

# Hampshire Mental Health and Wellbeing Index – Technical Report

A Mental Health & Wellbeing Index has been produced for Hampshire. This tool provides an assessment of the relative assets and vulnerabilities of each ward in the county in respect of the mental health and wellbeing of the population resident within it. The Index is constructed from a wide range of indicators. These aim to capture individual, household and community aspects of wellbeing and encompass themes including health, education, family stability, infrastructure, and crime.

Outputs from the tool enable the examination of assets and vulnerabilities at three levels, self, family and community support, and wider systems and services including public services and the economy. This tool can be used to inform needs assessment, to assist in the identification of the wellbeing and mental health issues underlying general deprivation, to aid decision making around service provision, and to support the preventative agenda.

As would be expected, there is a high degree of correlation between the Mental Health & Wellbeing Index and measures of deprivation. This is particularly true of the more deprived wards in the county, which tend to register lower levels of wellbeing. There is greater divergence amongst the more rural wards of Hampshire, where higher deprivation scores are driven by a lack of access to public services and issues associated with the living environment.

Whilst there is a degree of overlap between the underlying indicators that compose these measures, the Mental Health & Wellbeing Index encompasses a broader range of data specifically related to mental health and wellbeing. As a result, it provides additional insights that can be used alongside conventional deprivation measures to provide a more detailed picture of the underlying drivers of mental health and wellbeing in local areas.

## Self domain

### Education

#### Attainment: Key Stage 4 pupils

% of pupils achieving 5+ A\*-C GCSEs (including English and Maths) at the end of Key Stage 4, 2014  
Source: HCC Education, Data and Information Team, DFE published results KS4

#### Attainment: Early years foundation stage pupils

% of pupils achieving a good level of development at early years foundation stage, 2014  
Source: HCC Education, Data and Information Team, DFE published results KS4

#### Qualification levels in the adult population: Level 2

% persons (aged 16+) with a Level 2 qualification (or higher), 2011  
Level 2 qualifications include 5+ O Level (Passes) / CSEs (Grade 1) / GCSEs (Grades A\*-C), School Certificate, 1 A Level/2-3 AS Levels/VCEs, Intermediate/Higher Diploma, NVQ Level 2, Intermediate GNVQ, City and Guilds Craft, BTEC First/General Diploma, RSA Diploma  
Source: Census.

#### Qualifications in the adult population: Level 4

% persons (aged 16+) with a Level 4 qualification (or higher), 2011  
Level 4 qualifications include a degree (for example BA, BSc), higher degree (for example MA, PhD, PGCE), NVQ Level 4-5, HNC, HND, RSA Higher Diploma, BTEC Higher level, Foundation degree (NI), professional qualifications (for example teaching, nursing, accountancy)  
Source: Census

#### Qualifications in the adult population: No qualifications \*

% persons (aged 16+) with no qualifications, 2011  
Source: Census

#### Education, skills and training IMD domain\*

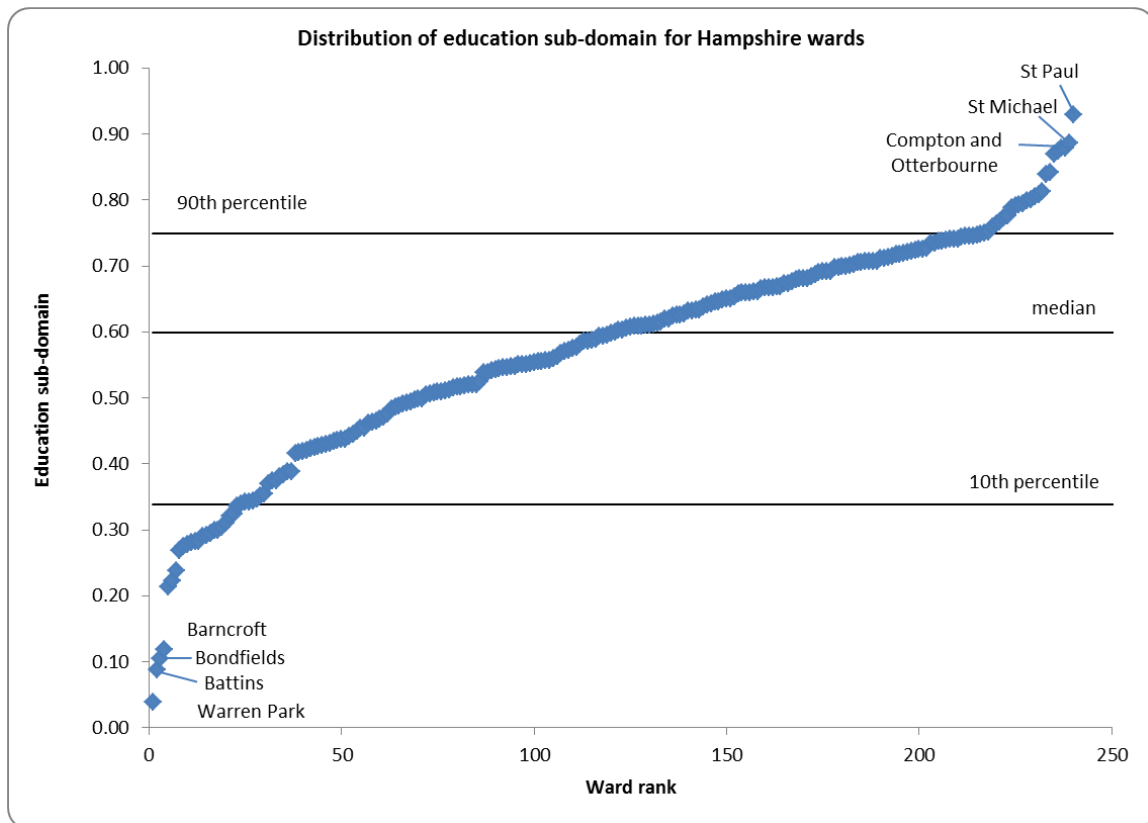
Source: IMD 2015, Ministry of Housing, Communities & Local Government

\*Denotes indicators where the polarity has been reversed (i.e. high values are associated with poor wellbeing)

## Distribution and summary statistics

### Correlation matrix

Hampshire - Education subdomain	Attainment - GCSE	Attainment - Year R	Qualifications - Level 2	Qualifications - Level 4	Qualifications - None*	Education IMD*
Attainment - GCSE	1					
Attainment - Year R	0.39	1				
Qualifications - Level 2	0.63	0.49	1			
Qualifications - Level 4	0.64	0.52	0.95	1		
Qualifications - None*	0.55	0.41	0.92	0.81	1	
Education IMD*	0.73	0.53	0.82	0.85	0.75	1



<b>Measures of central tendency</b>	
Mean	0.57
Median	0.60
<b>Measures of range</b>	
Minimum	0.04
Maximum	0.93
Mean of bottom decile	0.25
Mean of top decile	0.81
Ratio of top: bottom decile	3.20
Slope of mid-section	0.002

## Material wellbeing

### Income

Synthetic estimates of median household income, modelled using Mosaic

Source: Mosaic

### Employment rate

% (aged 16-74) in employment, 2011

Source: Census

### Unemployment rate: aged 16-64\*

Claimant count (%) aged 16-64, August 2016

Source: Department of Work and Pensions

### Unemployment rate: aged 50+\*

Claimant count (%) aged 50+, August 2016

Source: Department of Work and Pensions

**Unemployment rate: aged 18-24\***

Claimant count (%) aged 18-24, August 2016

Source: Department of Work and Pensions

**Working age benefits\***

% of working age (16-64) claiming benefits, August 2016

Source: Department of Work and Pensions

**Income deprivation: children\***

% of children affected by income deprivation (IDACI)

Source: IMD 2015, Ministry of Housing, Communities & Local Government

**Income deprivation: older people\***

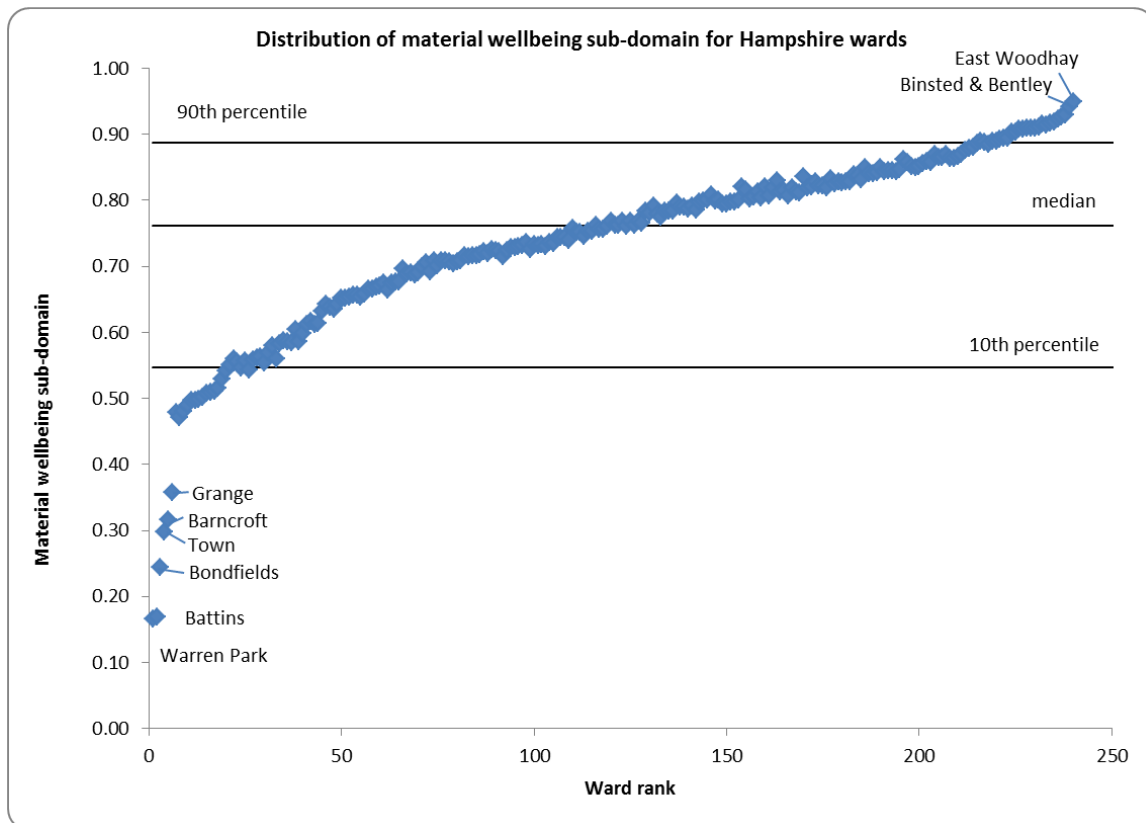
% of older people affected by income deprivation (IDAOP)\*

Source: IMD 2015, Ministry of Housing, Communities & Local Government

\*Denotes indicators where the polarity has been reversed (i.e. high values are associated with poor wellbeing)

**Correlation matrix**

Hampshire: Material wellbeing sub-domain	Income	Employment rate	Unemployment rate: age 16-64	Unemployment rate: aged 50+	Unemployment rate: aged 18-24	Working age benefits	Income deprivation affecting children (IDAC)	Income deprivation affecting older people (IDAOP)
Income	1.00							
Employment rate	0.19	1.00						
Unemployment rate: age 16-64	0.72	0.13	1.00					
Unemployment rate: aged 50+	0.52	-0.02	0.71	1.00				
Unemployment rate: aged 18-24	0.54	0.08	0.74	0.38	1.00			
Working age benefits	0.80	0.32	0.82	0.59	0.60	1.00		
Income deprivation affecting children (IDAC)	0.78	0.26	0.81	0.58	0.62	0.89	1.00	
Income deprivation affecting older people (IDAOP)	0.53	-0.01	0.53	0.66	0.35	0.57	0.54	1.00



<b>Measures of central tendency</b>	
Mean	0.74
Median	0.76
<b>Measures of range</b>	
Minimum	0.17
Maximum	0.95
Mean of bottom decile	0.45
Mean of top decile	0.91
Ratio of top: bottom decile	2.02
Slope of mid-section	0.001

## Health

### Health self-assessment

% in 'very good' or 'good' health (self-assessed), 2011

Source: Census

### Healthy life expectancy: At birth

Healthy life expectancy at birth, 2011-2015

Source: HCC Small Area Population Forecasts, ONS Primary Care Mortality Database (PCMD), Census

### Healthy life expectancy: At 65 years

Healthy life expectancy at 65 years, 2011-2015

Source: HCC Small Area Population Forecasts, ONS Primary Care Mortality Database (PCMD), Census

### Premature mortality\*

Premature mortality (all-cause, age-standardised), 2011-2015

Source: HCC Small Area Population Forecasts, ONS Primary Care Mortality Database (PCMD), Census

### Disability\*

% whose day to day activities are limited by a long term health problem or disability, 2011

Source: Census

### Depression\*

% with depression (based on GP-recorded level prevalence)

Source: HCC Small Area Population Forecasts, Care and Health Information Analytics (CHIA)

### Mental health problems\*

% with mental health problems (based on GP-recorded level prevalence)

Source: HCC Small Area Population Forecasts, Care and Health Information Analytics (CHIA)

### Hospital admissions: alcohol\*

Alcohol-related hospital admissions (all ages, age-standardised), 2014/15 to 2016/17

Source: HCC Small Area Population Forecasts, Hospital Episode Statistics (HES) NHS Digital

### Hospital admissions: self-harm\*

Emergency hospital admissions for self-harm (all ages, age-standardised emergency admission ratio), 2010/11 to 2014/15

Source: Mental Health and Wellbeing JSNA Profiles, Public Health England

### Hospital admissions: Falls\*

Emergency hospital admissions for falls (65+, age- standardised), 2012/13 to 2016/17

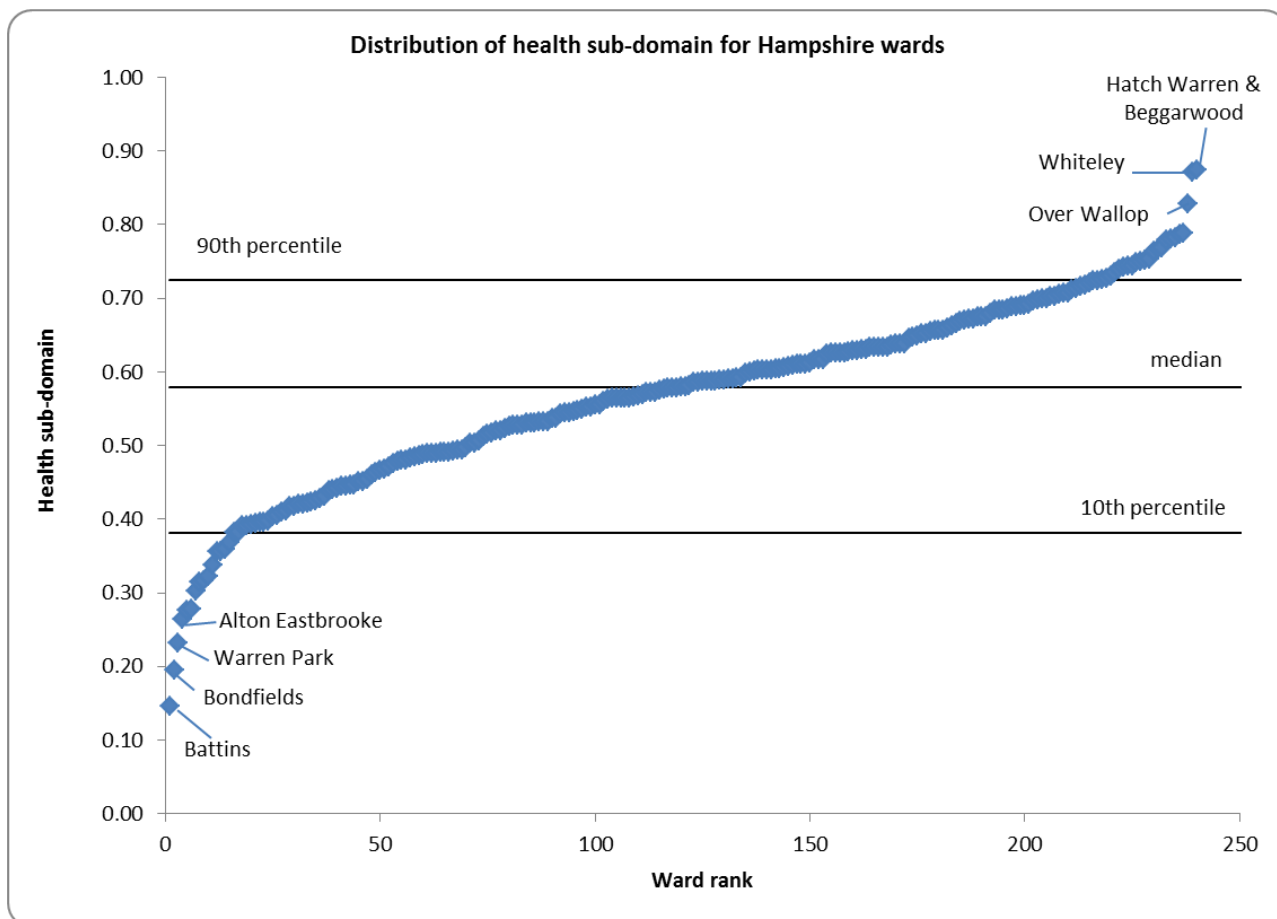
Source: HCC Small Area Population Forecasts, Hospital Episode Statistics (HES) NHS Digital

### Health IMD domain\*

Source: IMD 2015, Ministry of Housing, Communities & Local Government

### Correlation matrix

Hampshire: Health sub-domain	In good health	Healthy life expectancy at birth	Healthy life expectancy at 65	Premature mortality	Disability	Depression	Mental health problems	Admissions - alcohol	Admissions - self-harm	Admissions - falls	Index of Multiple Deprivation 2015: Health
In good health	1.00										
Healthy life expectancy at birth	0.56	1.00									
Healthy life expectancy at 65	0.57	0.79	1.00								
Premature mortality	0.51	0.80	0.67	1.00							
Disability	0.95	0.40	0.45	0.34	1.00						
Depression	0.15	0.33	0.32	0.33	0.05	1.00					
Mental health problems	0.40	0.56	0.43	0.55	0.34	0.39	1.00				
Admissions - alcohol	0.39	0.63	0.51	0.64	0.24	0.21	0.50	1.00			
Admissions - self-harm	0.46	0.62	0.48	0.63	0.32	0.30	0.50	0.66	1.00		
Admissions - falls	0.34	0.45	0.63	0.38	0.29	0.14	0.31	0.56	0.42	1.00	
Index of Multiple Deprivation 2015: Health	0.62	0.79	0.67	0.80	0.44	0.32	0.56	0.72	0.77	0.43	1.00



Measures of central tendency	
Mean	0.57
Median	0.58
Measures of range	
Minimum	0.15
Maximum	0.87
Mean of bottom decile	0.33
Mean of top decile	0.77
Ratio of top: bottom decile	2.32
Slope of mid-section	0.001

## Life satisfaction

### Low 'life satisfaction'\*

Synthetic estimates of the percentage scoring 0-6 for "Overall, how satisfied are you with your life nowadays?" modelled using Acorn.

Source: ONS (Annual Population Survey), Acorn, Ministry of Housing, Communities & Local Government

### Low 'happy yesterday'\*

Synthetic estimates of the percentage scoring 0-6 for "Overall, how happy did you feel yesterday?"

Source: ONS (Annual Population Survey), Acorn, Ministry of Housing, Communities & Local Government

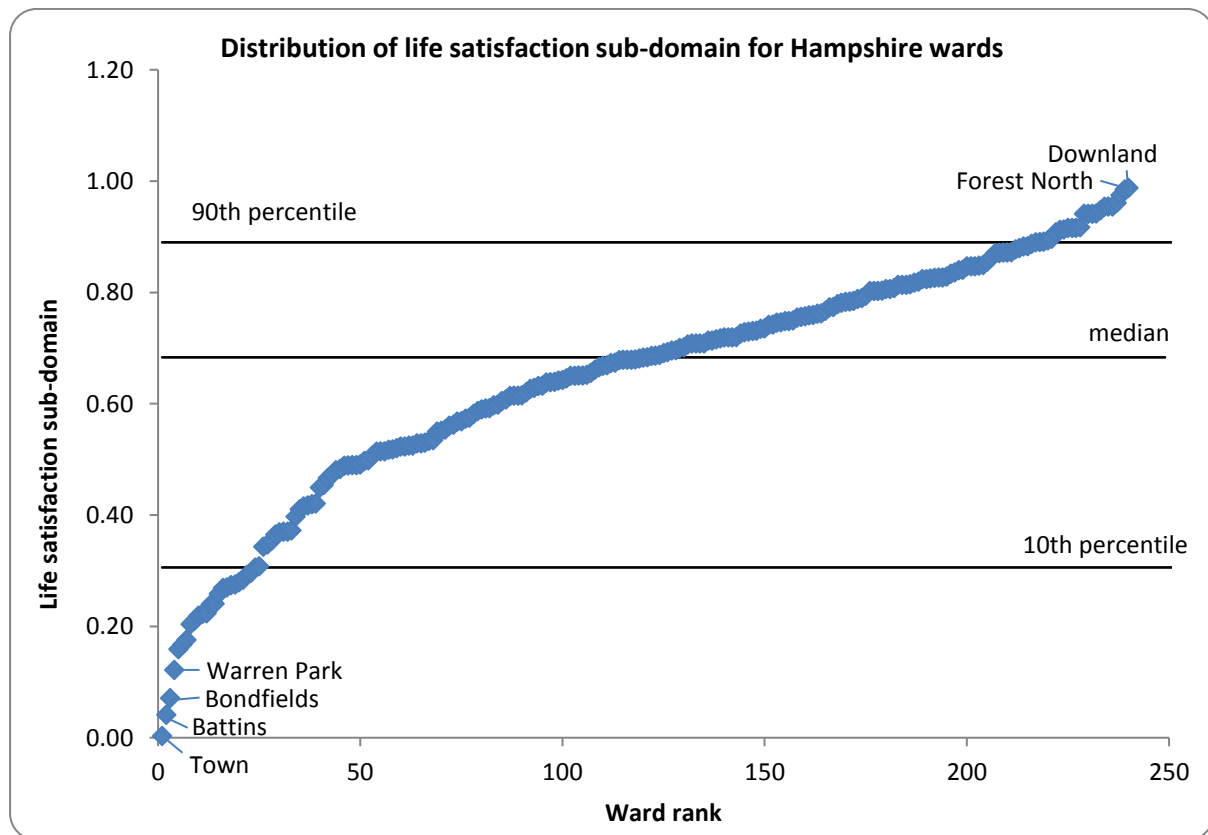
**Low 'worthwhile'\***

Synthetic estimates of the percentage scoring 0-6 for "Overall, to what extent do you feel the things you do in your life are worthwhile?"

Source: ONS (Annual Population Survey), Acorn, Ministry of Housing, Communities & Local Government

**Correlation matrix**

Hampshire: Life satisfaction sub-domain	Low 'life satisfaction'	Low 'happy yesterday'	Low 'worthwhile'
Low 'life satisfaction'	1.00		
Low 'happy yesterday'	0.97	1.00	
Low 'worthwhile'	0.98	0.97	1.00

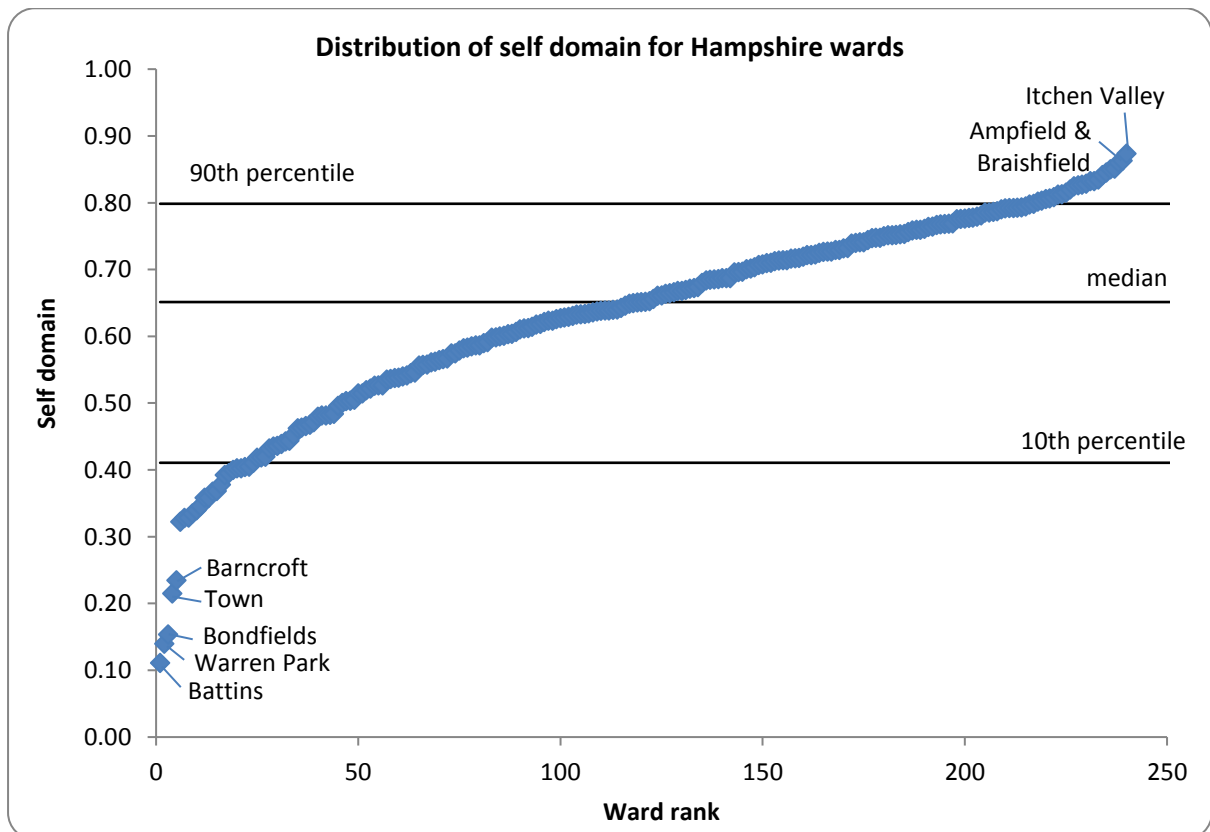




Measures of central tendency	
Mean	0.65
Median	0.68
Measures of range	
Minimum	0.00
Maximum	0.99
Mean of bottom decile	0.21
Mean of top decile	0.93
Ratio of top: bottom decile	4.38
Slope of mid-section	0.002

### Overall 'self' domain

Hampshire: 'Self' domain	Education	Material wellbeing	Health	Life satisfaction
Education	1.00			
Material wellbeing	0.89	1.00		
Health	0.82	0.83	1.00	
Life satisfaction	0.83	0.90	0.82	1.00



<b>Measures of central tendency</b>	
Mean	0.63
Median	0.65
<b>Measures of range</b>	
Minimum	0.11
Maximum	0.87
Mean of bottom decile	0.33
Mean of top decile	0.83
Ratio of top: bottom decile	2.52
Slope of mid-section	0.002

## Supports domain

### Strong & stable families

#### Married couple households with children

% living in households consisting of married couples with dependent children, 2011

Source: Census

#### Households with children but no adult in employment

% living in households with dependent children, but no adults in employment, 2011

Source: Census

#### Lone parent households with children: Dependent\*

% living in households consisting of a lone parent with dependent children, 2011

Source: Census.

#### Lone parent households with children: Any\*

% living in households consisting of a lone parent with children (either dependent or non-dependent), 2011

Source: Census

#### Divorcee households\*

% households headed by an adult (aged 16+) not living in a couple and divorced, 2011

Source: Census

#### Carers

% providing 50+ hours of unpaid care per week, 2011

Source: Census

#### Young carers

% children and young people (aged 0-24) providing unpaid care, 2011

Source: Census

#### Under-occupied households – single person aged 65+\*

% households that are under-occupied by a single-person aged 65+, 2011

Source: Census.

#### One person pensioner households\*

% living in one person pensioner (aged 65+) households, 2011

Source: Census

#### Social isolation\*

Modelled social isolation propensity indicator, 2015.

Source: Census, modelled at HCC

#### Safe from harm: domestic abuse victims

Domestic abuse incidents, rate per 1,000 population, 2016/17

Source: Hampshire Constabulary

#### Safe from harm: adult safeguarding incidents

Adult social care safeguarding enquiries, 2015-17

Source: Adults' Health and Care Information Team, Hampshire County Council

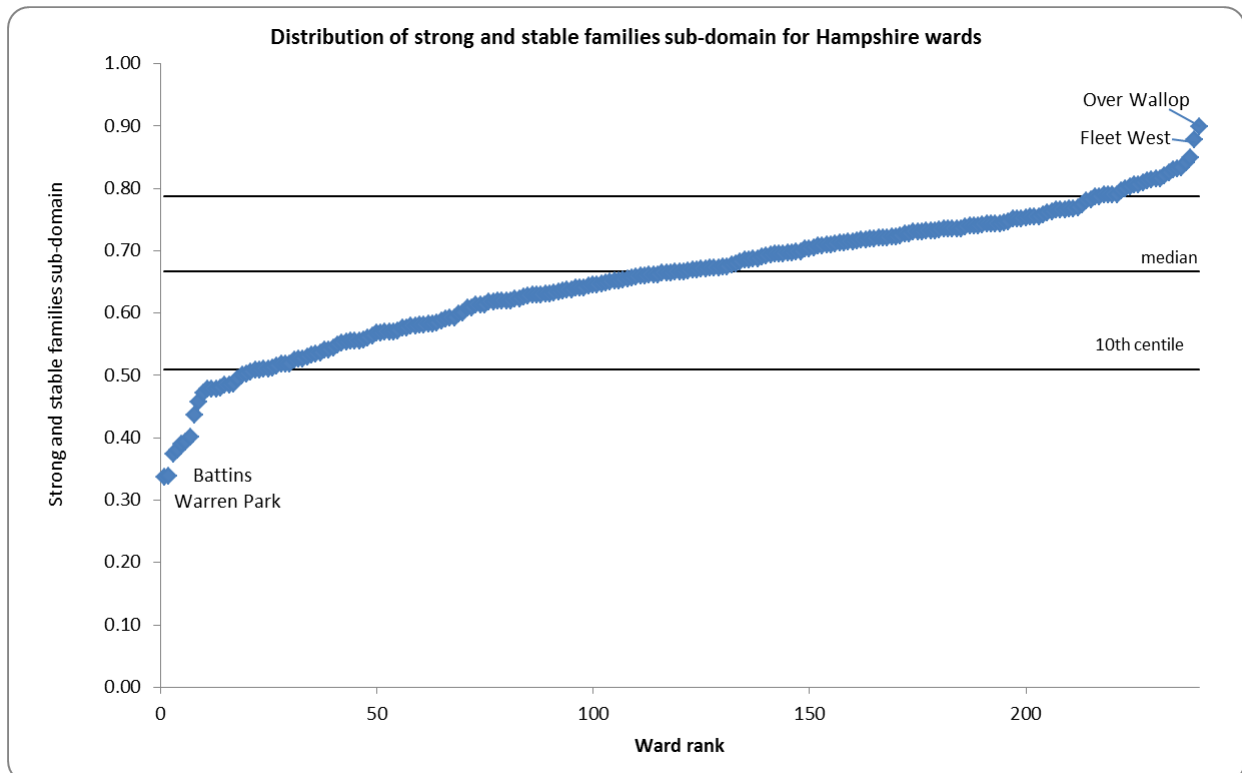
#### Safe from harm: child safeguarding incidents

Children’s social care referrals progressing to an initial assessment, April 2015 to November 2017

Source: Children’s Service Data and Information Team, Hampshire County Council

\*Denotes indicators where the polarity has been reversed (i.e. high values are associated with poor wellbeing)

Hampshire - Strong and stable families subdomain	Married with children	No employment with children	Lone parents (dependent)	Lone parents (any age)	Divorcee households	Carers	Young carers	Under-occupied, aged 65+	One person pensioners	Social isolation	Domestic abuse incidents	Social care referrals (adults)	Social care referrals (children)
Married with children	1												
No employment with children	0.37	1											
Lone parents (dependent)	0.39	0.92	1										
Lone parents (any)	0.45	0.91	0.98	1									
Divorcee households	0.54	0.69	0.81	0.83	1								
Carers	0.67	0.44	0.39	0.47	0.38	1							
Young carers	0.52	0.32	0.35	0.41	0.45	0.50	1						
Under-occupied, aged 65+	0.49	-0.32	-0.33	-0.27	-0.11	0.38	0.19	1					
One person pensioners	0.61	-0.19	-0.17	-0.11	0.13	0.40	0.31	0.90	1				
Social isolation	0.79	0.29	0.32	0.39	0.49	0.66	0.55	0.55	0.75	1			
Domestic abuse incidents	0.43	0.78	0.78	0.77	0.63	0.38	0.35	-0.24	-0.10	0.36	1		
Social care referrals (adults)	0.27	-0.01	-0.03	0.01	0.09	0.17	0.24	0.26	0.31	0.28	0.08	1	
Social care referrals (children)	0.52	0.85	0.83	0.85	0.70	0.54	0.44	-0.15	-0.02	0.46	0.78	0.08	1



<b>Measures of central tendency</b>	
Mean	0.66
Median	0.67
<b>Measures of range</b>	
Minimum	0.34
Maximum	0.90
Mean of bottom decile	0.45
Mean of top decile	0.82
Ratio of top: bottom decile	1.80
Slope of mid-section	0.001

## **Social capital (modelled)**

### **Voluntary work**

Synthetic estimates of the % who participate in any voluntary work, modelled from weighted Community Life Survey data on the basis of NS-SEC distributions, 2011

Source: Community Life Survey, Census

### **Environmental organisation membership**

Synthetic estimates of the % who are a member of an environmental organisation, modelled from weighted Community Life Survey data on the basis on NS-SEC distributions, 2011

Source: Community Life Survey, Census

### **Sports/hobby organisation membership**

Synthetic estimates of the % who are a member of a sports organisation, modelled using Sport England Market Segmentation data, 2010

Source: Sport England Market Segmentation

### **Participation in sport**

Synthetic estimates of those % who play sport at least once a week, modelled using Sport England Market Segmentation data, 2010

Source: Sport England Market Segmentation

### **Sense of community: belong to neighbourhood**

Synthetic estimates of the % who feel that they 'belong to neighbourhood', modelled using weighted Community Life Survey data on the basis of economic activity categorisation

Source: Community Life Survey, Census

### **Sense of community: talk to neighbours**

Synthetic estimates of the % who feel that they 'belong to neighbourhood', modelled using weighted Community Life Survey data on the basis of economic activity categorisation

Source: Community Life Survey, Census

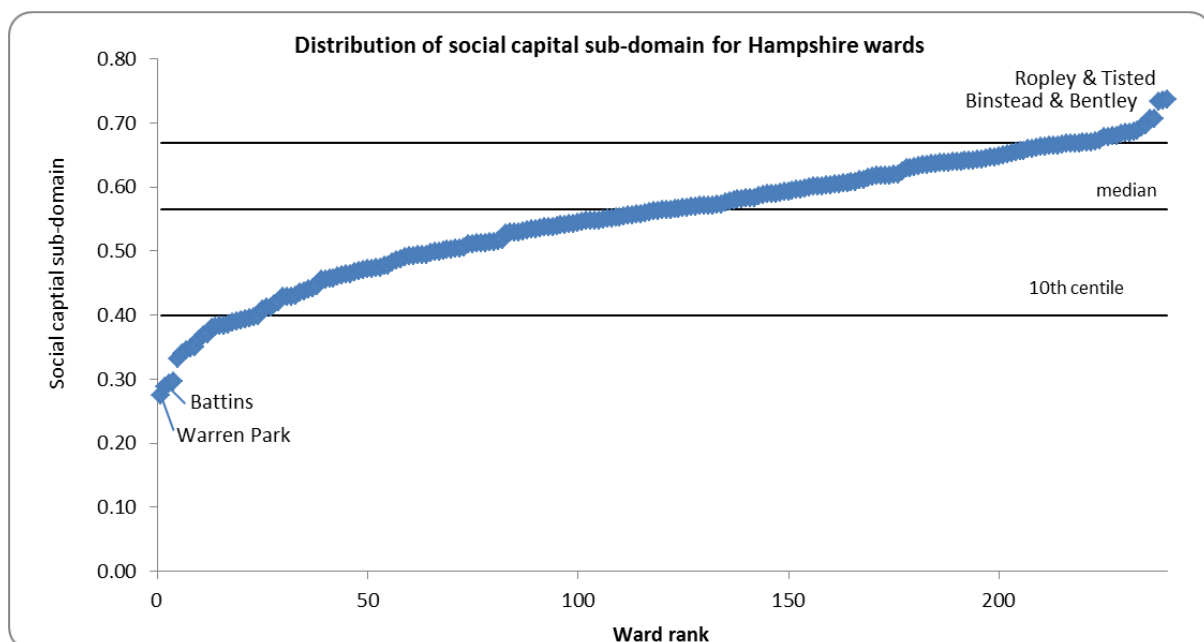
### **Transiency\***

% not living at the same address on year age, 2011

Source: Census

\*Denotes indicators where the polarity has been reversed (i.e. high values are associated with poor wellbeing)

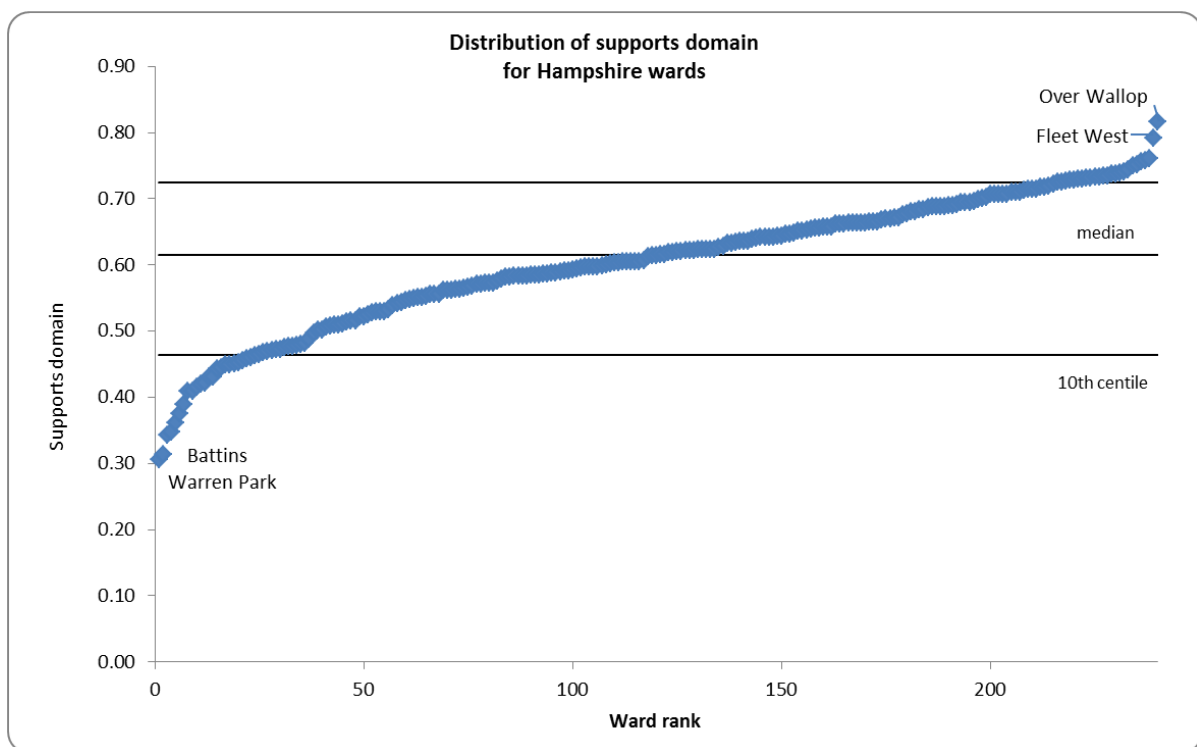
Hampshire - Social capital subdomain	Voluntary work	Environmental organisation	Sports/ hobby organisation	Participation in sport	Election turnout	Belong to neighbourhood	Talk to neighbours	Transiency
Voluntary work	1							
Environmental organisation	0.67	1						
Sports / hobby organisation	0.88	0.55	1					
Participation in sport	0.79	0.55	0.91	1				
Election turnout	0.76	0.54	0.72	0.52	1			
Belong to neighbourhood	0.39	-0.31	0.30	0.20	0.27	1		
Talk to neighbours	-0.39	-0.54	-0.44	-0.45	-0.32	0.53	1	
Transiency	-0.02	-0.29	0.10	-0.09	0.27	0.23	0.04	1



Measures of central tendency	
Mean	0.55
Median	0.56
Measures of range	
Minimum	0.28
Maximum	0.74
Mean of bottom decile	0.36
Mean of top decile	0.69
Ratio of top: bottom decile	1.91
Slope of mid-section	0.001

## Overall 'supports' domain

Hampshire - Supports Domain	Strong & stable families	Social Capital
Strong & stable families	1	
Social Capital	0.85	1.00



Measures of central tendency	
Mean	0.60
Median	0.62
Measures of range	
Minimum	0.31
Maximum	0.82
Mean of bottom decile	0.41
Mean of top decile	0.74
Ratio of top: bottom decile	1.80
Slope of mid-section	0.001

## Systems and structures domain

### Enabling Infrastructure

#### Renting households\*

% households living in rented accommodation (or living rent free), 2011

Source: Census

#### Over-occupied households\*

% households that are over-occupied, 2011

Source: Census

#### Travel to work: less than 10km

% employed adults travelling less than 10km to work (or working from home), 2011

Source: Census

#### Access to services: Distance to GP\*

Distance to nearest GP, 2015

Source: Department for Transport

#### Access to services: Distance to A&E\*

Distance to nearest urgent care centre / A&E, 2015

Source: Department for Transport

#### Barriers to housing and services IMD domain\*

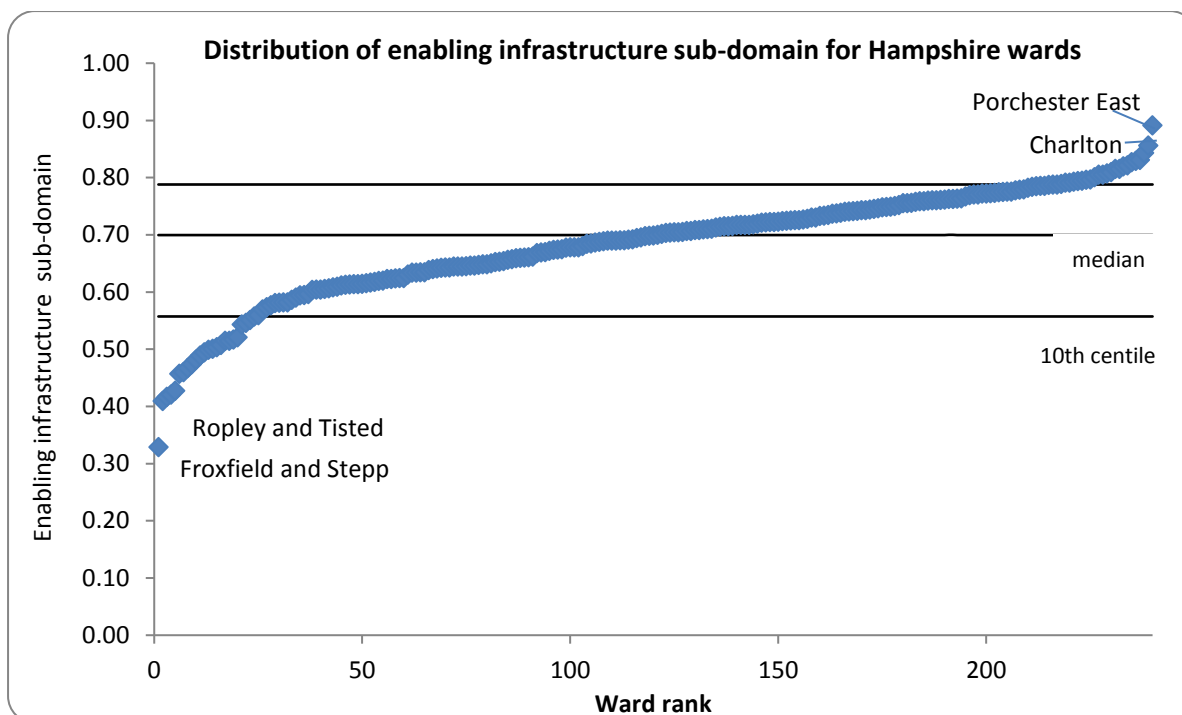
Source: IMD 2015, Ministry of Housing, Communities & Local Government

\*Denotes indicators where the polarity has been reversed (i.e. high values are associated with poor wellbeing)

Hampshire - Enabling infrastructure subdomain	Renting households	Over-occupied households	Travel to work	Access to GP	Access to hospital	IMD 2015 Barriers to housing and services
Renting households	1					
Over-occupied households	0.72	1				
Travel to work	-0.26	-0.37	1			
Access to GP	-0.11	-0.34	0.41	1		
Access to hospital	-0.18	-0.29	0.36	0.35	1	
IMD 2015 Barriers to housing and services	0.13	-0.18	0.35	0.73	0.30	1.00

The correlation matrix shows a mix of positive and negative correlations between the six measures of enabling infrastructure at ward level. In particular, the measures relating to poor housing often negatively correlate with measures relating to access to services. This is to be expected due to the influence of deprived urban areas, where housing is poor but access to services is good.





Measures of central tendency	
Mean	0.68
Median	0.70
Measures of range	
Minimum	0.33
Maximum	0.89
Mean of bottom decile	0.48
Mean of top decile	0.81
Ratio of top: bottom decile	1.68
Slope of mid-section	0.001

## Enabling Infrastructure

### Number of businesses

Number of businesses by MSOA, per head of population, 2016

Source: UK Business Counts, ONS

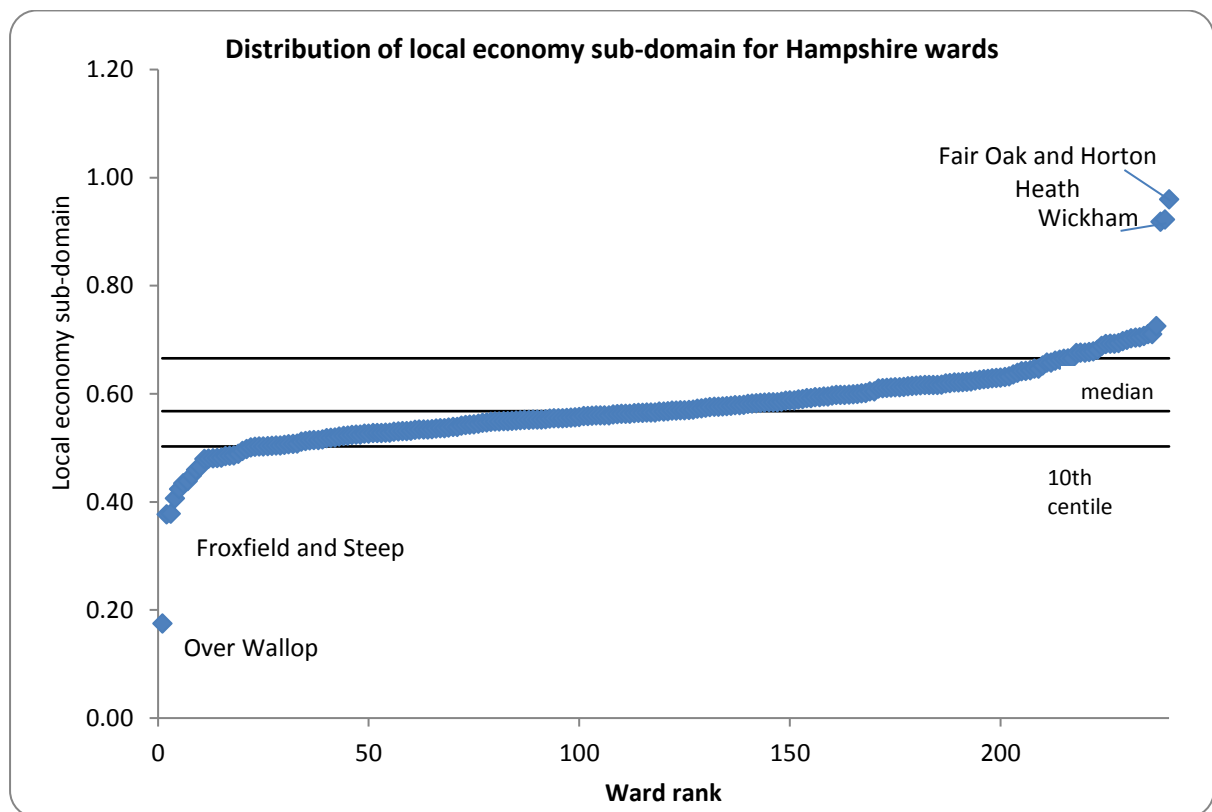
### Access to employment \*

Average travel times to public transport / walking to medium-sized employment centres (with 500 to 4999 jobs available), 2016

Source: Department for Transport

\*Denotes indicators where the polarity has been reversed (i.e. high values are associated with poor wellbeing)

Hampshire - Local economy subdomain	Businesses per head of population	Access to employment
Businesses per head of population	1	
Access to employment	-0.47	1



Measures of central tendency	
Mean	0.58
Median	0.57
Measures of range	
Minimum	0.18
Maximum	0.96
Mean of bottom decile	0.45
Mean of top decile	0.72
Ratio of top: bottom decile	1.60
Slope of mid-section	0.001

## Effective public services

### Satisfaction with GP

% who would recommend GP surgery to someone who has just moved to the area (modelled from practice-level data), 2016.

Source: GP Patient Survey, Patients registered at a GP practice, NHS Digital

### Satisfaction with local police

Synthetic estimates of the % rating local police as doing a good or excellent job, modelled using NS-SEC distribution

Source: British Crime Survey

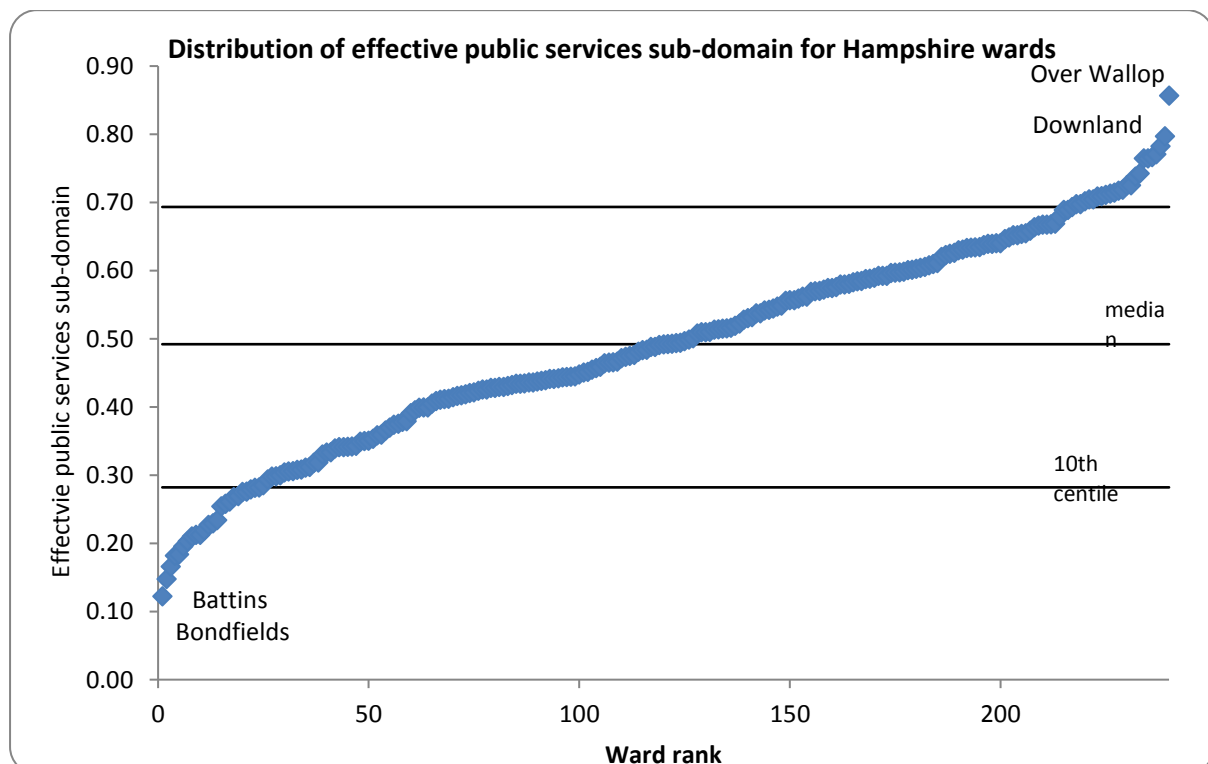
### Library usage

Synthetic estimates of library usage based on Sports England Market Segmentation data

Source: Sport England Market Segmentation

- Placeholder until data supply from Library Services

Hampshire - Effective public services subdomain	Satisfaction with GP	Satisfaction with local police	Library usage
Satisfaction with GP	1		
Satisfaction with local police	0.32	1	
Library usage	0.27	0.77	1



<b>Measures of central tendency</b>	
Mean	0.49
Median	0.49
<b>Measures of range</b>	
Minimum	0.12
Maximum	0.86
Mean of bottom decile	0.23
Mean of top decile	0.73
Ratio of top: bottom decile	3.23
Slope of mid-section	0.002

## **Crime & antisocial behaviour**

### **Feeling safe: walking alone at night**

Synthetic estimates of the % who feel safe walking alone at night, modelled from the Community Life Survey using NS-SEC distribution

Source: Community Life Survey

### **Concerned about burglary**

Synthetic estimates of the % who are concerned about burglary, modelled from the British Crime Survey

Source: British Crime Survey

### **Crime: All recorded\***

Reported crime rate: all recorded crime (rate per 1,000 population), August 2015 to August 2016. Excludes antisocial behaviour.

Source: police.data.uk

### **Crime: Burglary\***

Reported crime rate: burglary (rate per 1,000 population), August 2015 to August 2016.

Source: police.data.uk

### **Crime: Antisocial behaviour\***

Reported crime rate: antisocial behaviour (rate per 1,000 population), August 2015 to August 2016. Excludes antisocial behaviour.

Source: police.data.uk

### **Crime: Violence and sexual offences\***

Reported crime rate: violence and sexual offences (rate per 1,000 population), August 2015 to August 2016. Excludes antisocial behaviour.

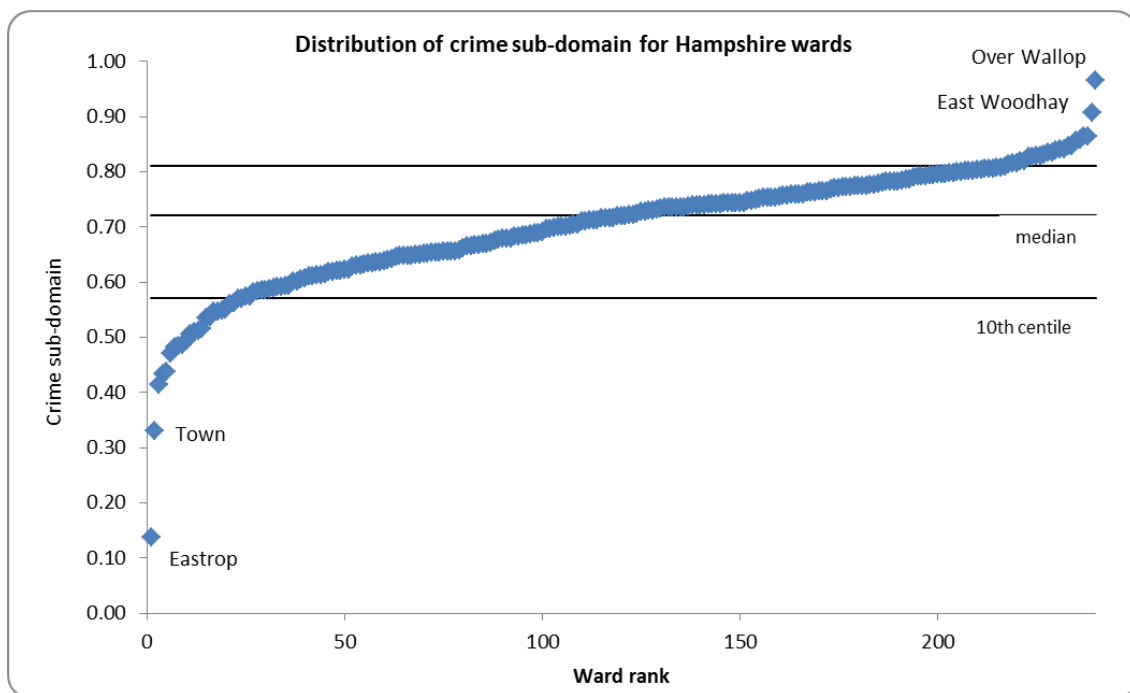
Source: police.data.uk

### **Crime IMD domain\***

Source: IMD 2015, Ministry of Housing, Communities & Local Government

\*Denotes indicators where the polarity has been reversed (i.e. high values are associated with poor wellbeing)

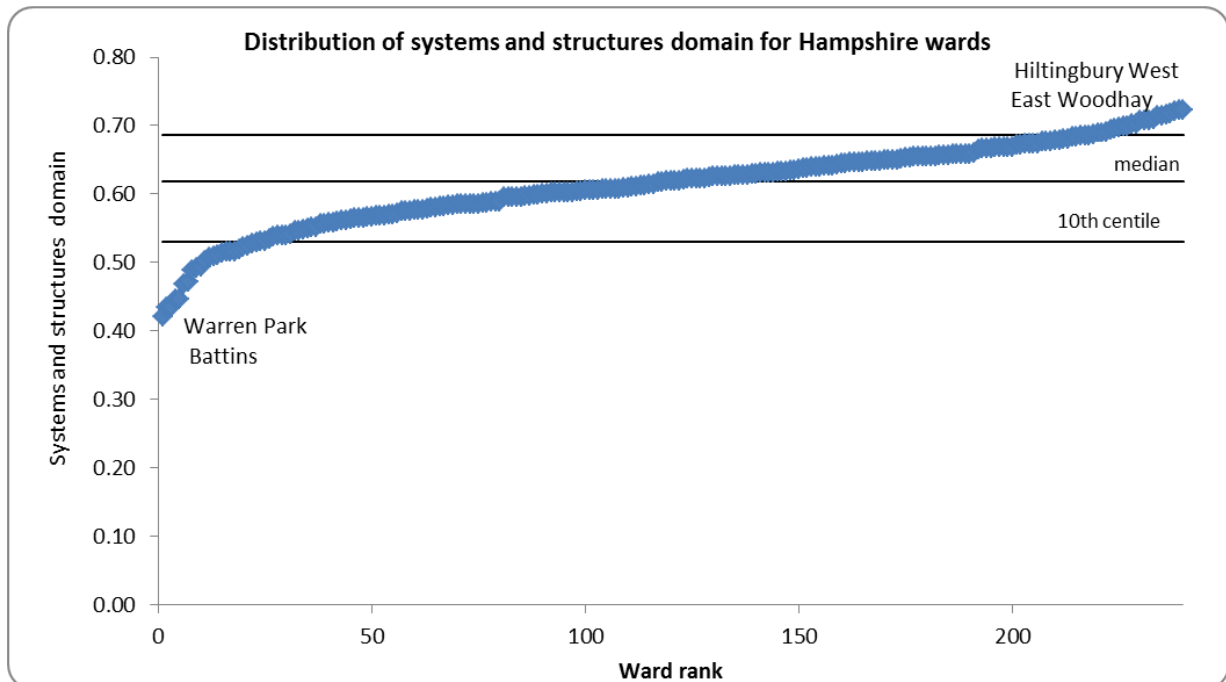
Hampshire - Crime subdomain	Feel safe walking alone at night	Concerned about burglary	All recorded crime	Burglary	Antisocial behaviour	Violence and sexual offences	IMD 2015 Crime
Feel safe walking alone at night	1						
Concerned about burglary	0.80	1					
All recorded crime	0.26	0.26	1				
Burglary	-0.10	-0.04	0.42	1			
Antisocial behaviour	0.48	0.48	0.76	0.23	1		
Violence and sexual offences	0.57	0.56	0.72	0.18	0.93	1	
IMD 2015 Crime	0.55	0.62	0.55	0.28	0.61	0.64	1



Measures of central tendency	
Mean	0.70
Median	0.72
Measures of range	
Minimum	0.14
Maximum	0.97
Mean of bottom decile	0.49
Mean of top decile	0.84
Ratio of top: bottom decile	1.72
Slope of mid-section	0.001

## Overall 'systems and structures' domain

Hampshire - Systems and structures domain	Enabling infrastructure	Local economy	Effective public services	Crime
Enabling infrastructure	1			
Local economy	0.18	1		
Effective public services	-0.45	0.06	1	
Crime	0.03	0.05	0.52	1.00



<b>Measures of central tendency</b>	
Mean	0.61
Median	0.62
<b>Measures of range</b>	
Minimum	0.42
Maximum	0.72
Mean of bottom decile	0.49
Mean of top decile	0.70
Ratio of top: bottom decile	1.43
Slope of mid-section	0.001