Templemore (15.9%) and Borrisokane (15.7%), but none can be considered high when compared to other towns and cities.

New Measures of Deprivation in the Republic of Ireland

An Inter-temporal and Spatial Analysis of data from the Census of Population, 1991, 1996, 2002 and 2006

Trutz Haase & Jonathan Pratschke, February 2008

This section provides a brief summary of the new Measures of Deprivation for the Republic of Ireland, drawing on recent data from the 2006 Census of Population. Building on the innovative and powerful approach to the construction of deprivation indices developed in our previous research (Haase & Pratschke, 2005), the new Measures of Deprivation provide an up-to-date analysis of the changes in deprivation that have occurred in each local area over the past fifteen years¹.

How is the new deprivation index constructed?

Most deprivation indices are based on a factor analytical approach which reduces a larger number of indicator variables to a smaller number of underlying dimensions or factors. This approach is taken a step further in the Measures of Deprivation developed by Haase & Pratschke: rather than allowing the definition of the underlying dimensions of deprivation to be determined by data-driven techniques, the authors develop a *prior conceptualisation* of these dimensions. Based on earlier deprivation indices for Ireland, as well as analyses from other countries, three dimensions of affluence/disadvantage are identified: **Demographic Profile**, **Social Class Composition** and **Labour Market Situation**.

Demographic Profile is first and foremost a measure of rural affluence/deprivation. Whilst long-term adverse labour market conditions tend to manifest themselves in urban areas in the form of unemployment blackspots, in rural areas, by contrast, the result is typically agricultural underemployment and/or emigration. Emigration from deprived rural areas is also, and increasingly, the result of a mismatch between education and skill levels, on the one hand, and available job opportunities, on the other. Emigration is socially selective, being concentrated amongst core working-age cohorts and those with further education, leaving the communities concerned with a disproportionate concentration of economically-dependent individuals as well as those with lower levels of education. Sustained emigration leads to an erosion of the local labour force, a decreased attractiveness for commercial and industrial investment and, ultimately, a decline in the availability of services.

Demographic Profile is measured by five indicators:

- the percentage increase in population over the previous five years
- the percentage of population aged under 15 or over 64 years of age
- the percentage of population with a primary school education only
- the percentage of population with a third level education
- the percentage of households with children aged under 15 years and headed by a single parent

Social Class Composition is of equal relevance to both urban and rural areas. Social class background has a considerable impact in many areas of life, including educational achievements, health, housing, crime and economic status. Furthermore, social class is relatively stable over time and constitutes a key factor in the inter-generational transmission of economic, cultural and social assets. Areas with a weak social class profile tend to have higher unemployment rates, are more vulnerable to the effects of economic restructuring and recession and are more likely to experience low pay, poor working conditions as well as poor housing and social environments.

¹ The present analysis supersedes and replaces the previous analysis by Haase & Pratschke (2005), as all estimates are derived from a new matrix of observations covering all four census periods.

Social Class Composition is measured by five indicators:

- the percentage of population with a primary school education only
- the percentage of population with a third level education
- the percentage of households headed by professionals or managerial and technical employees, including farmers with 100 acres or more
- the percentage of households headed by semi-skilled or unskilled manual workers, including farmers with less than 30 acres
- the mean number of persons per room

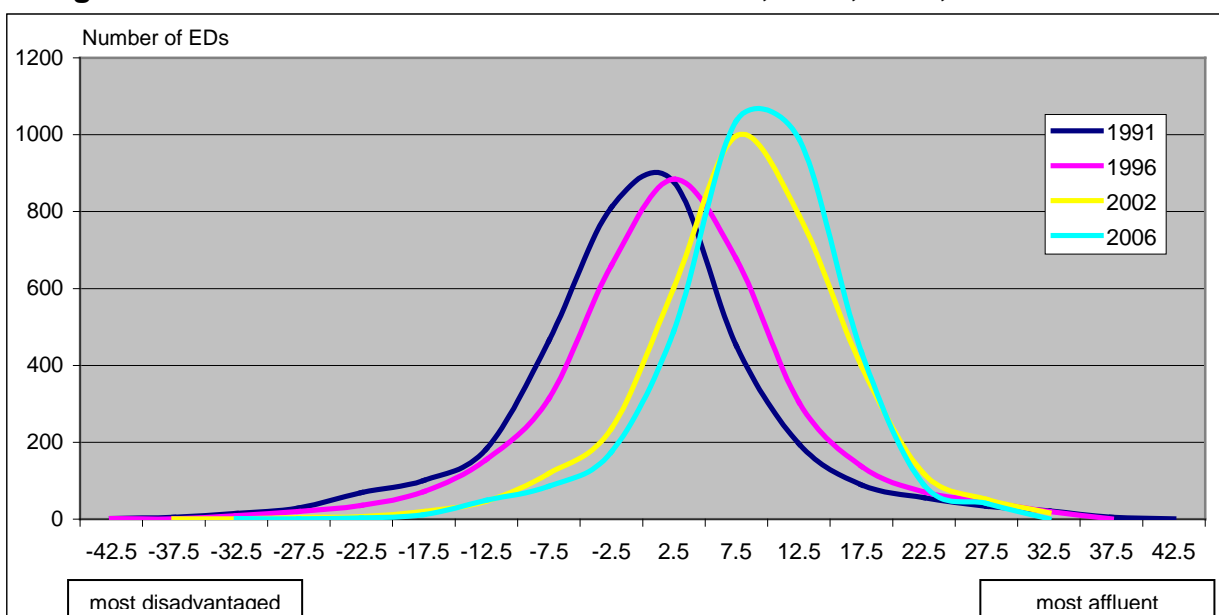
Labour Market Situation is predominantly, but not exclusively, an urban measure. Unemployment and long-term unemployment remain the principal causes of disadvantage at national level and are responsible for the most concentrated forms of multiple disadvantage found in urban areas. In addition to the economic hardship that results from the lack of paid employment, young people living in areas with particularly high unemployment rates frequently lack positive role models. A further expression of social and economic hardship in urban unemployment blackspots is the large proportion of young families headed by a single parent.

Labour Market Situation is measured by four indicators:

- the percentage of households headed by semi-skilled or unskilled manual workers, including farmers with less than 30 acres
- the percentage of households with children aged under 15 years and headed by a single parent
- the male unemployment rate
- the female unemployment rate

Each dimension is calculated in the same way for each census wave and then combined to form an Absolute Index Score and Relative Index Score. The **Absolute Index Scores** have a mean of zero and a standard deviation of ten in 1991, with varying means and standard deviations in subsequent periods that reflect the underlying trends. The **Relative Index Score** is identical to the absolute score in 1991, with the difference that the 1996, 2002 and 2006 scores are 'detrended'. In other words, the overall average for each census wave is subtracted from the scores (which consequently have a mean of zero) in order to remove national trends from the index scores and to highlight differences in their relative values. In addition, the standard deviation is set to ten for each wave so that the Relative Index Scores provide a standardised measurement of relative affluence or deprivation in a given area at a specific point in time.

Figure 1: Distribution of Absolute Index Scores, 1991, 1996, 2002 and 2006



What is the difference between the Absolute and Relative Index Scores?

The **Absolute Index Scores** measure the actual affluence/deprivation of each area on a *single fixed scale* which, for 1991, has a mean of zero and standard deviation of ten. As the economy has greatly improved over the past fifteen years, the Absolute Index Scores for most EDs have increased significantly. Because affluence/deprivation is measured on a fixed scale, it is possible to use the Absolute Index Scores to evaluate this progress across successive waves of data. However, if we are interested in targeting resources towards disadvantaged areas, the relative position of each area at a specific point in time is of greater importance. This is represented by the **Relative Index Scores**, which have been rescaled so as to have a mean of zero and standard deviation of ten *at each census wave*. Thus, for the development of the latest round of social inclusion plans, the appropriate deprivation measure to use is the **2006 Relative Index Score**. It shows the position of any given ED *relative to all other EDs in 2006*.

Why are the Measures of Deprivation not expressed in decile rankings?

Decile rankings divide all spatial units into equally-sized categories. This is used primarily for mapping purposes, although it is also sometimes used in the comparison of scores derived from indices that do not utilise identical measurement scales across successive waves of data. However, it is important to be aware that this use of decile rankings is problematic, as relatively large changes at the extremes of the affluence-to-deprivation spectrum may not be reflected in a change in decile ranking, whilst relatively minor changes at the middle of the distribution can easily result in a change of one or two deciles. In contrast, the New Measures of Deprivation presented in this report use the same measurement structure and scale for successive census waves. As a result, the use of rankings is not required, and the Absolute Index Scores can be compared over time. This approach pays greater attention to the actual level of deprivation experienced, reflected in the distance from the mean, and is superior to decile rankings.

How should the Index Scores be interpreted?

Figure 1 (above) shows the distribution of **Absolute Index Scores** for the four census waves and reveals a number of important attributes of the Index. Firstly, the scores range between roughly -50 (most disadvantaged) and +50 (most affluent). The measurement scale is identical for all four census waves, thus allowing the direct comparison of each area's score from one wave to the next. The scale is constructed in such a way that the mean score for 1991 is equal to zero and the standard deviation is equal to ten.

The rightward shift of the 1996, 2002 and 2006 curves relative to 1991 reflects the exceptional growth experienced by the Irish economy over this period. As we have noted, the mean score for 1991 is zero, which rises to 2.4 in 1996, 8.2 in 2002 and 8.9 in 2006, capturing the impact of sustained economic growth². In this context, it is important to understand that the Absolute Index Score for a given area may change over time even where its position relative to other areas remains unchanged.

The distributions follow a bell-shaped curve, with most areas clustered around the mean and fewer areas exhibiting extreme levels of affluence or deprivation. Most importantly, the curve of scores has become narrower over the course of this fifteen-year period. This is important, as the corresponding reduction in the standard deviation is indicative of a certain narrowing of the differential between affluent and deprived areas, at least when measured using the indicator variables described above.

The **Relative Index Scores** are rescaled to have a mean of zero and a standard deviation of ten at each census wave. This makes it more meaningful when putting descriptive labels on the values, as utilised in the maps for the Relative Index Scores. The labels used for each range of standard deviations are as follows:

² It is worth noting that the large shift from 1996 to 2002 is partly due to the delayed implementation of the Census due to the Foot and Mouth Disease in Spring 2001.

Table 1: Distribution and Labels of Relative Index Scores, 2006

Relative Index Score	Standard Deviation	Label	Colour Scheme in Maps	Number of EDs in 2006	Percentage of EDs in 2006
over 30	> 3	extremely affluent	dark blue	0	0.0
20 to 30	2 to 3	very affluent	medium blue	68	2.0
10 to 20	1 to 2	affluent	medium green	372	10.9
0 to 10	0 to 1	marginally above average	light green	1393	40.9
0 to -10	0 to -1	marginally below average	light yellow	1141	33.5
-10 to -20	-1 to -2	disadvantaged	medium yellow	296	8.7
-20 to -30	-2 to -3	very disadvantaged	orange	106	3.1
below -30	< -3	extremely disadvantaged	red	33	1.0

When making comparisons over time, the appropriate scores to use are the **Absolute Index Scores** without the labels, as the meaning of what constitutes affluence or deprivation changes from one census to another. When making a statement about a particular ED or an area at a particular point in time (e.g. in 2006) the appropriate score to use is the (2006) **Relative Index Score** and this can be described using the labels as shown in Table 1.

How are deprivation scores calculated for larger areas?

Both Absolute and Relative Index Scores can easily be derived for any aggregate area, such as Partnership areas, counties or local authority areas, regions or Ireland as a whole. This is done by calculating the population-weighted average for the aggregate area. Thus, the affluence or deprivation of any ED will contribute to the area score proportionate to the number of people residing within it.

Due to the application of population weights in the calculation of aggregate area scores, the Ireland Totals for the Relative Index Scores in Table 1.1 are no longer equal to zero and the Absolute Index Scores for Ireland move from 2.3 (1991) to 5.2 (1996), 10.8 (2002) and 10.4 (2006) respectively.

Reading the Tables, Graphs and Maps

The New Measures of Deprivation cover the following:

- A. Ten individual indicator variables which are used to construct the index;
- B. Eight composite index scores (one Absolute Index Score and one Relative Index Score for each of the four census waves);
- C. Additional variables which show how each indicator has changed over the 15-year period and a ranking of each area using the 2006 census data³.

The full ED-level data for all of the underlying indicator variables and the Absolute and Relative Index Scores are contained on the accompanying disk and will also be made available on the Pobal website⁴. The website will feature a broad range of graphs and maps and the full report on the construction of the index, as they become available.

The disk also contains a summary report which shows the area aggregates for the 34 Local Authority Areas (NUTS4), the 8 Regional Authorities (NUTS3), the two NUTS2 Regions (Southern & Eastern Region and Border, Midlands and Western Region) and Ireland as a whole (NUTS1). These provide important reference values when interpreting the relative affluence or deprivation of any specific area.

³ Note: Tables 13 to 15 show additional housing tenure data. This is included here for information only, but is not used in the construction of the index.

⁴ www.pobal.ie

Substantive Findings

Ireland 1991-2006, a period of unprecedented growth

The first four index scores show the absolute level of overall affluence and deprivation in 1991, 1996, 2002 and 2006, using identical measurement scales. As we noted above, the mean Index score rose considerably during this period, from 0 to 2.4 between 1991 and 1996, from 2.4 to 8.2 between 1996 and 2002, and from 8.2 to 8.9 between 2002 and 2006. This shift in the means suggests the existence of three relatively distinct phases: the first, from 1991 to 1996, is a period of relatively gradual initial growth, 1996 to 2002 marks a period of rapid growth, whilst the 2002 to 2006 period is characterised by a slow-down in the rate of change.

Comparing the ED-level maps of Absolute Index Scores for the four census waves provides a fascinating insight into the spatial distribution of this growing affluence, most importantly the overriding importance of Ireland's urban centres and the influence that these assert on their environs. The most affluent areas of the country are distributed in concentric rings around the main population centres, mainly demarcating the urban commuter belts. The measures show how rapidly these rings of affluence expanded during the 1990s, as large-scale private housing development took place in the outer urban periphery, generating high concentrations of relatively affluent young couples.

The spatial distribution of deprivation over time

Comparing the ED-level maps of the Relative Index Scores for the four census waves shows the limited degree to which the *relative* position of local areas has changed over the past fifteen years. The worst-affected areas in 1991 were generally in the same position in 2006, despite the unprecedented economic growth that has been experienced by practically all parts of the country. The rising tide seems to have lifted most boats, but this 'lift' has tended to conserve the relatively stable differentials that already existed between affluent and poorer areas. The most remarkable exception to this general observation is Dublin's Inner City, where massive investment has led to significant gentrification. Moreover, the narrowing of the distribution of Absolute Index Scores suggests that there has been some progress in narrowing the differences between the most affluent and most disadvantaged areas. It is disturbing, however, to observe that some of the most disadvantaged urban areas, particularly in Limerick, Cork and Waterford, have failed to participate in the generalised improvement in living standards, and have, as a consequence, fallen even further behind the more affluent areas of Ireland.