Children's, Customers and Education
Business Intelligence and Performance Improvement

Fair and Equitable Funding Model

Northamptonshire Fair and Equitable Funding Model

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The Fair and Equitable Funding Methodology

Introduction

In their strategy, Social Justice: transforming lives, the Government has identified clearly that the level of disadvantage face by people is a significant causal factor of the difficulties they face and the poorer outcomes they achieve in life. The strategy outlines five principles which they have used to inform their approach to Social Justice which they define as '....about making society function better – providing the support and tools to help turn lives around':

- A focus on prevention and early intervention
- Where problems arise, concentrating interventions on recovery and independence
- Promoting work for those who can as the most sustainable route out of poverty, while offer unconditional support to those who are severely disabled and cannot work
- Recognising that the most effective solutions will often be designed and delivered at a local level
- Ensuring that interventions provide a fair deal for the taxpayer

The Fair and Equitable Funding Methodology (FEFM) was developed using the principles of the Indices of Multiple deprivation. The model can be used to analyse patterns of deprivation and identify those living in areas with higher levels of need and greater levels of disadvantage.

Following the decision of the council to move toward three strands of delivery of the prevention and demand management strategy the FEFM has been reviewed and updated to reflect the focus on children and families. The model has been further developed to recognise the importance placed by national government on the impact of disadvantage and deprivation, including an approach of scaled weighting within the model calculation that apportions more funding to those areas ranking in the 1st, 2nd, and 3rd deciles of the deprivation domain. The Model applies a formulaic approach to apportioning funding based on the levels of identified need in an area.

What is the Fair and Equitable funding model?

The FEFM contributes to a more sophisticated understanding of the issues facing local communities and the people in those communities and provides a framework to benchmark progress in key neighborhoods and communities.

It is driven by the need to use current resources more effectively and efficiently and recognises the need for The Fair and Equitable funding model which brings together a wealth of information that paints a broad picture of an area (Super Out put Area /District / can be extended to Ward etc)and helps to describe local conditions.

It will allow us to allocate funding to different areas of the county based on need which is identifiable by the datasets.

It is a multiple domain and indicator based system which can be used to measure the general "health" and the relative success of districts across the county.

The Index is constructed from 29 indicators that have been grouped into the following seven domains

- Deprivation
- Early Years
- Young People
- Communities
- Adults
- Community Safety
- Access to services

Defining the Areas /Rankings

Lower Super Output Areas (LSOAs) have been used as the basis for the Index. There are 407 LSOAs in Northamptonshire.

The Office for National Statistics created Super Output Areas after the 2001 Census to enable them to compare populations across the country. Lower Level Super Output Areas (LSOA) are geographical areas that have an average population of 1,500 (minimum of 1,000). A rural LSOA is likely to have a much larger geographical size than an urban one where the population is much denser.

Datasets gives information for each LSOA in the county; this information allows us to rank those areas, depending on the criteria for that Dataset. For Example for the % of 65+ residents with learning difficulties accession local services dataset, an area with a higher percentage would have a higher rank (highest rank = 407)

The model uses the concept of **Average of LSOA ranks** and the ranking for each dataset is combined to give each area a rank for that domain.

For the purpose of calculation, LSOAs are ranked according to the rule - the one with the most deprived / worst performing/ highest incidents is given the rank of 407.

Districts/wards

Where data is not available at an LSOA level the model has ranked the districts/wards and then averaged the ranking. Otherwise the districts would be given an inappropriately low rank that does not take into account the number of LSOs within a District.
For instance South Northamptonshire has the lowest rank with reference to the % offender rate. To avoid every South Northamptonshire LSOA having a rank of 1, the model has found the median value of the ranks. In reality South Northamptonshire LSOAs are assumed to be filling the ranks 1 to 48. The median value is 24.5 ((1 + 48)/2).

Domains and Indicators

At the start of the dataset scoping exercise the creation of many different domains/themes was considered. There were several which were appropriate to inform the model.

Each of these domains contains datasets, or criteria, that were brought forward as possibly being worthy of inclusion within the model.

As the model was derived, each variable (criteria) was correlated with the others within their domain to see if there were strong positive relationships. Correlations scoring higher than 0.8 on a scale of -1 to 1 indicate strong positive relationships and so one of the datasets would be dismissed.

An example occurred within the Young People domain - rates of Persistent Absence and rates of Overall Unauthorised Absence produced very similar rankings and therefore the unauthorised absence dataset was removed to avoid absence rates becoming too much of an influence on the overall Young People rankings.

After the Correlation had been carried out on all of the domains it was identified that there were two data sets that could be removed from the model as they were replicating other sets. These were:

- **Overall Unauthorised Absence** – strong correlation to Persistent Absence and so removed

- **HMRC Child Poverty Figures - % of Children under 16 in "Poverty"** – strong correlation to the other 3 deprivation indicators and so removed

* - Data only currently available at a district/borough level

Early Years / Children's Centers

This theme will highlight areas where there are high proportions of children under 5 and where there are families with young children who may be in need of support and advice.

Dataset	Source	Date	Scaling
No of infants born in 10/11 as a % of 0-4 population	NCC	May 11	1= lowest rate , 100 = highest rate
Take up by 3 Year olds of free care entitlement	NCC	March 2011	1= highest Take up, 100 -= lowest take up rate
EYFSP Gold standard measure (% 78+ and 6+ inc both CLL and PSE)	NCC	Summer 2012	1 = highest attainments, 100 = lowest attainments
% Disabled children in 0-4 population	NCC	June 2011	1= lowest rate , 100 = highest rate
No of pregnant teenagers 07-09	NCC	May 2011	1= lowest rate , 100 = highest rate

Young People

This theme will highlight areas where there are high proportions of school age children and particularly areas where children struggle to reach the same level of achievement as their peers.

Dataset	Source	Date	Scaling
% persistently absent pupils (Years 1 to 11)	Oct School census 11	Academic Year 10/11	1= lowest rate , 100 = highest rate
Total Absence (authorised /unauthorised) – Years 1 -11)	Oct School census 12	Academic Year 10/11	1= lowest rate , 100 = highest rate
Fixed exclusions as a % of school population (YR to 11)	ONE (run Jan 2012)	Academic year 10/11	1= lowest rate , 100 = highest rate
% pupils with Free School Meals (Years 1 to 11)	Oct School census 12	Academic Year 11/12	1= lowest rate , 100 = highest rate
% attaining Level 4+ English and Maths 2011	KEYPAS (Dec 11)	Academic Year 10/11 and 11/12	1= highest pass rate, 100 = lowest pass rate
% attaining 5+A*-C GCSE and equivalents including A*-C including English and Maths GCSE	EPAS (provisional) (Dec 11)	Academic Year 10/11 and 11/12	1= highest pass rate, 100 = lowest pass rate
NEET rate (Nov10 to Jan 11) *	Connexions	Maximum NEET period averaged (November to January as per NI 117)	1= lowest rate , 100 = highest rate

Access to Facilities

This theme will highlight areas that are isolated and so residents in these areas find it more difficult to access services

Dataset	Source	Date	Scaling
Rural/Urban Classification	Office for national statistics	Calculated in 2004	10% weighting given for rurality within Domain. (i.e. IMD Barrier rank * 1.1)
% of users with access to primary schools within a reasonable time by public transport or by walking	Department of Transport	2010	1= highest rate, most access , 100 = lowest rate, least access
% of users with access to GP within a reasonable time by public transport or by walking	Department of Transport	2010	1= highest rate, most access , 100 = lowest rate, least access
% of users with access to food stores within a reasonable time by public transport or by walking	Department of Transport	2010	1= highest rate, most access , 100 = lowest rate, least access

Communities

This theme will highlight areas where there are communities that may be in need of support and advice such as areas with a high proportion of people from different backgrounds.

Dataset	Source	Date	Scaling
School Census Ethnicity Figures (% BME)	Oct School census 12	Academic year 10/11	1= lowest rate , 100 = highest rate
Ethnicity % - Total BME (Not White British) 2011 Census	Office for national statistics	2011 Census	1= lowest rate , 100 = highest rate

Deprivation

This theme will highlight areas where residents are deprived due to many factors including low income, low levels of employment, To reflect the high level of emphasis placed on deprivation those LSOS falling in the top 30% nationally have been assigned additional weighting. Scores of areas falling in the top 10% are given a weighting of 5, those in the top 20% have a weighting of 2 and those in the top 30% have a weighting of 1.5.

Dataset	Source	Date	Scaling
Number of Job Seekers	Department of Work and Pensions	2012	1= lowest rate , 100 = highest rate

Number of Lone Parents	Department of Work and Pensions	2012	1= lowest rate , 100 = highest rate
% of houses in council band C and below	http://www.nomisweb.co.uk/	2010	1= lowest rate , 100 = highest rate

Adults – Working Age

This theme will highlight areas where there are a high proportion of vulnerable adults of working age, that need assistance from council services.
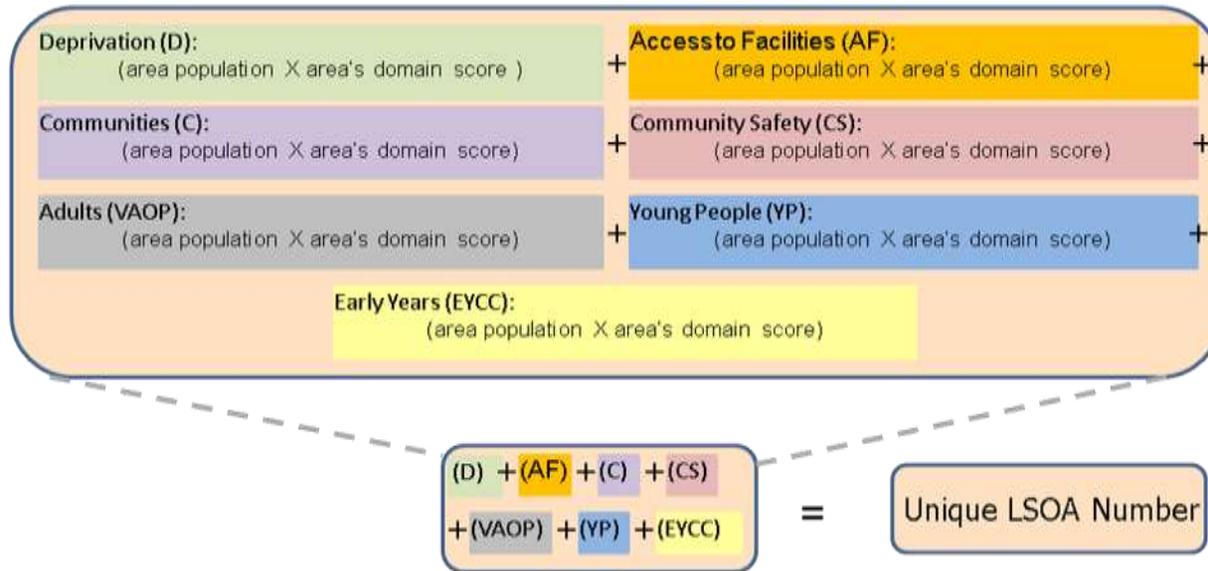
Dataset	Source	Date	Scaling
% of residents whose Day-to-Day Activities Limited a Lot; Age 16 to 64 - Census 2011	2011 Census – Office for National Statistics	2011	1= lowest rate , 100 = highest rate
% of working age residents accessing services due to learning difficulties, physical difficulties and mental health issues	NCC	2011and 2012	1= lowest rate , 100 = highest rate

Community Safety

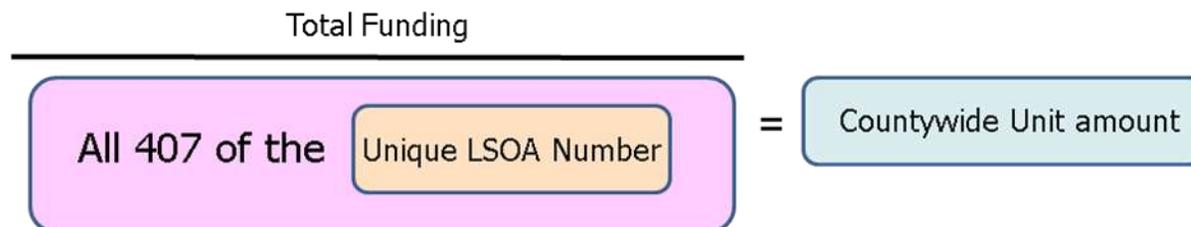This theme will highlight areas that suffer high levels of criminal offences and antisocial behavior.

Dataset	Source	Date	Scaling
Offender cohort as a % of population *	Partnership Needs Assessment	2011	1= lowest rate , 100 = highest rate
% of offenders reoffending *	Partnership Needs Assessment	2011	1= lowest rate , 100 = highest rate
No of recorded crimes per % of population	Police	2011	1= lowest rate , 100 = highest rate
No Hate incidents reported to police *	Partnership Needs Assessment	2011	1= lowest rate , 100 = highest rate
No of Youth Service assessments carried out	Youth Offending Service	2011	1= lowest rate , 100 = highest rate
No of young offenders receiving an outcome	Local YOP	April 08 to Mar 11	1= lowest rate , 100 = highest rate
% in LSOA susceptible to Binge Drinking	NSOA	2010	1= lowest rate , 100 = highest rate

How Funding is calculated

This Unique LSOA figure is created for each of the 407 Lower super output areas.

A Countywide Unit amount is created by dividing the total funding available by the total sum of all LSOA Unique figures

$$\boxed{\text{Countywide Unit amount}} \; \mathbf{X} \; \boxed{\text{Unique LSOA Number}} \; = \; \boxed{\textbf{Each area's Funding}}$$

To allocate the amount of funding for a particular area you multiply the Unit amount by the unique LSOA figure.

$$\frac{\textbf{Each area's Funding}}{\textbf{That area's population}} \; = \; \textbf{Funding per person within that area}$$

The funding per person can be worked out by dividing the funding allocated to an area by that areas population.

Based on a Funding level of £10.5 Million the funding allocations would be as follows

Funding amount	£ 10,500,000					

Deprivation	Access to Facilities	Communities	Community Safety	Adults	Young People	Early Years
1	1	1	1	1	1	1

Borough/Districts Allocations	Communities	Percentage of total funding		Amount of funding per person	Population
Corby	£ 1,175,613.28	11.20%		£ 19.70	59,676
Daventry	£ 858,801.80	8.18%		£ 11.03	77,843
East Northamptonshire	£ 1,008,612.39	9.61%		£ 11.62	86,765
Kettering	£ 1,385,151.38	13.19%		£ 14.62	94,762
Northampton	£ 4,114,430.41	39.19%		£ 19.40	212,069
South Northamptonshire	£ 676,355.01	6.44%		£ 7.94	85,189
Wellingborough	£ 1,281,035.73	12.20%		£ 17.00	75,356

Funding amount	£ 3,400,000					

Deprivation	Access to Facilities	Communities	Community Safety	Adults	Young People	Early Years
1	1	1	1	1	1	1

Borough/Districts Allocations		Percentage of total funding		Amount of funding per person	Population
Corby	£ 380,674.78	11.20%		£ 6.38	59,676
Daventry	£ 278,088.20	8.18%		£ 3.57	77,843
East Northamptonshire	£ 326,598.30	9.61%		£ 3.76	86,765
Kettering	£ 448,525.21	13.19%		£ 4.73	94,762
Northampton	£ 1,332,291.75	39.19%		£ 6.28	212,069
South Northamptonshire	£ 219,010.19	6.44%		£ 2.57	85,189
Wellingborough	£ 414,811.57	12.20%		£ 5.50	75,356