Taking the temperature of local communities

The Wellbeing and Resilience Measure (WARM)

Nina Mguni & Nicola Bacon

Local Wellbeing Project

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About the Local Wellbeing Project

The Local Wellbeing Project was a three-year initiative to explore how local government can improve the wellbeing of its citizens. The project brought together the Young Foundation, Professor Lord Richard Layard at the London School of Economics' Centre for Economic Performance, the Local Government improvement and Development Agency (formerly IDeA), Hertfordshire County Council, Manchester City Council, South Tyneside Metropolitan Borough Council.

The aims of the Local Wellbeing Project were:

- to establish the value of local government prioritising wellbeing in service delivery and strategic planning with local communities;
- to explore effective ways to measure wellbeing and resilience at local level; and
- to develop replicable practice to maximise wellbeing in service delivery.

THE YOUNG FOUNDATION

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Foreword

The UK is rich in data, including extensive data on local areas. But over the years it has become ever clearer that supply doesn't automatically create demand. Local councils and voluntary organisations have not always been very effective at using that data to decide on priorities for action. There's also a bias in the kinds of things that get measured. These tend to be the more obviously countable things like numbers of jobs, crimes reported or exams passed. Yet often the things that matter most in a community are less visible: like the strength of connections and commitments, or levels of wellbeing, or resilience to cope with shocks.

WARM was developed to provide a way of bringing together existing and new data to help communities make sense of their choices. We particularly wanted to develop an approach that could analyse assets – the things that make communities work – as well as deficits. And we wanted a method that could help local areas compare themselves not to national or regional averages, but rather to other areas similar to them.

Pilots around the country have shown that this approach really does work; it helps communities use the data that is already available more rigorously and more creatively. It provides a context for adding in new data as well. And it provides the vital starting point for a serious discussion about priorities.

Crucially too this is an approach which is designed to be owned and managed from the bottom up and not from the top down. Over the last few years measurement became too associated with performance management and interference on the part of distant bureaucracies. WARM by contrast is a tool for communities to better understand themselves.

It's not true to claim that anything that can't be measured can't be managed (and it's hard not to feel sorry for anyone who truly believes that, and applies it to their own lives). But better measurements, along with better ways of bringing data together, can help us to make better decisions, and help us to use scarce resources to better effect.

Geoff Mulgan, Chief Executive, Young Foundation

Summary

What is WARM and who is it for?

The Wellbeing and Resilience Measure (WARM) is a framework to measure wellbeing and resilience at a local level. WARM helps identify who is vulnerable, who is not, and why. It supports localism, by giving better information to both communities and residents, and agencies responding to their concerns and aspirations.

Wellbeing and resilience measures can enable local professionals and communities to see which services are having an impact on people's lives at a local level and which are not; identify a community's strengths as well as its weaknesses; and make more informed decisions about where to direct limited resources.

Understanding how people feel about the quality of their lives is important for local decision-makers and service providers at any time, but becomes vital when resources are as scarce as they are in these uncertain times.

WARM gives fresh insights into the dynamics of communities. It can be used to:

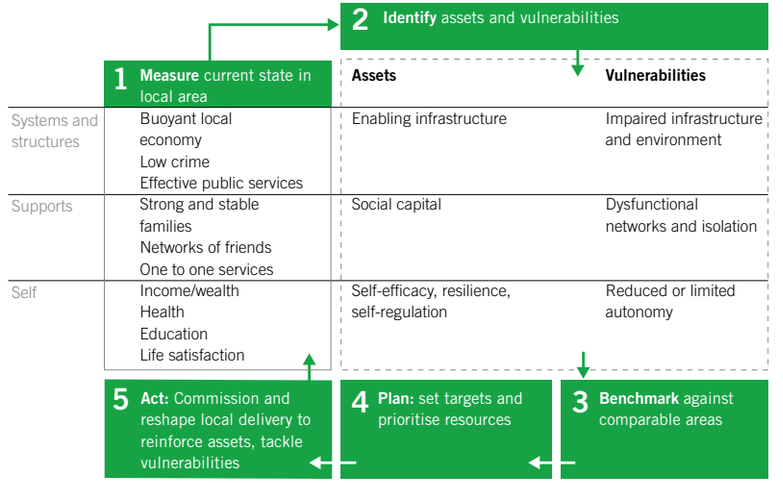
- **Measure life satisfaction:** Capture information on how well – or not – a community is faring. This could be as part of a routine 'state of the community' health check or part of a more targeted mapping exercise.
- **Map local assets and vulnerabilities:** This can contribute to a general audit of the community or focus on specific issues, such as how to work with vulnerable families, or social capital.
- **Inform local decision making:** WARM provides a strong starting point for service re-design and developing local initiatives.

It is our hope that wellbeing and resilience measures will soon become as much of a determining factor for policy makers as Gross Domestic Product is for economists and the weather forecast is for farmers.

How should WARM be used?

WARM has five stages:

Figure 1: The five stages of WARM



The **first stage** is to measure wellbeing. To do this we look at three domains:

  - Self: the way people feel about their own lives
  - Support: the quality of social supports and networks within the community
  - Structure and systems: the strength of the infrastructure and environment to support people to achieve their aspirations and live a good life.
- The **second stage** measures resilience, by creating a map of assets and vulnerabilities in the community. Accurately identifying the assets, for example social capital, and the vulnerabilities, for example social isolation, helps estimate the capacity of a community to withstand shock and pinpoint where support should be targeted.
- The **third stage** is a benchmarking process. We use national and local authority wide data to draw out local trends in life satisfaction.
- The **fourth stage** is about planning. We use the data provided from stages one to three to inform communities, commissioners and local partnerships about what is working well, and where further interventions are needed. This stage can also involve the public, political leaders, community organisations and business.
- The **fifth stage** is about action – creating or redesigning local services to ensure they respond effectively to local needs and wishes.

We see the **five stages of WARM** as an iterative process. The process should be repeated over time to help identify the extent to which interventions have led to tangible improvements in life satisfaction.

Introduction

This report sets out a new way to measure the wellbeing and resilience of people and communities. It starts from the assumption that the key to flourishing neighbourhoods is to boost local assets and social wealth, while also tackling vulnerabilities and disadvantage. It describes a tool – Wellbeing and Resilience Measure (WARM) – that has been designed to support local agencies and communities to better understand, plan and act.

The UK is well served by extensive data about our population and social needs, much of it available at a very local level. This data covers everything from economic indicators and income to measures of health and education. However, it is relatively little used by decision makers at local level, whether local authorities, businesses or community organisations, to interpret how these variables impact on how residents feel about their lives. Few surveys capture data on quality of life and the social supports available, though there are some exceptions.[1] Datasets largely ignore many of the issues that matter most to people, such as the quality of social support and how people feel about their lives, and where such information does exist it is often dated.

Our starting point in developing WARM has been to make the best use of the data that is currently available, while also suggesting how it can be complemented with new data. The framework we have developed measures residents' current wellbeing and other measures of local areas circumstances and needs. It also then looks at the balance of assets and vulnerabilities that are most likely to determine future success and how resilient the community will be to shocks. WARM helps to identify better ways to support assets that already exist in communities, as well as to reduce the impact of vulnerabilities. With budgets for traditional area-based working to tackle poverty and deprivation shrinking, new ways are needed to diagnose local needs and maximise the impact of public money.

WARM is not a tool for traditional performance measurement, and cannot rank the performance of different areas. Instead it is designed to help local areas and the agencies that work in them understand their own capabilities and needs. It supports serious conversations, negotiations and decision making, by helping local agencies to assemble their local data, assess levels of wellbeing, alongside community assets and vulnerabilities, and compare this against a national benchmark, to decide on priorities for action.

WARM provides a way of understanding and identifying an area's strengths, such as levels of social capital, confidence amongst residents, the quality of local services or proximity to employment; as well as vulnerabilities such as isolation, high crime, low savings and unemployment.

This report describes the method in detail, including a series of case studies, and annexes that address some of the methodological issues and challenges. It covers:

- Part 1: Defining local wellbeing and resilience
- Part 2: Constructing WARM
- Part 3: Applying WARM in three case study local authorities
- Part 4: Selecting indicators and creating the measurement framework
- Appendixes 1 to 9: Detailed background to the framework

An overview of WARM: The framework
Our starting point was to:

1 Capture indicators that are relevant to communities and agencies operating at the local level. We have applied a filter to identify those measures that are pertinent to understanding local wellbeing and resilience and fall within the jurisdiction of local agencies or which may influence local service provision.
2 Draw on objective and subjective metrics. For example, one element of community wellbeing could be satisfaction with GPs' services, as well as the number of GPs in an area; another example is perception of levels of crime and anti-social behaviour alongside actual crime data.
3 Take account of both assets and deficits. An example of asset could be an indicator that captures levels of confidence amongst residents in an area, reflecting positive mental health. An example of a deficit could be isolation.
4 Use a basket of indicators, recognising the multi-faceted nature of wellbeing, but also that each indicator impacts on wellbeing to varying degrees.
5 Devise a framework that could be tailored to different local areas. Where additional data exists, or where specific local factors are deemed particularly important, these can be added to the framework. Clearly, when indicators are locally tailored, the ability to compare to national patterns is likely to be compromised.
6 Explore very local areas in depth, not create a resilience league table of local areas.
7 Draw on existing evidence of what factors contribute to life satisfaction, including statistical analysis of British Household Panel data.

The WARM framework has been designed to be adapted by local areas in the recognition that circumstances, priorities and data availability vary greatly from neighbourhood to neighbourhood.

Recommendations on data gathering

This report has focused on how we can use existing data to understand and explain complex patterns at the very local level. We have drawn on national surveys and large-scale datasets. Through this work we have identified four data gaps. If this information were available, our picture of resilience and wellbeing in local communities would be greatly enriched. The following are some of the key questions that we think could generate particularly useful datasets, and that should be piloted in local areas:

- How many people can you rely on to help in times of need?
- Overall, how would you describe the quality of your life?
- In the area where you live, would you intervene to help a child who was being hurt in the street?
- How confident do you feel?

Some more work is needed to pilot these questions to ensure robustness.

The report

This Young Foundation project has been supported by the Audit Commission, Department of Education, Department of Health, Communities and Local Government, Local Government Improvement and Development, and the Local Government Association.

It has grown out of the Local Wellbeing Project, a partnership between the Young Foundation, Professor Lord Layard of the London School of Economics, Local Government Improvement and Development (formerly IDeA) and three local authorities: Hertfordshire, Manchester and South Tyneside. The aim of the project was to develop and test approaches to the design and delivery of policies and services that promote wellbeing at the local level.

This work has built on the Local Wellbeing Project's initial work on measuring wellbeing at the local level, *Local Wellbeing: Can we measure it?* published in 2008.

The findings and recommendations in this report are those of the authors and do not necessarily represent the views or proposed policies of any of the departments or organisations listed above.

PART 1

Defining local wellbeing and resilience

1.1 Defining wellbeing

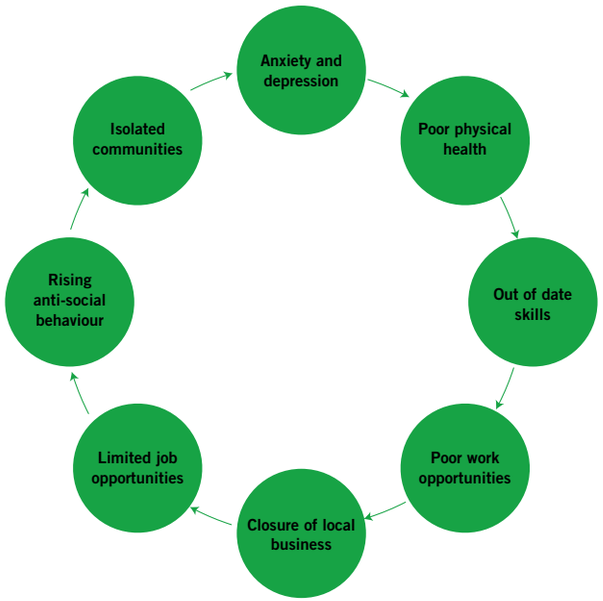
There is as yet no universally accepted definition for 'wellbeing', at an individual or community level. A range of definitions has been applied across various policy areas, usually informed by the specific jurisdiction of the government department. Although attempts have been made to establish a common definition, none has been produced.

The focus in our work has been on individual 'subjective wellbeing', how people experience the quality of their lives, alongside community wellbeing – the extent to which local services and infrastructure has the capacity to support or reduce wellbeing. We see this as the most fundamental test of any area: does it provide its citizens with a good life?

Academic research on wellbeing has emphasised various factors as being particularly important in shaping wellbeing (a summary of the academic research is presented in Part 4). These tend to include family relationships, financial situation, health, friends, work, freedom and values. But the community matters too.[2]

Some people can be happy anywhere. But most people's individual wellbeing is influenced by the wellbeing of the community in which they live. For example, people may feel more anxious about crime if they live in an area where there are few social networks and where neighbours do not tend to know each other. Non-spatial communities (for example communities of faith or of ethnicity) can also impact on wellbeing, though these effects are inherently harder to map.[3]

Figure 2: How local environments can interact with individual characteristics in harmful ways



1.2 Defining resilience

The recent economic downturn has prompted fresh interest in what protects or helps communities overcome shock. National or regional events play out at the very local level, be it recession (resulting in local business closures, increased unemployment and sometimes crime); an influx/out flux of a large number of people from/to other areas (even nations); or environmental catastrophe such as flooding.

Much work has been done on individual resilience to understand why some individuals bounce back or flourish in the face of adversity or risk. Research, particularly in relation to child and adolescent development, has tried to understand the interplay of 'biological, psychological and socio-cultural' variables that allow successful adaptation in some individuals. Research on community resilience is less developed, but extends these approaches,[4] based on the premise that 'place matters'.[5]

More on resilience

The literature broadly defines resilience as **person focused** or **variable focused**.

- The **person focused** approach identifies people who meet set criteria for resilience. However, describing resilience as an individual trait can negate the impact of external factors and, according to one study, "may foster perspectives that blame the individual for their negative outcomes".[6]
- The **variable focused** approach examines the links between competence, adversity and interactions with the wider world. Ingrid Schoon states that whilst "individuals may manifest a resilience in their behaviour and life patterns, resilience is not a personality characteristic".[7] This defines resilience primarily in terms of 'adaptive functioning', which explores how people relate to and interact with family and the wider social environment, alongside their individual characteristics.

Sir Michael Rutter, a leading child psychiatrist who specialises in the interplay between genetic and psychosocial risk factors, makes a useful distinction between moderating factors (which help a person or community thrive) prior to adversity and moderating factors at the time of or after adversity. Our focus is on understanding the factors that moderate risk prior to adversity, which we refer to as 'assets'.[8]

1.3 The relationship between resilience and wellbeing

Resilience and wellbeing are inextricably linked. The ability to make decisions, to overcome challenges, to ask for help, the story that we tell ourselves when we fail, are all resilient behaviours that impact on wellbeing, either positively or negatively. Additionally, positive feelings of wellbeing associated with resilience can in turn lead to higher levels of subjective wellbeing.[9]

Our definition of wellbeing and resilience also includes social capital and structural features. Social capital – relationships with family, friends, neighbours, colleagues and wider community – support the ability to bounce back or withstand adversity.[10] Some structural features also contribute to a resilient community, such as good transport links and proximity (and quality) of services such as primary schools, GP surgeries and local hospitals. Also important are local buildings and organisations that allow communities to come together, have a collective voice, and access support.

WARM therefore combines assessments of wellbeing with assessments of resilience, the ability to bounce back from adversity or resist shocks. This is shaped by the interaction of personal and community assets, such as human capital, finance or strong social supports, and vulnerabilities such as poor mental health. We are particularly interested in both what we call 'adaptive resilience', the ability to use even crises and setbacks as opportunities, and what we call 'survival resilience', which is simply the ability to absorb shocks. The former is the critical quality that helps areas adapt to change.

WARM shifts focus away from a purely deficit model and directs attention towards what assets exist, and how they can be amplified to absorb risk. A focus on resilience sharpens attention on what a community can do to meet its own needs and on what assets, formal and informal support and structures, are available.

1.4 Why focus on local communities?

Communities are one of the main arenas in which people act out their lives, as individuals, with their family and with peers, though we often travel beyond these boundaries to work, study or socialise and opt into social networks outside of our local area. Geographic communities are not fixed, as different types of people move in and settle, so a level of transience and change is inevitable. However, where we live matters and it is important that people feel healthy and safe, are able to participate in their community and can access support and services in the neighbourhood. Residents' sense of wellbeing is influenced by the interaction with their immediate environment, which in turn influences the characteristics of their neighbourhood.

One view of what constitutes a community (of place, as opposed to of interest) is summarised in policy reports of recent decades that stress the idea of 'sustainable communities', with key dimensions including governance, transport, the economy and the environment. While all of these are important, alternative views have highlighted a different set of building blocks for a successful community,[11] stressing the importance of contact between individuals living in close proximity, and the creation of local identity. Key factors are physical boundaries to promote geographical identity; rules and laws specific to the area (an example could be car-free zones); local myths and stories; visible leadership; strong social relationships, networks and bonds; rituals and rhythms; and shared belief systems (this could encompass the experience of past garden cities, and new proposed eco towns). Neighbourhoods are experienced as both physical and social spaces.[12]

What are neighbourhoods?

Neighbourhood characteristics can include:[13]

- Environmental characteristics – topographical features, particular geographic features, defining physical characteristics, pollution
- Proximity characteristics – influenced both by location and transport infrastructure
- Characteristics of buildings – type, design, materials, density, state of repair
- Infrastructural characteristics – roads, streetscape, open spaces
- Demographic characteristics
- Social class of the population
- The existence and quality of local services
- Political characteristics – political networks, local representative and advocacy groups, involvement of residents
- Social-interactive characteristics – friend and family networks, associations, strength of social control forces
- Sentimental characteristics – sense of identification with place, historical significance, myths and stories

Greater devolution of decision making and increased capacity and capability at community level requires good local knowledge. Local statutory agencies now often work across traditional service silo boundaries and are forging relationships with active community and voluntary sector organisations. It is important to have measures that adequately capture the trajectory of local communities, to build shared understanding between different stakeholders, helping to safeguard what works well and capture the impact of interventions that work less well.

1.5 Understanding dynamics

Wellbeing is increasingly seen as an explicit goal for public policy, and as something that can be measured.[14] However, on its own it risks being a rather static measure, giving a snapshot at a particular time, but providing little insight into future opportunities and threats.

PART 2

Constructing the Wellbeing and Resilience Measure (WARM)

This section sets out the WARM framework (much more detail is included in part 4 on indicator selection and underlying considerations).

Agencies and communities draw on a wealth of information to understand local needs and, from this, make decisions to deploy resources to meet social need. Traditionally policy makers have focused on objective indicators, measuring improvements in health, crime or education,[15] though subjective measures (such as perception of anti-social behaviour) are increasingly used across a range of policy domains. Some of these have been turned into formal performance management frameworks or frameworks for assessment.

These methods have introduced greater transparency, and awareness of comparisons, while also fuelling long-running debates about how or whether data should be used for performance management.

However, a common complaint has been that local data is rarely used and is not up to date. This can be frustrating for both local agencies and communities. There are also some major gaps in the data collected. These include a lack of attention to:

- subjective experiences, such as life satisfaction and feelings of belonging, compared to the attention paid to objective measures
- quantifying the quality of support people receive in daily life, particularly from friends, family and others
- future dynamics, the data available today that can give insights into how well an area might perform in the future.

WARM has been developed to address these weaknesses and to build on the excellent data available from a wide range of surveys.

The challenge, therefore, is to sift through the large array of data to identify which datasets are most relevant. Economists and psychologists have carried out extensive primary research and analysed large datasets to understand which factors contribute to life satisfaction and their relative importance. We have drawn on this body of work (which is set out in part 4) to develop our framework, in particular exploring what is known about the relationship between wellbeing and key factors in people's lives. The evidence here is about associations between wellbeing and the different factors – understanding causality is much more complex and ambiguous.

Our work builds on an earlier Local Wellbeing Project report, *Local Wellbeing: Can we measure it?*,[16] which set out how wellbeing can be measured in a local context. This report develops the model – which is detailed in Appendix nine – and includes a model of resilience within the measurement framework.

The structure of WARM falls into three overarching domains:

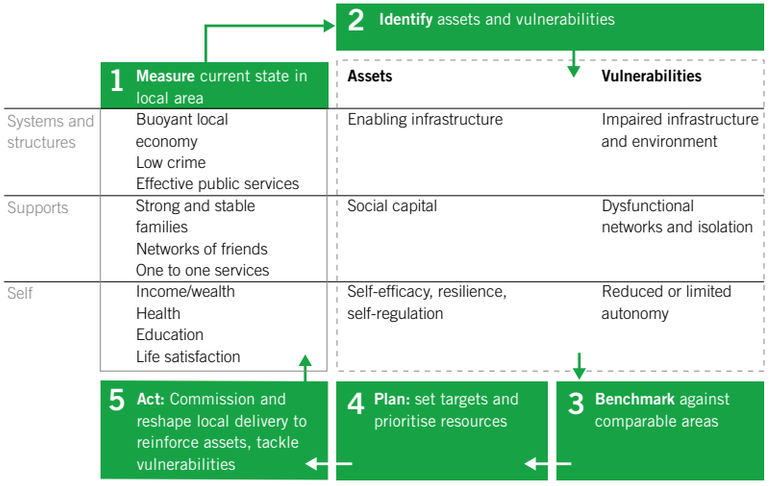
- **Self:** personal wellbeing and resilience, as well as other attributes such as income or health
- **Support:** includes emotional support as well as broader personal support
- **Systems and structures:** includes the state of the local economy, the availability of public services, infrastructures and so on, all of which contribute to wellbeing and resilience.

We see it as vital to understand dynamics at all three levels. To make sense of how a particular family is faring, or a street, we need to look at what is happening to individuals, how they are relating within the community, and the wider structures that impact on personal experience. Currently, the majority of available data is gathered at either an individual level or at the level of wider systems. This tends to miss out data on the quality and frequency of social and emotional supports that can be critical to the experience of areas and of daily life.

For WARM to help areas make decisions about priorities, particularly during a period when resources will be scarce, we envisage it being used in a five-stage process involving community organisations, the public, political leaders, public agencies and business:

Stage one: measuring how the area has fared and is faring
Stage two: identifying assets and vulnerabilities
Stage three: benchmarking – to disentangle local trends from national trends
Stage four: understanding and planning – drawing on this analysis to identify priorities for action, allocating resources or dis-investing
Stage five: implementing a plan.

Figure 3: WARM



Stage one: Measuring how well the area has fared and is faring

The starting point is to understand how the area is doing – and how it has fared in the past.

Three types of data are particularly useful at this stage:

- Trend data for key indicators, such as health, education, income and incapacity benefit – as useful measures for objective conditions within the area, which can be broken down to neighbourhood level (lower super output level).[17] More data will be available when the results of the 2011 Census are available.
- Any local surveys which capture data on levels of life satisfaction. These could be included in local annual opinion surveys or as one-off initiatives by local authorities or health agencies. For instance, some local authorities include the following question in annual surveys: Thinking about everything which affects how you feel about yourself and the place where you live, how satisfied would you say you are with your quality of life overall?[18]
- A proxy 'WARM estimate' of life satisfaction, which uses British Household Panel Survey (BHPS) data to construct an indicator of levels of individual life satisfaction in areas with similar demographic profiles, to predict likely levels of life satisfaction where no primary data exists.

Together these give a rough picture of the levels of life satisfaction in the area, alongside trend data, to show the current state of the area, how it has changed and how it compares to national trends.

Developing the proxy estimate of life satisfaction

We have attempted to reconcile the need for robustness with the need to create a framework that can be relatively easily explained.

A systematic statistical analysis was undertaken to understand these correlations between life satisfaction and other factors. Logistic regression was carried out to appropriately model the categorical responses recorded in survey questions about life satisfaction. The first step was to identify factors likely to be related to life satisfaction and which were available in BHPS. All the indicators that were included in our analysis are listed in Appendix 3. A more detailed paper setting out the statistical approach to the approach developed for our wellbeing and resilience framework, 'Factors influencing life satisfaction in demographic communities' by John Brown from the Institute of Education, is available from www.youngfoundation.org.

To better understand how the specific factors identified above contribute to life satisfaction, we analysed the influence of living conditions, employment, financial wellbeing and social conditions, contacts and engagement on life satisfaction in a secondary analysis of the BHPS over ten years from 1997 to 2007. Our analysis identifies the most important factors influencing life satisfaction nationally and then examines scores on these factors locally to identify important strengths and weakness in local areas. Our analysis confirms the importance of place, and of everyday social interactions, in shaping wellbeing.[19]

Table 1: Positive factors correlating with life satisfaction

	Positive influence[20]	Size of effect (odds ratio)[21]
Likes present neighbourhood	+	2.07
Health status over 12 months	+	1.57
General Health Questionnaire (GHQ): enjoy day-to-day activities	+	1.57
Retired	+	1.56
Financial situation	+	1.46

	Positive influence[20]	Size of effect (odds ratio)[21]
Confidence	+	1.39
Frequency of meeting people	+	1.19
GHQ: capable of making decisions	+	1.18
Married	+	1.15
Change in financial position last year	+	1.14
Frequency of talking to neighbours	+	1.11

Table 2: Negative factors that reduce life satisfaction

	Negative influence	Size of effect (odds ratio)
Unemployed	-	0.52
GHQ: problem overcoming difficulties	-	0.63
Employed	-	0.64
Losing confidence	-	0.66
Cares for handicapped/ other in household	-	0.77

Tables 1 and 2 show the best model for factors nationally in 2007 after removing some variables on the basis that they did not help explain any more of life satisfaction than the variables already in the model. The results have been sorted by the size of effect or odds ratio to show those factors that contribute to or reduce life satisfaction. 'Liking of your neighbourhood' was the most strongly related factor to life satisfaction, taking all the other factors into account. Based on 2007 data, the odds of experiencing better than average life satisfaction increased by a factor of 2.07 for those with higher liking for their neighbourhood. In contrast, the odds of having better than average life satisfaction decreased by 0.77 for those who looked after a 'handicapped'[22] (using the definition in BHPS) or other person in the household.

A note of caution
Statistical models do not explain causal relationships and results should therefore be treated with caution. Causal relationships are often complex and ambiguous. What the model describes is associations between life satisfaction and aspects of our lives. We cannot assume that intervention in a factor that has a large effect on life satisfaction (e.g. health status) will certainly have an impact on life satisfaction.

However, given this caveat, the associations listed above, with existing data captured at a local level, provide a more accurate understanding of wellbeing and resilience, compared to looking at one indicator in isolation.

Our statistical model is a partial explanation of the factors that contribute to life satisfaction. We therefore draw on the literature to identify other explanatory factors that are included in the WARM framework.

Stage two: Identifying assets and vulnerabilities

The next stage looks in more detail at the assets and vulnerabilities of a local area. We do so at the three levels of:

- **Self**: self-efficacy
- **Supports**: social capital
- **Systems and structures**: enabling infrastructure.

To identify assets and vulnerabilities we use data from a number of different sources that provide timely data and which can be disaggregated to ward or sub-ward level. A full list of the data sets and the geographical level are provided in Appendix 6.

The diagram below illustrates some of the data that can be included within the assets and vulnerabilities stage of the WARM model. This includes data about service provision (e.g. satisfaction with GPs in the area), outcomes (e.g. the percentage of people in good health), outputs (number of schools) and perceptions (e.g. fear of crime).

Figure 4: Examples of indicators for assets and vulnerabilities

Domain	Assets/vunerabilities	Examples of indicators
Systems and structures	Enabling infrastructure/ impaired infrastructure	Number of vacancies Number of FE colleges Average travel time to employment centre
Supports	Social capital/ dysfunctional networks or isolation	% of single pensioner households % of people that provide unpaid help
Self	Self-efficacy/reduced or limited autonomy	Average number (per LSOA in ward) of people in receipt of incapacity benefits Mental health indicator

Our focus is on identifying the processes that moderate risk factors and which lead to positive adaptation. Risk can be cumulative and on occasion a 'risk trajectory' can arise, where one risk factor reinforces another. For example, the presence of a large number of workless households will impact on income support provision but may also exacerbate underlying mental health problems in the community. Conversely, positive assets can reinforce each other: one example is when strong social capital creates the conditions for effective resident involvement in services, boosting the effectiveness of service delivery.

Stage three: Benchmarking

Stage three focuses on benchmarking against national data. Applying a benchmark helps:

- distinguish between community-level and wider trends. It is important to disentangle what is happening at the very local level from broader trends across a local authority area, a region, or even nationally
- identify which members of the community are vulnerable and why, and those who are not vulnerable
- make a realistic assessment of what local interventions can and cannot achieve.

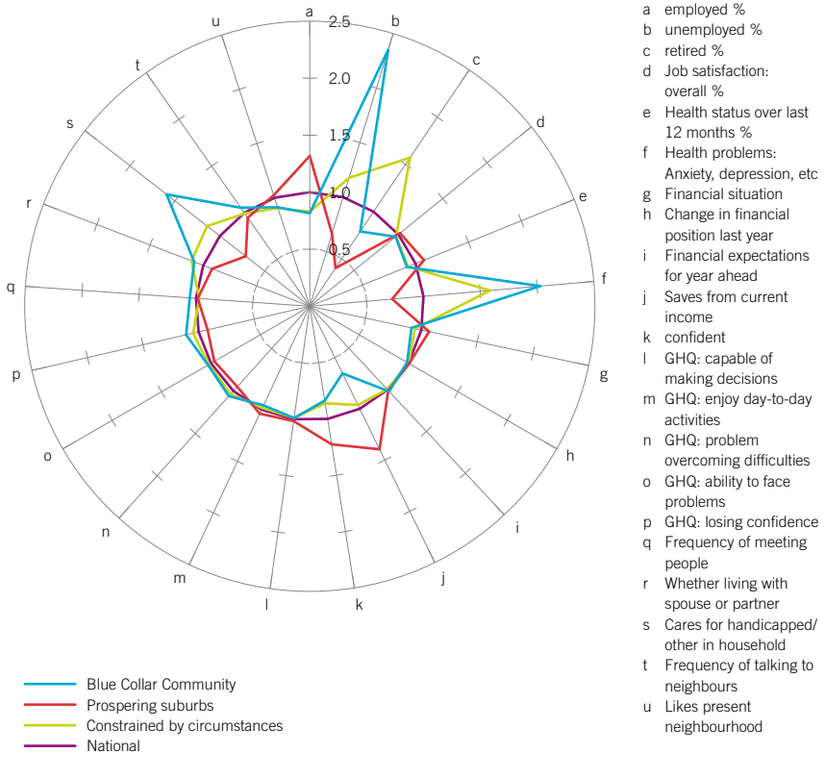
There are two parts to this stage. First, we have compared data at a local level with data drawn from local authority level to identify differences in wellbeing. This approach allows us to distinguish between the broader influence of authority-wide or national trends. This helps sharpen focus on how community factors stimulate or moderate factors associated with wellbeing. We have used data at the smallest possible spatial level at which it is robust and fit for purpose. The data sources used for this purpose are in Appendix 6.

Second, we have used data drawn from BHPS – the same starting point as the WARM estimate of life satisfaction. We have used the BHPS data to estimate how communities with similar demographic profiles fare across selected variables (e.g. employment, retirement) that correlate with life satisfaction. We have used BHPS data to present all the variables on the same scale by standardising all averages as a proportion of the national total.

Using the BHPS data we set out all variables on the same scale and the averages have been standardised as a proportion of the national. Area averages that are the same as the national average will equal 1. Area averages below the national are decimal places below the national, e.g. .95 or 95 per cent of the national; area averages above the national are decimal places above the national e.g. 1.1 or 110 per cent of the national.

This data is not drawn from the local areas but nonetheless helps us to estimate which communities within a locality are faring better and worse across the different life satisfaction variables. Also, we recognise the limitations of national comparators given the variation in types of areas across England. However, the tool is a useful benchmark even in situations that are far from 'typical' for England as life satisfaction – and its constituent parts – can be compared to a national aggregate that is not affected by locally derived norms, expectations or aspirations. This approach is described in further detail in 'Factors influencing life satisfaction in demographic communities' by John Brown from the Institute of Education (available from www.youngfoundation.org).

Figure 5: An example of the WARM benchmark in practice for three types of communities



a employed %
b unemployed %
c retired %
d Job satisfaction: overall %
e Health status over last 12 months %
f Health problems: Anxiety, depression, etc
g Financial situation
h Change in financial position last year
i Financial expectations for year ahead
j Saves from current income
k confident
l GHQ: capable of making decisions
m GHQ: enjoy day-to-day activities
n GHQ: problem overcoming difficulties
o GHQ: ability to face problems
p GHQ: losing confidence
q Frequency of meeting people
r Whether living with spouse or partner
s Cares for handicapped/ other in household
t Frequency of talking to neighbours
u Likes present neighbourhood

Stage four: Understanding and planning

The three sources of data – on current wellbeing, assets and vulnerabilities, and benchmarking against comparable areas – together give fresh insights into the dynamics of communities. This information can be the basis for formal and informal discussion of priorities.

The WARM framework allows us to identify where there are problems and provides information about which groups of people are most vulnerable and what potential assets exist within the community. However, as a statistical model it cannot explore some of the relationships between the indicators or provide answers to why many of these problems exist in a particular area. WARM can help prioritise areas for action, but local knowledge and a better qualitative

understanding of those communities is required to design effective interventions to address the problems identified.

WARM provides information that gives a different lens on familiar areas. In the absence of locally available data on how different factors impact on life satisfaction, this tool allows communities and commissioners to understand where scarce resources can be best used and enables a fine-tuning of public investment to recognise the differing circumstances and experiences of particular areas.

Having identified potentially problematic issues using the WARM framework, we would ideally recommend additional qualitative research. This should aim to find out more about the historical, economic, and social context of the area, provide a better understanding of people's lives and multiple and overlapping needs as well as what they are doing to meet them.

In our own work we have found that this can provide powerful insights into why some places are more resilient than others, or why they avoid unrest or high crime.[23] It is also important to look at what services people are accessing and what other sources of support they depend on, to identify the barriers people face in meeting needs and to highlight emerging or changing problems or solutions that are not yet evident in the survey data. However, if commissioning new primary research is not feasible, then a desk-based review of existing studies (from your own organisation, for example local government, health authorities, voluntary sector organisations and others) can be useful.

Stage five: Implementing a plan

A more accurate way of predicting and assessing communities can shape pre-emptive interventions, which promote greater levels of resilience and wellbeing of individuals and communities. Implementing plans will require commissioning new interventions, reshaping existing programmes and possibly, given current economic drivers, decommissioning services or initiatives that are no longer seen to be priorities.

A number of vehicles for action exist, including local partnership arrangements, established social networks and local business consortiums, each of which can contribute to or lead in delivering interventions.

We see the five stages of WARM as an iterative process. The process should (ideally) be repeated to help identify the extent to which there have been noticeable improvements in life satisfaction and how interventions have influenced levels of life satisfaction.

Interpreting the information
Figure 5 shows how three types of residents – Blue collar communities, Prospering suburbs and Constrained by circumstances – are faring. The diagram identifies a number of vulnerabilities, namely health and low confidence, for people Constrained by circumstances and blue collar communities, as well as high levels of unemployment for the latter group. People living in prospering suburbs fare better, with higher levels of confidence and employment, but have less active social networks. Blue collar communities have stronger social capital.

Examples of interventions to tackle the identified vulnerabilities and bolster assets could include:

Boost social networks and improve health – **Mancunian agreements**:[24] Local people alongside local agencies agree to work together to deal with issues in their neighbourhood, using local solutions. Residents and local agencies commit to activities in response to emerging issues. This approach could be used to develop local health interventions, e.g. community fit clubs; or community allotments to grow local vegetables.

Improve confidence and social networks – **Community Freshview**:[25] Freshview in the London borough of Lambeth is led by residents, volunteers or community groups who wish to get more involved in cleaning up their local environment. Working with local agencies, who supply expertise and equipment, local people work to cut back trees and hedges and clean disused areas in their neighbourhood. This approach can encourage greater levels of interaction within the community.

Improve employment opportunities and improve health outcomes – **appoint local champions or peer mentors** to provide information and advice on health and 'back to work' interventions using existing statutory services, e.g. children's centre or other community spaces, for example the local bus stop.

PART 3

Applying WARM in three case study local areas

We identified six wards from three local authority partners in the Local Wellbeing Project: Hertfordshire County Council, Manchester City Council and South Tyneside Metropolitan Borough Council, to test the WARM model. In this section, we present six case studies, selected with the local authorities.

For each case study site we have:

- **Stage one**: Measured how the area has fared – this includes the estimated life satisfaction (from BHPS data) of types of communities that live in the ward. We have also included trend data on recipients of income support and incapacity benefit to provide a broader picture of recent history.
- **Stage two**: Identified the assets and vulnerabilities: using the domains from our WARM model. We use local data from central and local government data sources. Each domain is accorded a colour – red (indicators in this domain are consistently below the local authority average); amber (indicators are in line with local authority averages or mixed performance – above and below); green (indicators are above the local authority average). A list of data sources and the data for each ward is set out in Appendix six.
- **Stage three**: Disentangled local trends from national trends and identified variation in outcomes across the different groups within the ward.[26]

More detailed information and analysis about each case study is set out in Appendix 5 and 6.

3.1 Case study one: Manchester

The case studies are of two contrasting wards in Manchester, Ardwick and Blackley.

> *Wellbeing is a central part of our community strategy…our community strategy is focused on creating sustainable economic growth so that all people can benefit from the opportunities of Manchester, living healthier, happier, wealthier lives in cohesive and diverse communities. The ways of achieving those outcomes are fairly straightforward in terms of education, skills and health, to help people achieve and build sustainable communities. The bit that has been missing is the role of the individual and family and neighbourhood in doing what they can for themselves. Moving away from a deficit model to a model where people take responsibility for their own aspirations and problems and develop the measure of the extent to which people have aspirations to do things for themselves.*
>
> Geoff Little, Deputy Chief Executive, Performance, Manchester City Council

> *We need to know how some communities are more likely to overcome their problems and challenges for themselves. In short, why some residents and communities are more resilient than others. In doing this, we need to look at the link between the concepts of wellbeing, aspiration and resilience, and successful neighbourhoods and communities. And to explore the link to between resilience and getting people into work.*
>
> James Hand, Head of Organisational Improvement and Service Inclusion, Manchester City Council

Ardwick: Overview

The Ardwick ward area is a mile south of Manchester City Centre. The area does not have coherent local shopping facilities and many residents do not have access to the services and facilities they need. Most major services are provided outside the ward boundary and community facilities within the area are of a variable quality. There is no high-quality food store in the area.

Circular road and rail routes divide the area and many residential neighbourhoods face inwards, such as Brunswick, New Bank Street and West Gordon. Key routes that connect the ward to the city centre also dissect residential neighbourhoods. The main west coast railway line is a significant barrier between neighbourhoods.

The ward is home to the Ardwick Green Park, which is an important public space in the area. The park won the Green Flag award for being well maintained and having strong community involvement in its use. There are many churches in the area. These are the basis of social networks offering various services and spaces to the community and its voluntary groups. There are a range of amenities in the ward, though few community spaces, and what exists has a relatively low level of usage by the community. Small but vibrant creative and cultural sectors are located around Ardwick Green Park. There is no library in the ward, although the mobile library service is well used.

Along with many other inner neighbourhoods in Manchester, the Ardwick area has suffered from economic and population decline. Regeneration in the area is focusing on addressing unemployment, increasing education and skills attainment as well as good quality and affordable housing.

Blackley: Overview

Higher Blackley is in the north of the city, south of the M60 motorway. It borders Bury and Rochdale. The ward is primarily residential with a diverse mix of council owned, registered social landlords and privately owned housing stock.

The Higher Blackley ward is comparatively less disadvantaged than other North Manchester wards. Nonetheless, there are still some challenges, with concentrated deprivation that falls within the bottom one per cent of the most deprived areas in England. The ward also has one of Manchester's largest populations of older people.

The Higher Blackley ward plan was set up to respond to neighbourhood management and service delivery issues in the area. There are ongoing significant investments in social housing as well as renovating schools, part of a broad aim to increase educational attainment and attendance. The east of the ward has been a focus of this. Investment on the Rosewood Estate in the east has led to greater levels of owner-occupation as well as improved housing quality.

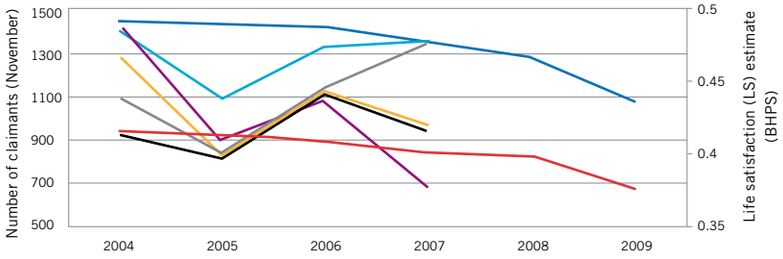
Other recent developments include work on new contemporary apartments designed and tailored for the older people and a new education village, built in 2009, with state of the art education and leisure facilities.

Population density is much lower than the city average. The ward benefits from strong community interest and involvement. In the nationally recognised Royal Horticultural Society's 'In Bloom' competition, many successful entries came from Blackley residents.

Ardwick [27]

Main group in Ardwick is Afro-Caribbean communities

Stage 1: How has Ardwick fared?



- Total (n) income support benefit
- Total (n) Incapacity Benefits
- Afro-Caribbean Communities High % flats
- Asian Communities High % public rent
- Settled in the City Born outside the UK
- Older Workers High % no central heating
- National life satisfaction

Satisfaction with life: A high proportion of people feel good about their lives, with four fifths of people stating that they are satisfied with their lives.The BHPS estimated life satisfaction had decreased. In contrast, number of claimants for income support and incapacity benefits has decreased.

Stage 2: Measure assets and vulnerabilities

Self	EDUCATION
	HEALTH
	MATERIAL WELLBEING
Supports	STRONG & STABLE FAMILIES
Systems and structures	LOCAL ECONOMY
	PUBLIC SERVICES
	CRIME & ANTI-SOCIAL BEHAVIOUR
	INFRASTRUCTURE & BELONGING

HOT SPOT
Area around Ardwick Green

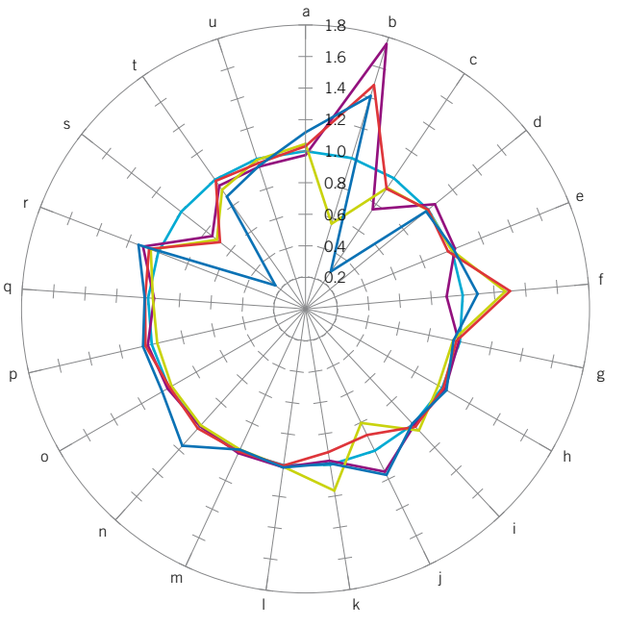
Main assets

- Low proportion of people have no qualifications
- High level of self-reported good health
- Relatively high number of vacancies in the ward
- People are generally satisfied with their area
- Residents participate in local decision making forums

Main vulnerabilities

- Deprivation amongst older people and high proportion of older people that are claimants
- Workless households
- Levels of crime
- Low sense of belonging to neighbourhood

Stage 3: Benchmark Ardwick against national trends



- Older Workers High % No Central Heating
- Settled in the City Born Outside the UK
- Asian Communities High % Public Rent
- Afro-Caribbean Communities High % Flats
- National

a employed %
b unemployed %
c retired %
d Job satisfaction: overall %
e Health status over last 12 months %
f Health problems: Anxiety, depression, etc
g Financial situation
h Change in financial position last year
i Financial expectations for year ahead
j Saves from current income
k confident
l GHQ: capable of making decisions
m GHQ: enjoy day-to-day activities
n GHQ: problem overcoming difficulties
o GHQ: ability to face problems
p GHQ: losing confidence
q Frequency of meeting people
r Whether living with spouse or partner
s Cares for handicapped/ other in household
t Frequency of talking to neighbours
u Likes present neighbourhood

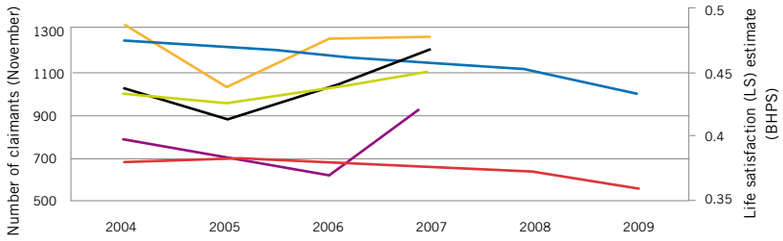
Stage 4: Understand and plan

- People who live in multi-cultural Asian communities are less likely to meet people, have experienced loss of confidence, though are confident, but have higher levels of anxiety and depression.
- The main challenge for people living in multi-cultural Afro-Caribbean communities is unemployment. But this community does save, experiences low levels of anxiety and depression and general good health.
- Residents classed as 'Settled in the City' are more likely to experience anxiety and depression, and face high levels of unemployment.
- A relatively high proportion of people have qualifications and the local economy has some capacity to absorb unemployed people.
- Potential action: Bolster local decision making bodies to focus on access to employment initiatives in multi cultural areas and for older workers. Also, mental health initiatives targeted at residents that are settled in the city.

Blackley

Main groups are public housing tenants and younger blue collar workers

Stage 1: How has Blackley fared?



- Total (n) income support benefit
- Total (n) Incapacity Benefits
- Younger Blue Collar
- Younger Blue Collar Low % detached housing
- Public Housing Low % detached, High % flats, public rent
- National

Satisfaction with life: Life satisfaction in this ward, overall, is below the national average. However, there has been an increase in estimated life satisfaction, alongside a decline in the number of income support claimants.

Stage 2: Measure assets and vulnerabilities

Self	EDUCATION
	HEALTH
	MATERIAL WELLBEING
Supports	STRONG & STABLE FAMILIES
Systems and structures	LOCAL ECONOMY
	PUBLIC SERVICES
	CRIME & ANTI-SOCIAL BEHAVIOUR
	INFRASTRUCTURE & BELONGING

HOT SPOTS
Area around the junction of Chain Rd & Alworth Rd

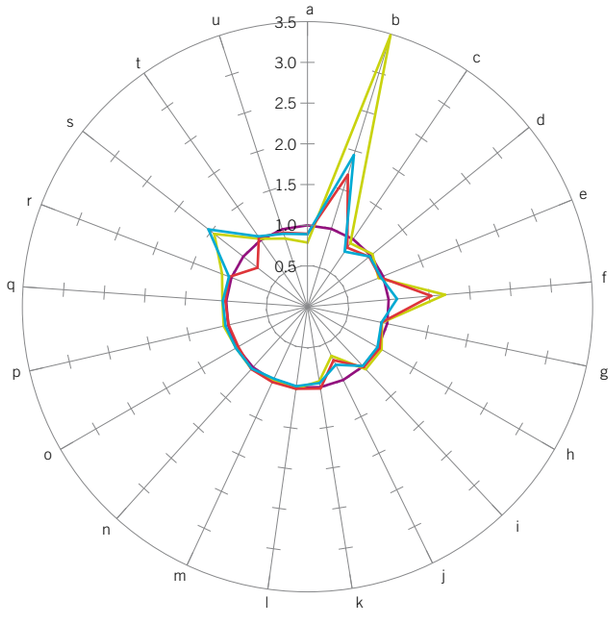
Main assets

- Low level of benefit claimants
- Residents are generally satisfied with public services in the area
- Low levels of crime
- High sense of belonging to the local area

Main vulnerabilities

- Poor educational attainment and high proportion of people with no or low qualifications
- Poor health outcomes
- High level of exposure to credit

Stage 3: benchmark Blackley against national trends



- Younger blue collar
- Younger Blue Collar Low% Detcached Housing
- Public Housing Low % Detached, High % Flats, Public Rent
- National

a employed %
b unemployed %
c retired %
d Job satisfaction: overall %
e Health status over last 12 months %
f Health problems: Anxiety, depression, etc
g Financial situation
h Change in financial position last year
i Financial expectations for year ahead
j Saves from current income
k confident
l GHQ: capable of making decisions
m GHQ: enjoy day-to-day activities
n GHQ: problem overcoming difficulties
o GHQ: ability to face problems
p GHQ: losing confidence
q Frequency of meeting people
r Whether living with spouse or partner
s Cares for handicapped/ other in household
t Frequency of talking to neighbours
u Likes present neighbourhood

Stage 4: Understand and plan

- Communities in this area share similar problems: high levels of unemployment, poor health and anxiety, low rate of savings.
- A high proportion of people have caring responsibilities.
- People who are constrained by circumstances (particularly lone unemployed parents who live in flats that are rented from the council) tend to be more vulnerable and less resilient.
- There is a general sense of belonging and the majority of residents are satisfied with public services. In addition, crime is low and social capital is high.
- When looking at the psycho-social indicators, people in these communities feel that they are capable of making decisions and have levels of confidence in line with the national average.
- The frequency with which they meet people (including their neighbours) is in line with the average, but it is above average for residents considered to be 'constrained by circumstances'.
- Potential action: development of peer support initiatives – particularly in health and education.

3.2 Case study two: Hertfordshire

The case studies are of two contrasting wards in Hertfordshire, Bandley Hill (covered by Stevenage Borough Council) and Hertford Sele (in East Herts District Council).

Bandley Hill: Overview

Bandley Hill contains some of the most concentrated areas of multiple deprivation in Hertfordshire. Situated within the Shepall division is the Bandley Hill Ward, between Woodcock Road and Magpie Crescent, which is the 21st most deprived of 683 areas in Hertfordshire. For instance, in Bandley Hill fewer people own their property than the Stevenage average and there is an above average number of Stevenage Homes Limited tenants. In addition, Bandley Hill has some of the highest prevalence of binge drinking and smoking in the region.

Bandley Hill has one of the lowest proportions of minority ethnic groups in Stevenage.[28] The division is mainly residential but is home to a number of large industries, which include J Sainsbury Plc supermarket, and BUPA Care Homes, which are situated in Magpie Crescent.

Hertford Sele: Overview

The ward contains very mixed incomes, with Super Output Areas (SOAs) in the best one per cent and worst 40 per cent in England with regards to deprivation. Hertford Sele Ward is overall ranked the 41st most deprived of the 683 areas of Hertfordshire. Sele Ward is covered by three SOAs. The ward is one of the most challenging in East Hertfordshire, with the highest levels of council and social housing in the district, and nationally high levels of divorce, separation and poor health.

Two of the three SOAs in the ward show evidence of being the most deprived in East Hertfordshire District Council: these indices include the lowest level of education/skills training, the lowest level of employment, the lowest level of income and the lowest level of health in the District.

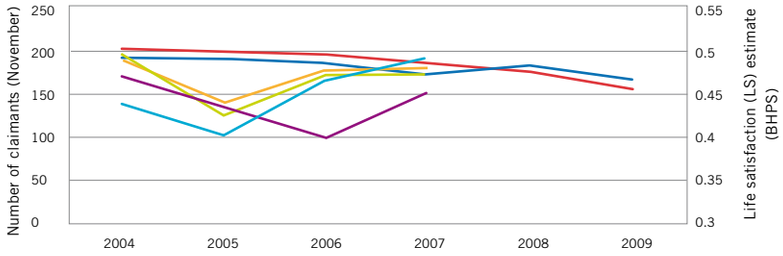
> *We cannot do community interventions if we can't afford to. But if we know who is resilient and whom we suspect won't be resilient you can forecast where the cost savings are.*
>
> Chris Badger, Head of Performance Improvement and Diversity, Hertfordshire County Council

> *If you de-commission a service you have to ensure that it is in a place where people are less likely to need this service. You have to justify why you are putting resources in one area and not the other.*
>
> Officer, Hertfordshire County Council

Bandley Hill

Main groups are terraced blue collar lone parents and older workers low % private rent & detached housing

Stage 1: How has Bandley Hill fared?



- Total (n) income support benefit
- Total (n) Incapacity Benefits
- Terraced Blue Collar Unemployment and Lone parents
- Terraced Blue Collar
- Older Workers Low % private rent & detached housing
- National

Satisfaction with life: No life satisfaction data collected by local authority. Life satisfaction estimates lowest level of life satisfaction amongst blue collar terraced residents, though they have experienced a sharp increase in life satisfaction. This trend coincides with reduced number of income support and incapacity benefit claimants.

Stage 2: Measure assets and vulnerabilities

Self	EDUCATION
	HEALTH
	MATERIAL WELLBEING
Supports	STRONG & STABLE FAMILIES
Systems and structures	LOCAL ECONOMY
	PUBLIC SERVICES
	CRIME & ANTI-SOCIAL BEHAVIOUR
	INFRASTRUCTURE & BELONGING

HOT SPOTS
Area near Field Fare, Cotney Croft and Sheep Croft Hill

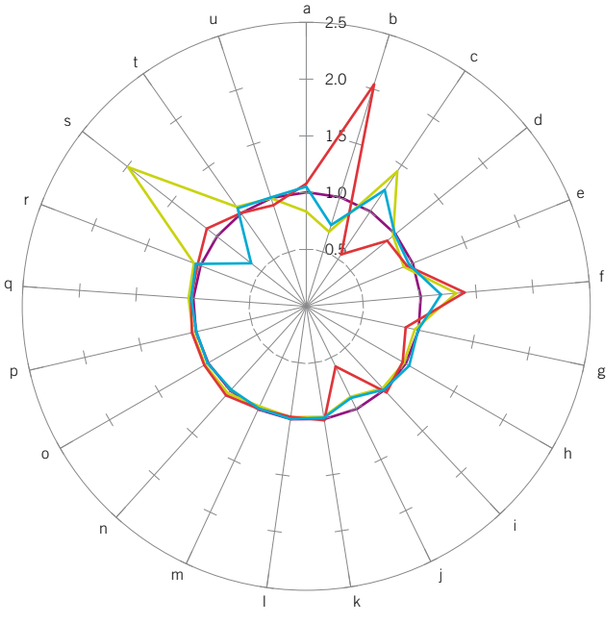
Main assets

- Good health
- Comparatively low number of claimants and low proportion of single pensioner households and lone parents
- High number of small businesses
- Low levels of actual crime and anti-social behaviour (and falling). Residents would like to be more involved

Main vulnerabilities

- High proportion with low or no qualifications
- High proportion of young people do not stay on post 16 and low rate of attainment
- Income deprivation affecting older people
- High proportion of youth unemployment (31%)
- Exposure to CCJs, comparatively higher youth unemployment and comparatively low income

Stage 3: Benchmark Bandley Hill against national trends



- a employed %
- b unemployed %
- c retired %
- d Job satisfaction: overall %
- e Health status over last 12 months %
- f Health problems: Anxiety, depression, etc
- g Financial situation
- h Change in financial position last year
- i Financial expectations for year ahead
- j Saves from current income
- k confident
- l GHQ: capable of making decisions
- m GHQ: enjoy day-to-day activities
- n GHQ: problem overcoming difficulties
- o GHQ: ability to face problems
- p GHQ: losing confidence
- q Frequency of meeting people
- r Whether living with spouse or partner
- s Cares for handicapped/ other in household
- t Frequency of talking to neighbours
- u Likes present neighbourhood

- Terraced Blue Collar
- Terraced Blue Collar Lone Parents
- Older Workers Low % Private Rent & Detached Housing
- National

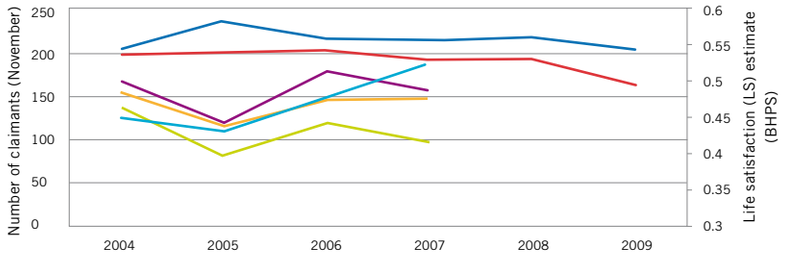
Stage 4: Understand and plan

- Lone parents fare poorly. This group experience high levels of unemployment and are likely to have health problems related to anxiety and depression as well as low confidence.
- There is a low proportion of single pension households; however, this group tends to experience relatively high levels of caring responsibilities as well as deprivation.
- The data also suggests high levels of youth unemployment and low levels of participation in post 16 education.
- Potential action: Develop peer support for older carers to help alleviate depression and anxiety. Put in place flexible apprenticeships and internships in local businesses for lone parents and young people.

Hertford Sele

Main groups are populations that are least divergent from the national average and older workers

Stage 1: How has Hertford Sele fared?



- Total (n) Income support benefit
- Total (n) Incapacity Benefits
- Older Workers High % no central heating
- Least Divergent High % flats
- Aspiring Households High % terraced, born outside UK
- National

Satisfaction with life: No data collected by local authority. Estimated life satisfaction suggests older workers fare worst and life satisfaction has declined for this group.

Stage 2: Measure assets and vulnerabilities

Self	EDUCATION
	HEALTH
	MATERIAL WELLBEING
Supports	STRONG & STABLE FAMILIES
Systems and structures	LOCAL ECONOMY
	PUBLIC SERVICES
	CRIME & ANTI-SOCIAL BEHAVIOUR
	INFRASTRUCTURE & BELONGING

HOT SPOT
Near the Ridgeway

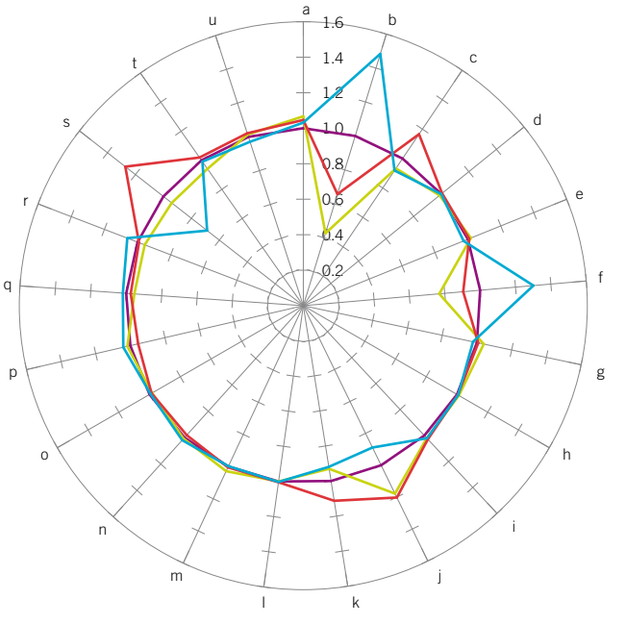
Main assets

- High level of education attainment
- Good health
- Good income and low exposure to debt.
- Low proportion of youth unemployment
- A high proportion of people provide unpaid help at least once a month and 5% participate in decision making bodies in their local communities for regeneration and local crime

Main vulnerabilities

- High proportion of claimants
- High number of lone parents
- Higher than average level of anti-social behaviour

Stage 3: Benchmark Hertford Sele against national trends



- Older Workers High % No Central Heating
- Least Divergent High % Flats
- Aspiring Households Low % Public Rent
- National

a employed %
b unemployed %
c retired %
d Job satisfaction: overall %
e Health status over last 12 months %
f Health problems: Anxiety, depression, etc
g Financial situation
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p GHQ: losing confidence
q Frequency of meeting people
r Whether living with spouse or partner
s Cares for handicapped/ other in household
t Frequency of talking to neighbours
u Likes present neighbourhood

Stage 4: Understand and plan

- Aspirant households fare well across the indicators above. This is reflected in good health and educational outcomes in the ward. Young people have access to good education and there is low youth unemployment.
- In contrast older workers are at greater risk of unemployment and anxiety and depression and there are generally a high number of lone parents
- Levels of anti-social behaviour are also a concern. However, participation in local decision-making is high, with specific reference to bodies that focus on crime and local regeneration.
- Potential action: Interventions should focus on lone parents and older workers. This could include community based initiatives that could focus on skills renewal and confidence building. There is also a need for peer support on financial management.

3.3 Case study three: South Tyneside

The case studies are of two contrasting wards in South Tyneside, Biddick Hall and Primrose

Biddick Hall: Overview

Biddick Hall is located 3.5 miles from South Shields town centre, and is one of nine wards in the West Shields Community Area Forum. A mineral line and a disused railway track border Biddick Hall to both the east and west of the area and provide a demarcation of the estate. Farmland and green space are located to the west of the estate.

Approximately half of all properties in Biddick Hall are council owned. Biddick Hall comprises mainly family houses, bungalows and purpose built flats. There are two main shopping areas on the estate and transport links to the town centre are good.

In recent years Biddick Hall has received some investment and resource to improve the area. The area under went a neighbourhood planning approach with support from the Local Strategic Partnership. Health and employment needs are the primary focus of the neighbourhood partnership. South Tyneside Homes have recently started work on the local area to improve garden walls.

Primrose: Overview

There are 12 neighbourhoods in the Jarrow Community Area, of which Primrose is one. The English Indices of Deprivation 2004 show just under three-quarters of the Community Area is in the most deprived 20 per cent in England with the most northern part of the Bede and Primrose wards, located along the river, in the worst five per cent.

Primrose has a population of just over 8,000 people, of which just under half live in accommodation owned by the local authority. Primrose has the lowest proportion of whole houses in the Jarrow area, with 67 per cent compared to the75 per cent Jarrow average whilst 7 per cent of homes are overcrowded, compared to 6 per cent in other parts of South Tyneside.

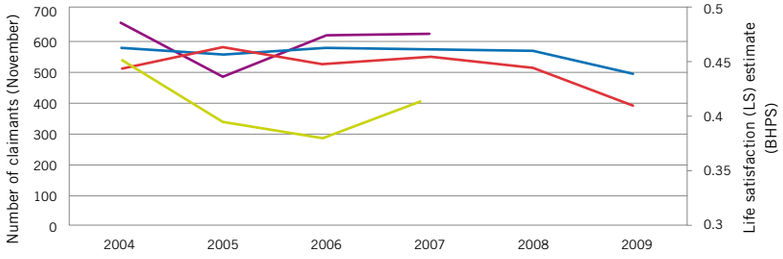
> *Understanding wellbeing at a local level is very useful…the most useful element is that it brings the resilience element. The whole idea that some neighbourhoods are adaptable to change and that they are more likely to cope with set backs and this is the most difficult thing to get right in the model.*
>
> Alan Richardson, Area Coordination Team Leader, South Tyneside Council

> *The wellbeing framework occupies a position between a medium and long-term look at the issues. It takes a more thematic approach to wellbeing. I think the wellbeing model should aim to maximise the partnership working in that area. The local authority and other significant partners such as voluntary and community organisations, civic society and resident associations, should aim to try to get the local people to do more themselves.*
>
> Mike Linsley, Assistant Head of Service: Neighbourhoods, South Tyneside

Biddick Hall

Main group in Biddick Hall is blue collar unemployed lone parents

Stage 1: How has Biddick Hall fared?



Total (n) Income support benefit
Total (n) Incapacity Benefits
Terraced Blue Collar Unemployment and Lone parents
National

Satisfaction with life: No data collected by Local Authority. Estimated life satisfaction suggests older workers fare worst and life satisfaction has declined for this group.

Stage 2: Measure assets and vulnerabilities

Self	EDUCATION
	HEALTH
	MATERIAL WELLBEING
Supports	STRONG & STABLE FAMILIES
Systems and structures	LOCAL ECONOMY
	PUBLIC SERVICES
	CRIME & ANTI-SOCIAL BEHAVIOUR
	INFRASTRUCTURE & BELONGING

HOT SPOT
Ainsworth Ave. and Sheridan Road

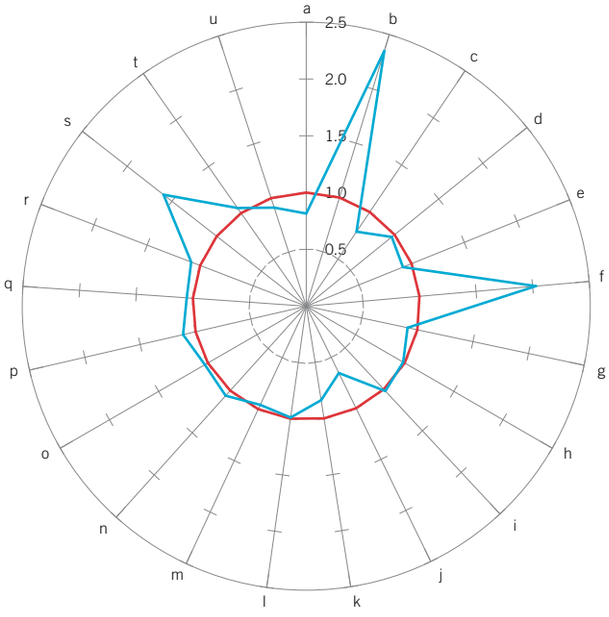
Main assets

- Relatively good GCSE attainment
- High levels of recorded satisfaction for local hospitals and GPs

Main vulnerabilities

- Low level attainment of working age adults and post 16 participation in education. Poor education score
- Low proportion of residents record self-reported good health
- High income support and incapacity benefits dependency
- Higher proportion of lone parents and workless households. Also, high proportion of single person pensioner households

Stage 3: benchmark Biddick Hall against national trends



Terraced Blue Collar Unemployment and Lone Parents
National

a employed %
b unemployed %
c retired %
d Job satisfaction: overall %
e Health status over last 12 months %
f Health problems: Anxiety, depression, etc
g Financial situation
h Change in financial position last year
i Financial expectations for year ahead
j Saves from current income
k confident
l GHQ: capable of making decisions
m GHQ: enjoy day-to-day activities
n GHQ: problem overcoming difficulties
o GHQ: ability to face problems
p GHQ: losing confidence
q Frequency of meeting people
r Whether living with spouse or partner
s Cares for handicapped/ other in household
t Frequency of talking to neighbours
u Likes present neighbourhood

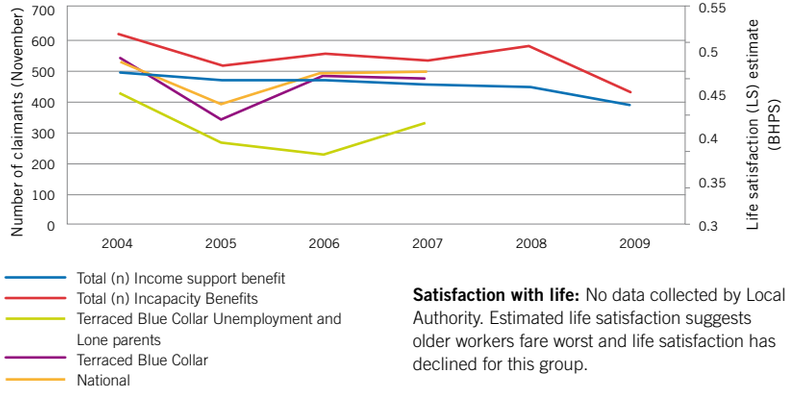
Stage 4: Understand and Plan

- This is a homogenous ward made up primarily of blue collar community with high proportion of lone parents, unemployment and anxiety.
- BHPS data suggests these residents are also losing confidence and are financially vulnerable.
- Main vulnerabilities are low level of attainment and poor education alongside large number of income support recipients.
- However, Place Survey data suggests general satisfaction with statutory services.
- Potential action: Interventions should focus on skill renewal and confidence building – particularly for lone parents. Interventions should be offered at flexible times during the day and with child care facilities.

Primrose

Main groups in Primrose are unemployed, lone parent blue collar residents and blue collar residents living in terraced housing

Stage 1: How has Primrose fared?



- Total (n) Income support benefit
- Total (n) Incapacity Benefits
- Terraced Blue Collar Unemployment and Lone parents
- Terraced Blue Collar
- National

Satisfaction with life: No data collected by Local Authority. Estimated life satisfaction suggests older workers fare worst and life satisfaction has declined for this group.

Stage 2: Measure assets and vulnerabilities

Self	EDUCATION
	HEALTH
	MATERIAL WELLBEING
Supports	STRONG & STABLE FAMILIES
Systems and structures	LOCAL ECONOMY
	PUBLIC SERVICES
	CRIME & ANTI-SOCIAL BEHAVIOUR
	INFRASTRUCTURE & BELONGING

HOT SPOT
Area near Nairn Drive and Morecambe

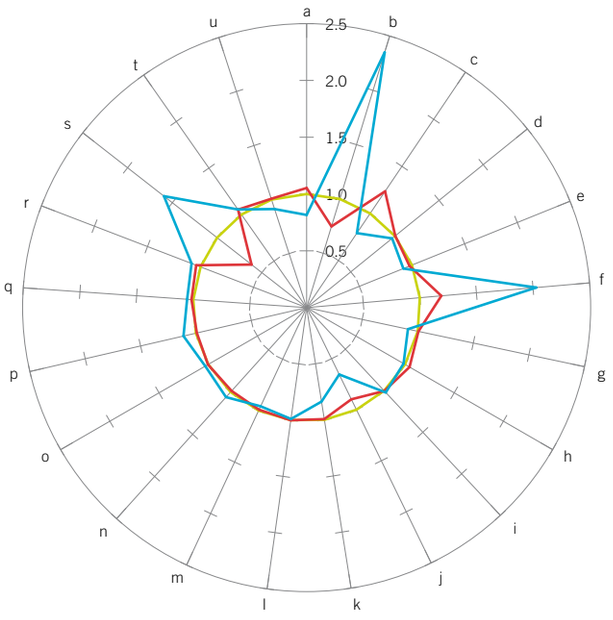
Main assets

- Comparatively good post 16 rates of participation and low and no qualifications
- Comparatively lower numbers of CCJ claimants and lower exposure to risk
- Comparatively higher number of VAT based businesses
- Low rates of ASB and burglary
- High rate of participation in health or education services decision making bodies

Main vulnerabilities

- Poor GCSE results
- Fear of crime

Stage 3: Benchmark Primrose against national trends



- Terraced Blue Collar Unemployment and Lone Parents
- Terraced Blue Collar
- National

a employed %
b unemployed %
c retired %
d Job satisfaction: overall %
e Health status over last 12 months %
f Health problems: Anxiety, depression, etc
g Financial situation
h Change in financial position last year
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o GHQ: ability to face problems
p GHQ: losing confidence
q Frequency of meeting people
r Whether living with spouse or partner
s Cares for handicapped/ other in household
t Frequency of talking to neighbours
u Likes present neighbourhood

Stage 4: Understand and plan

- Lone parents tend to score low on the BHPS data. In contrast, blue collar terraced housing community is less vulnerable to health problems and unemployment and is less likely to have caring responsibilities.
- There is generally low exposure to debt in this ward but lone parents and unemployed residents are less likely to save from their income. Both of these groups are also more likely to experience low confidence.
- There are high levels of participation in health and education decision making.
- Potential action: Mental health interventions that are tailored for lone parents. Community based and peer support interventions for lone parents perhaps delivered in conjunction with Children's Centre, parenting support programmes and local schools. Flexible apprenticeships and internships in local businesses targeted at lone parents.

PART 4

Selecting indicators and creating the measurement framework

4.1 Selecting the WARM wellbeing domains

The first part of the framework flows from the three overarching domains: self; supports and systems; and structures. The basket of measures that fall within the three main domains are included in the green boxes in Figure 6. The measures do not comprise an exhaustive list of indicators, and individual agencies may wish to include alternative indicators that are priorities in their area, or use particular sources of local data where relevant.

Figure 6: Measuring wellbeing – the three dimensions of WARM

	1 **Measure** current state in local area
Systems and structures	Buoyant local economy Low crime Effective public services
Supports	Strong and stable families Networks of friends One to one services
Self	Income/wealth Health Education Life satisfaction

We have included individual and social characteristics that are statistically associated with wellbeing and resilience and that relate to our overall objective, to measure wellbeing and resilience. The associations do not describe causality – for instance being employed does not automatically make you happy – but describe a set of circumstances that often co-exist with feelings of subjective wellbeing.

4.1a Self

- Income and wealth
- Health
- Education
- Life satisfaction

Unemployment: Research shows that being unemployed has a much greater impact on levels of wellbeing than being separated from a wife or husband.[29/30] This finding has been linked to research that shows an association between an internal locus of control and subjective wellbeing,[31] and unemployment can lead to a loss of this sense of control.[32] One review suggests that unemployment is more detrimental amongst men and the middle aged, compared to the young and old, and people with higher levels of education. The impact of unemployment is higher in areas without employment deprivation.[33] After unemployment, life satisfaction tends to fail to return to pre-unemployment levels despite return to employment.[34]

Health: Health, both physical and psychological, greatly enhances life satisfaction, and has a larger impact than employment status and marital status.[35] There is an even greater association between psychological health and subjective wellbeing.[36] The data also suggests that a positive outlook has a strong impact on subjective wellbeing, with the impact of health on subjective wellbeing surpassing the impact of subjective wellbeing on health.[37]

Income: The relationship between income and subjective wellbeing is complex. The increase in wellbeing from having more money tends to level off once a certain income level has been met (known as the 'Easterlin effect').[38] Relative income has a much stronger effect on wellbeing than absolute income, with increases in satisfaction associated with gains relative to peers (although there is also evidence that people adapt to relative increases quickly and that increases in wellbeing are not lasting).[39] The perception of poor financial health is also associated with low levels of wellbeing.[40]

Education: Research suggests that each additional level of education contributes to higher levels of wellbeing. However, there is less consensus on whether it is education in itself that leads to higher levels of subjective wellbeing or the outcomes that generally correlate with education (employment, income and better health outcomes). Positive associations may also be a result of other traits such as motivation or family background.[41]

Additional factors not included in the framework:

Gender: Women tend to report higher levels of subjective wellbeing than men. However, the extent to which a local authority can influence gender balance in a local community is limited.[42]

Age: Subjective wellbeing tends to be 'U-shaped', that is, it is highest amongst younger and older members of the population. People between the ages of 35 and 44 years tend to report lower levels of subjective wellbeing.[43]

4.1b Emotional supports

- Stable families
- Networks of friends
- Social networks

Family status: Married people report higher levels of wellbeing than those who are separated. Co-habitees and people who are widowed and divorced also report higher levels of wellbeing than people who have separated or recently divorced.

Supportive relationships: engaging in supportive relationships generally, with other family members, with friends, or work colleagues, correlates with enhanced life satisfaction.[44] Engaging with people in your local community also enhances life satisfaction. Evidence drawn from the British Household Panel Survey highlights the link between people who talk to their neighbours and personal wellbeing.[45] Robert Putnam's work has also given focus to the narrowing of social networks and isolation and the increase in depression and anxiety.[46] A new US meta-analysis of the impact of social relationships on health found that having low levels of social interaction is equivalent to being an alcoholic, is more harmful than not exercising and twice as harmful as obesity.[47]

Research supports the view that social relationships are a core feature of resilience. Lynn Friedli notes that public policy has attempted to alleviate the impact of fiscal and economic policy on social relationships, in what has been termed 'economic growth at the cost of social recession'.[48]

Caring: Giving care informally is associated with loss in subjective wellbeing as well as depressive symptoms. This is particularly evident amongst people providing care for immediate family members. Reduced levels of wellbeing may result from a loss of autonomy and the number of hours needed to care.[49]

Social capital: People who are involved in voluntary and community activities are reported to have higher levels of subjective wellbeing. In an area with high levels of involvement in civil society organisations, this also increases the wellbeing of people living in the area who are not members of such organisations.[50]

Participation in religious organisations is similarly associated with higher levels of subjective wellbeing.

Trust: Communities that report higher levels of trust in each other also report higher levels of subjective wellbeing. This may indicate the presence of other factors, such as lower levels of crime and higher levels of participation.

Participation in decision making: Participation in local decision making yields higher levels of wellbeing, in part because local decisions reflect the wishes of the community.[51] Local agencies can and do facilitate opportunities for local decision making. The research on life satisfaction supports the case for increasing the capacity for local leadership and decision making.[52]

4.1c Systems and supports

- Crime
- The local economy
- Effectiveness of public services

Crime: Experiencing crime and fear of experiencing crime and anti-social behaviour reduce levels of life satisfaction. Emotions associated with being a victim of crime include negative outlook, reduced level of self-worth and becoming risk adverse, compared to people that have not been affected by crime.[53]

Fear of crime is believed to lead to mental distress and social exclusion.[54] People who perceive themselves to be at risk of being a victim of crime may withdraw from the community as a way of reducing risk. A reluctance to engage with the wider community may further generate fear and chisel away at relationships with others in the community.[55]

Local economy: People who live in deprived areas report lower levels of life satisfaction. It is not certain whether research in this area primarily captures socio-economic factors or isolates the impact of local deprivation.[56] However, it is known that employment, strong local networks and low commuting times all contribute to wellbeing, all of which are generally evident when there is a vibrant local economy.

Quality of public services and one-to-one services: Research on resilient relationships in the North West suggests that the 'quality of public service responses to people with problems' is a key determinant of resilience.[57] Resources allocated through public service delivery also influence social characteristics that impact on resilience, including community norms, networks, cohesion and cooperation.[58]

4.2 Identify datasets

The purpose of this tool is not to generate the need for onerous data collection, but to find new ways to interpret existing data to aid understanding of wellbeing and resilience.

Data on the domains listed currently exists. Councils, Primary Care Trusts and other local agencies have access to a wealth of information on who is living in their communities, levels of poverty and disadvantage, profiles of residents, the services they access, performance of service and how satisfied they are with those services. Local authorities and partner agencies collect information through formal processes like surveys and consultations, plus anecdotal information that is passed on less formally.

WARM has draw on analysis of a number of sources of data, and secondary analysis of BHPS. We used the following datasets:

- Child Wellbeing Index 2009 (Output area) Index 2009
- Community and Local Government Deprivation Indices
- Core Accessibility Indicators – Department of Work and Pensions data
- Income Deprivation Affecting Older People Index
- National Indicator dataset*
- Neighbourhood statistics
- Nomis labour statistics
- Place survey[59/60]
- British Household Panel survey 2007.

Although some of these indicators will not be available in the future, for example the Place Survey will no longer be collected nationally, the new data from the 2011 Census will be available from 2012 to 2013, and will provide a refreshed source of small area information.

A full list of indicators used in this tool is given in Appendixes 3 and 6.

National and regional sources – websites and expert advice
Local organisations use a range of national sources to access data about their own areas, and to draw out comparisons with other local authority areas. The Department for Communities and Local Government (CLG) has identified useful websites[61] that provide datasets and/or expert advice:

- ONS (especially Neighbourhood Statistics, the Census, and NOMIS)
- Department for Work and Pensions
- Communities and Local Government: see 2008 publication *Assessing Neighbourhood-Level Data for Target Setting* [62]

* At the time of publication, the National Indicator dataset is to be abolished and will be replaced with a comprehensive list following a review.

- Home Office
- Audit Commission (including Area Profiles)
- Local Government Improvement and Development, particularly the Communities of Practice forums
- Local Government Association publications.

4.3 Key issues

Geographical units

Datasets cover a range of geographical units. For this tool, we use datasets that could be disaggregated to small geographical units. There is often a mismatch between 'real' or 'natural' neighbourhood boundaries – what people living in localities understand as the neighbourhoods they live in – and the standard statistical boundaries adopted by administrators of datasets. Using the smallest possible geographical unit as the basis of analysis for each dataset attempts to achieve the fine-grained understanding of natural lived neighbourhoods that maps with residents' experiences. But this can create additional problems in terms of reducing the sample sizes and reducing the reliability of the estimates.

Timeliness
The time period covered varies across the different datasets. Census data offers the most comprehensive account of social and economic trends but is collected every ten years (next data collection due in 2011). More recent datasets are available to local public service agencies but may vary in quality and robustness. Real time data from GPs or local schools provide timely sound local data; however, it may be skewed by the way it has been collected and may not show trends over time.

WARM uses accessible nationally available datasets but it can be enhanced by locally collected data, specific to each area.

Robustness
It is important to be mindful of the reliability of measures used, the robustness of denominators, and the level of uncertainty this can introduce to your analysis. Table 3 provides an overview of datasets that the Department of Communities and Local Government deems sufficiently robust for neighbourhood level target setting.

Sample size
Confidence intervals (how reliable the data is) are larger for smaller samples, so data for smaller areas usually has less precision than data for larger areas. The smaller the sample size, the greater the level of uncertainty introduced into your analysis. The level of uncertainty can be quantified by calculating confidence intervals (CI). Analysis should include CI levels to identify the likely range of the data values.[63]

Accessing neighbourhood level data for target setting[64]

CLG reviewed the strengths and weaknesses of existing neighbourhood level datasets. Table 3 provides an overview of datasets that are appropriate for target setting at a neighbourhood level.

Recommendation: Qualitative research and ethnography

WARM can be enhanced by using it in conjunction with qualitative research and assessments about the neighbourhood and its residents. WARM corroborates or challenges anecdotal assumptions about an area and can be enriched by listening to what people say about their lives and observing what they do.

Table 3: Strengths and weaknesses of different sources of neighbourhood data

Indicator datasets	Appropriate for target-setting at neighburhood level	Can provide useful additional intelligence at neighbourhood-level?
Local Econonomy		
Jobseekers Allowance (DWP Benefits)	Yes	Yes
Incapacity Benefit / Severe Disablement Allowance (DWP Benefits)	Yes	Yes
Working Age Client Group (DWP Benefits)	Yes	Yes
VAT-registered Enterprises / Local Units (ONS)	No	Yes
Model-Based Estimates of Income for Wards (ONS)	No	Yes
Skills for Life – Basic Skills Data (DCSF)No	No	No
Adult Health and Wellbeing		
Incapacity Benefit Mental Health Claimants (DWP Benefits)	Yes	Yes
Pension Credit, Disability Living Allowance Amoung Older Groups (DWP Benefits)	Yes	Yes
Hospital Episode Statistics (DH)	Yes	Yes
Life Expectancy at Birth (DH)	No	Yes
Directly age standardised mortality rates for coronary heart disease, stroke and related conditions for under 75s (DH)	No	Yes
Synthetic estimates of healthy lifestyle behaviours (NHS HSCIC)	No	No
Safer and Stronger Communities		
Dwelling stock by tenure and condition (DCLG)	No	Yes
Crime Data - notifiable offences (Police Force)	Varies*	Yes
Children and Young People		
Pupils eligible for Free School Meals (DfES)	Yes	Yes
Unauthorised Pupil Absences (DfES)	Yes	Yes
Pupil Attainment Datasets by pupil home residence (DfES)	No (Yes**)	Yes
Pupil Attainment Datasets at School Level (DfES)	No (Yes***)	Yes
Conceptions to under 18 year olds (DH)	No	Yes
16-18 year olds Not in Education Employment Training (Connexions)	No	Yes
Low Birth Weight (ONS)	No	Yes

* Certain crime types for combined crime types) with large counts are more likely to be appropriate for target-setting. As a rule of thumb, counts of 1,000 or more would be needed for accurate target-setting and monitoring.

** It is important to note that it might be possible to manipulate pupil attainment data into groupings that contain sufficient numbers to allow for target setting. For example, creating an aggregate neighbourhood from several Middle-layer Super Output Areas (MSOA) and using a composite of Key Stage 2, 3 and 4 results. The 'No' assesment is based on usage of this data without aggregation.

*** It is important to note that it might be possible to manipulate this data into groupings that contain sufficient numbers to allow for target setting. For example, creating an aggregte from each of the schools in the most deprived neighbourhoods in an authority. The 'No' assessment is based on usage of this data without this aggregation.

4.4 Applying estimates to local areas for WARM

To understand levels of wellbeing and resilience in local areas we identified the Output Area Classification (OAC) – a geo-demographic classification that clusters types of communities according to demographic type – of each of the wards. The Office for National Statistics (ONS) has clustered each output area in the UK according to characteristics that are shared by the population.

BHPS uses the OAC geo-demographic classifications with each respondent to the survey labelled according to their classification. The Office for National Statistics created the classifications in 2001, based on Census data. One caveat to this approach is that some areas may have changed dramatically since this date and in these places the geo-demographic classification may be less than accurate.

There are seven main clusters:

- blue collar community
- city living
- countryside
- prospering suburbs
- constrained by circumstances
- typical traits
- multicultural.

Within the above seven main clusters there are 52 sub groups. Our approach was to match respondents to their geo-demographic type, and then estimate average level of life satisfaction for the types of individuals that are in each of the 52 geo-demographic types. We then used the classifications to create a typology of each of the wards in question.

Output areas are a smaller geographical area and wards are made up of multiple output areas – for instance, in more homogenous wards there will be fewer output area types compared to more heterogeneous wards, which will have a greater diversity of classifications. We have matched output area classifications.

By matching OAC classifications to wards we estimate level and trends in life satisfaction for the types of residents that live in that area. Based on the OAC classification we can then estimate the average levels of life satisfaction for different types of residents.

For more information about the OAC classifications visit the ONS website here: http://www.statistics.gov.uk/about/methodology_by_theme/area_classification/about.asp

Other more sophisticated models of data analysis are potentially useful here – for example a more complex approach would involve multilevel modelling techniques (described in the box below).

A more complex approach

Below we propose a more comprehensive and complex approach to analysing the BHPS. The full BHPS dataset could be used in a single model that contains cluster identifiers for the ONS areas. In order to produce the required estimates of effect of changes in various explanatory factors on individual level wellbeing, the data is modelled to contain random intercepts for each cluster and random effects can be tested for each of the explanatory factors.

The advantages of this method are that it will offer more robust estimates of the effects, taking into account the stability of estimates for each cluster due to sample size – i.e. the smaller the cluster, the greater will be the influence of the population data on the estimate (this is called empirical Bayes prediction). It will also enable the hypothesis of whether the effect varies significantly between clusters to be tested. A staged approach recording changes in explanatory power from a random intercept to a more complex model would offer an interesting contrast of the model's increasing sophistication.

The disadvantages of this approach are that it is a complex method that will not be easily understandable by a non-specialist. There may also be software limitations that could limit the number of random effects it is possible to include in a model. Also, it is possible that you could find that the effect of explanatory variables on wellbeing is the same in the majority of areas. This would mean that only the information from the area classification is needed to determine where a local authority should focus in its efforts to improve wellbeing.

Further work

The UK Household Longitudinal Study[65] is an annual survey of approximately 40,000 households and 100,000 individuals. The scope of this survey offers an opportunity to build on the approach used in WARM, particularly given that psycho-social indicators are included in the survey. The survey asks the following questions which are useful in thinking about wellbeing and resilience:

- … lost much sleep over worry?
- … felt constantly under strain?
- … been thinking of yourself as a worthless person?
- I feel like I belong to this neighbourhood.
- I would be willing to work together with others on something to improve my neighbourhood.
- I regularly stop and talk with people in my neighbourhood.

The data from this survey will be available in December 2010.

Conclusion

We readily acknowledge that much work has been done, both internationally and nationally, on developing wellbeing measures at a national and individual level. Our statistical approach seeks to build on the work that precedes this study but also to look specifically at measuring community wellbeing and resilience.

Examining a local community through a wellbeing and resilience lens focuses attention on a community and its component parts: who is vulnerable, and who is not, and what the impact of a community's vulnerabilities is on its residents. This lens also shifts attention from mapping an area's vulnerability to understanding the capacity and capability of communities to help themselves. From this starting point, local agencies can begin to ask better questions about how the work of agencies contributes to improvements in the quality of their life.

Our work emphasises the need not only to think more creatively about existing data sources, but also prompts questions on whether we have the right data, at the right time, with the right level of detail. Measures of wellbeing, resilience and social wealth are crucial. Measures that capture levels of emotional resilience – capacity of individual to bounce back from adversity, quality of social supports and the availability of assets to help restore communities following a shock – provide vital information for local decision makers.

About the appendices

The appendices below present the data and the theoretical considerations underpinning WARM. The appendices are as follows:

Theoretical considerations

- Appendix 1: Considerations underpinning WARM – presents a brief overview of the different conceptual constructs of well-being.
- Appendix 2: Understanding resilience – brief account of the risk factors and examples of protective factors that promote resilience.

Using the British Household Panel Survey

- Appendix 3: Factors influencing life satisfaction in demographic communities – A systematic method of identifying specific strengths and weaknesses in local communities – Summary of a paper commissioned by John Brown of the Institute of Education on the statistical processes used to develop WARM.
- Appendix 4: Output area classification names – Output Area Classifications we have adopted for WARM.

Using local and central government datasets

- Appendix 5: Assets and vulnerabilities – present the data used in stage 2 of the framework to assess assets and vulnerabilities in an area.
- Appendix 6: Data – present the data in the case studies.
- Appendix 7: Definitions – definitions of the indicators.

Other information

- Appendix 8: Contrasting international case studies – examples of how wellbeing and resilience is measured internationally.
- Appendix 9: Local Wellbeing Project domain framework for measuring wellbeing – overview of Phase one of the Local Wellbeing project on measuring wellbeing.

APPENDIX 1

Considerations underpinning WARM

Consideration 1: The definition of wellbeing

The notion of wellbeing has a number of definitions or conceptual constructs. As one report asserts, "the inconsistency of definitions used, even within individual disciplines, is so great that producing a comprehensive overview...is a formidable task".[66]

Broadly, the literature identifies two main camps:

- the **uni-dimensional/global**: defines wellbeing in relation to the single general life satisfaction question, or
- the **multi-dimensional approach**: relates to different domains of life.

The former captures an assessment of a person's life experience and does not dissect the response into individual dimensions. The multi-dimensional approach differs and makes an assessment of life satisfaction across a range of domains.

We adopt the **multi-dimensional** approach for the purpose of this tool. As individuals, when thinking about how we feel about our lives, we often draw on a range of indicators, which can include feelings of self-worth, the extent to which we feel able to create and fulfill opportunities, whether we have emotional support to draw on and how we feel about our immediate surroundings. Community wellbeing can also be assessed on a range of indicators, from level of life satisfaction of individual residents, to the extent to which there are services that enable individuals to create and shape opportunities for themselves.

The literature refers to three types of models that can fall within the multi-dimensional approach,[67] summarised in Table 4.

Table 4: Definitions of wellbeing

Type	Description
Global definitions	Comprises a general type of definition – usually based on satisfaction/ dissatisfaction
Component definitions	Breakdown of component parts to identify characteristics of quality of life
Focused definitions	Refers to specific aspects of quality of life
Combination definitions	Global definition with component domains of quality of life

WARM uses this component definition approach or the combination approach. While global definitions provide a useful overview of life satisfaction they have limited use in helping understand the detail of individuals' lives and community dynamics.

Consideration 2: Objective versus subjective indicators

Components of life satisfaction can include **objective** indicators, which describe the social and economic conditions of residents, or, **subjective** indicators, which measure an individual's personal assessment of their lives.

Objective indicators include many elements that are believed to contribute to overall wellbeing.[68] This approach is used in the Human Development Index[69] and the Index of Social Health[70] to assess levels of education, life expectancy, literacy and income. Assessing the objective conditions of a community is familiar ground for most policy makers.[71]

Objective indicators on their own do not adequately capture how individuals assess their own life satisfaction or perceptions about different aspects of their life. There are many well-recognised examples where subjective assessments are in tension with objective data. For example, perceptions of crime, or fear of crime, do not reflect actual crime. In recent years, crime has fallen but people still believe it to be pervasive. There are also examples where individuals report satisfaction with their immediate environment, despite the existence of poverty.[72]

A reliance on objective lists of indicators raises further questions about what contributes to wellbeing, and the relative importance of those conditions, and how you therefore balance positive aspects of our lives against negative aspects of our lives. This can lead to a prescriptive list of what wellbeing should be.[73]

Some commentators argue that **subjective assessments** are sufficient and that an individual's perception of their experience should be the sole criterion by which to assess life satisfaction.[74] The move towards a more person-centred approach and personalisation in public service delivery has put a greater emphasis on assessment of the subjective experience of service users.

Kahneman and Diener

The U.S Gallup Wellbeing index is founded on the works of Kahneman and Diener who view subjective wellbeing as being comprised of **'reflective cognitive evaluations'**, both negative and positive, which make up an individual's subjective perception of their wellbeing.

These include life satisfaction and work satisfaction, interest and engagement, and reactions to life-events such as joy and sadness. Kahneman highlights the need to differentiate between 'evaluative' and 'experiential' wellbeing, the former being the way people remember past experiences, the latter how a person feels at a given particular moment. 'Experienced' wellbeing aims to bypass the effect of 'judgement and memory', which can make what people remember significantly different from what they experienced at the time.

The single dimension approach, "How satisfied are you with your life?", is widely used and accepted as a sound measure.[75] Studies in psychology confirm that life satisfaction questions can accurately capture the subjective wellbeing of an individual (in spite of the influence of ups and downs in people's daily experience).[76]

Examples of single life satisfaction questions

Taken all together, how would you say things are these days – would you say that you are very happy, pretty happy, or not too happy?
US General Social Survey, Question 157[77]

On the whole, are you very satisfied, fairly satisfied, not very satisfied, or not at all satisfied with the life you lead?
Eurobarometer Survey Series[78]

However, while subjective indicators provide an assessment of how individuals feel about their life they do not provide indication about the actual circumstances of their lives.

Limitations of life satisfaction questions

Self-reported life satisfaction questions are becoming increasingly prevalent. For instance, a life satisfaction question is included in the UK Government's Sustainable Development Indicators.[79] However, a number of limitations have been identified:

Adaptation

First, people adapt to lifestyle and living conditions and this 'adaptation' may distort their perception. This is in terms of people becoming accustomed to improvements, for instance increases in income or improvements in material circumstances; and similarly, people can habituate to deprivations in their lives.

Nonetheless, some aspects of people's lives are less susceptible to adaptation. This includes social networks, such as number of friends, as well as less positive aspects such as unemployment, bereavement or divorce.[80]

Reliability, validity and sensitivity

Reliability questions arise when examples appear of individuals changing the score given to a question, when there is no other evidence for a change in their wellbeing. Questions arise whether the measure captures life satisfaction or 'noise', other factors in people's lives; and how sensitive the measure is to responding to changes in levels of wellbeing.

For more discussion on the methodological limitations, refer to the article 'How can measures of subjective wellbeing be used to inform public policy?' by Paul Dolan and Mathew White.[81]

Other standard subjective indicators include the General Health Questionnaire, which measures positive mental functioning.[82] This is used in the British Household Panel Survey and the Health Survey in England. The questions capture psychiatric measures in a non-clinical setting, and are used to identify anxiety and depression.

The General Health Questionnaire (12 item):

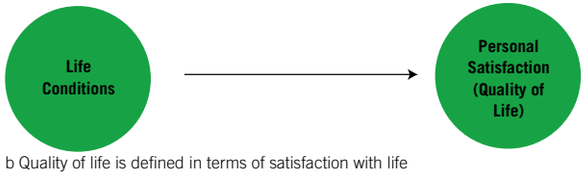
1 Have you recently been able to concentrate on whatever you're doing?
2 Have you recently lost much sleep over worry?
3 Have you recently felt that you were playing a useful part in things?
4 Have you recently felt capable of making decisions about things?
5 Have you recently felt constantly under strain?
6 Have you recently felt you couldn't overcome your difficulties?
7 Have you recently been able to enjoy your normal day-to-day activities?
8 Have you recently been able to face up to problems?

9 Have you recently been feeling unhappy or depressed?
10 Have you recently been losing confidence in yourself?
11 Have you recently been thinking of yourself as a worthless person?
12 Have you recently been feeling reasonably happy, all things considered?

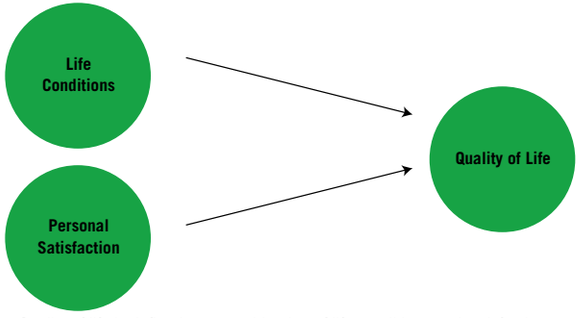
In developing WARM, the aim was to capture information about how people feel about their lives and the actual conditions that they live in. WARM uses both subjective and objective indicators, reflecting theoretical construct (c) in Figure A1.

Figure A1: Quality of life and life satisfaction[83]

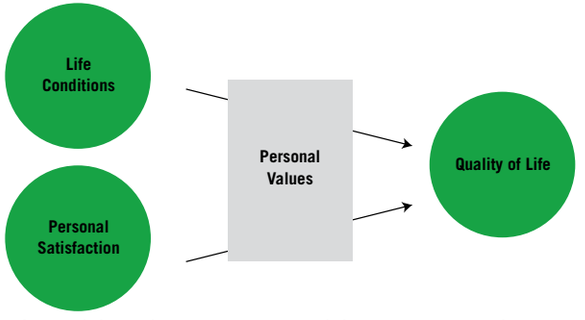
a Quality of life is defined in terms of life conditions



b Quality of life is defined in terms of satisfaction with life



c Quality of life is defined as a combination of life conditions and satisfaction



d Quality of life is defined as a combination of life conditions and satisfaction weighted by scale of importance

Consideration 3: Psycho-social measures of wellbeing

A number of assessments that measure psychological and social needs are available. Such data can provide local communities and agencies with important information on how local interventions impact on positive feelings of residents. This is currently not widely available in government datasets.

Positive aspects of mental health can also be measured using the following validated instruments:

- Affectometer 2[84]
- Antonovsky's Sense of Coherence Scale[85]
- Bradburn Affect Balance Scale[86]
- Day Reconstruction Model[87]
- Warwick-Edinburgh Mental Wellbeing Scale.[88]

APPENDIX 2

Understanding resilience

This appendix sets out risk factors and protective factors in resilience. The listed factors underpin our assumptions to identify the vulnerabilities and assets in the WARM framework.

The following risk factors have been identified in research about individual resilience:

- poor social skills – lack of empathy
- lack of problem solving ability
- low self–esteem
- low school involvement (truancy, suspension, expulsion, dropping out)
- cognitive deficits (reading readiness, following directions, vocabulary, social skills)
- parental psychopathology and child maltreatment (including family violence, poor supervision)
- homelessness
- peers (peer rejection, peer deviancy, gang involvement)
- neighbourhood disorganisation (drugs, firearms)
- urban poverty and community violence
- socioeconomic disadvantage (individual and community)
- cumulative risk indices (e.g. socioeconomic disadvantage and poor educational attainment).[89/90]

Table 5: Different analysis of resilience protective factors

Author	Publication	Examples of protective factors
Rutter, M	Resilience: Causal pathways and social ecology (PowerPoint presentation)	Physiological adaptation; psychological adaptation; sense of self-efficacy; acquisition of effective coping strategies; and cognitive redefinition of the experience. Fostering protective qualities prior to adversity: a Good intelligence/ scholastic achievement b Secure selective attachments c Multiple harmonious relationships d Sense of self-efficacy e Range of social problem solving skills f Positive interactional style g Flexible approach to new situations Fostering protective qualities at time of stress/adversity: a Dilution of impact of stress and adversity b Provision of alternative sources of support/relationships c Fostering social problem solving and self-efficacy, and adaptive coping d Avoidance of damaging coping strategies Necessary to combine psychosocial and biological research approaches and to use a diverse range of approaches.
Sonn and Fisher	Community resilience	Those who adapt well to profound stress have protective attributes. These include such **person-centered** factors as perceived self-efficacy, temperament, and **setting-centred** variables such as warm and caring relationships with caregivers which act as moderators of stressors.[91]
Schoon, I	The role of human capability and resilience[92]	The report focuses on: individual educational attainment,belief in own capabilities and positive aspirations about the future, stable family relationships and the wider social context: experiences in the school, workplace and within one's neighbourhood.

		Mechanisms to support resilience include affordable childcare, facilitating return to education for those that drop out, developing lifelong learning opportunities. Also, apprenticeship schemes, day release and adult education classes. In terms of employment – developing family friendly practices at work. Opportunities for participation in employment and education, human relationships and quality of public service responses.
Barnardo's	Quality Protects Research Briefing – No. 9: Promoting the mental health of children in need[93]	• secure early attachments • confidence of being loved and valued by one's family and friends • clear sense of self-identity (personal, cultural and spiritual) • sense of self-efficacy (being able to make decisions and act independently) • confidence to set goals and attempt to achieve them.
Vanderbilt and Shaw	Conceptualising and re-evaluating resilience across levels of risk, time, and domains of competence	**Child specific:** Child attributes that have been found to be associated with positive outcomes include intelligence, emotion regulation, temperament, coping strategies, locus of control, attention, and genetic influences. Emotion regulation refers to monitoring, evaluating and modifying the intensity and duration of emotional reactions to accomplish one's goals. **Family protective factors:** presence of a caregiver to provide both material resources, such as nutrition and shelter, and more abstract resources, such as love, nurturance, and a sense of safety and security. **Neighbourhood protective factors:** Neighbourhood quality, neighbourhood cohesion, community organisations.[94]

Meichenbaum	Understanding resilience in children and adults: Implications for prevention and interventions	Neighbourhoods with high levels of collective efficacy, social cohesion and social capital and civic engagement.[95]
New Zealand Treasury	Investing in wellbeing: An analytical framework	**Individual**: self-efficacy; personal and social skills. **Family**: good parent–child relationship; pro-social norms. Peers: positive peer modelling. **Schools and community**: good schools; social support: and effective social policies.[96]
Health Canada	Community resilience: Strengths and challenges	**Community connectedness:** shared history, values and cultural traits; traditional customs and language; religion; knowing everybody and trusting each other; community connectedness contributes to survival. **Social support:** community as a whole; family and friends; local volunteer organisations. **Community involvement and participation:** opportunity for participation in community process; high level of voluntarism; participation in recreational activities; participation in public meetings for burning issues. **Educational/retraining services and opportunities:** public schools offer good quality education; schools promote culture; adult upgrading and retraining has increased. **Communal coping:** communities moving toward positive coping responses; communities coping with current challenges.[97]

APPENDIX 3

Factors influencing life satisfaction in demographic communities – A systematic method of identifying specific strengths and weaknesses in local communities

This appendix is a summary of a paper commissioned from John Brown of the Institute of Education, to underpin the development of WARM.

Summary

Purpose: This project aims to provide robust and reliable reference information to identify specific challenges facing small local communities anywhere in the UK to inform planning of local services to raise wellbeing, resilience and life satisfaction (LS).

Method: This work uses statistical modelling techniques to investigate multiple factors influencing subjective life satisfaction over nine years exploiting the rich data available in the British Household Panel Survey (BHPS) and advanced demographic classifications developed by ONS. This work identifies factors most strongly related to LS and then examines differences in LS for different demographic groups to identify specific strengths and weaknesses on these important factors. This work provides reference tables to enable stakeholders to look up the typical strengths and weaknesses represented by scores for important factors of individual demographic groups known to characterise an area. First, researchers identified a long list of factors considered potentially important to life satisfaction. These factors were subjected to logistic regression analysis that mathematically selected those factors that most strongly related to LS, including those that did not contribute additional explanatory power, in each year 1997 to 2007. Second, following this the work used the coefficients derived from the regression analysis to estimate the LS for each of the 52 Output Area Classification (OAC) subgroups in each year. Third, the score of each important factor for each subgroup over nine years are presented to allow stakeholders to view the strengths and weakness of each OAC subgroup which most strongly influences their LS.

Method

Dataset: The British Household Panel Survey Questionnaire is a longitudinal survey of private households in Great Britain. It follows the same representative sample of individuals – the panel – over a period of years from 1991 to the present. Households were selected for inclusion in the main BHPS using a two-stage stratified systematic method designed to ensure the BHPS sample is representative of the whole UK population. The method of selecting households is approximately equivalent to the current sample design of the General Household Survey (GHS) (Smythe and Browne, 1992). In the first stage sampling units were subdivided into high and low occupation status groups of approximately the same number of households. In the second stage these were then subdivided in to groups based on the proportion of people of pensionable age. There was slight over-representation among Scottish homes, low responses among households according to SES and occupation status as well as low response within households from one adult.

Consequently, response weighting is used as provided by the BHPS.
The BHPS wave 1 panel consists of some 5,500 households and 10,300 individuals drawn from 250 areas of Great Britain. Additional samples of 1,500 households in each of Scotland and Wales were added to the main sample in 1999, and in 2001 a sample of 2,000 households was added in Northern Ireland, making the panel suitable for UK-wide research.

Main outcome variable
The main outcome variable was: BHPS Life Satisfaction, variable name: #lfsato[98]

Respondents were asked,[99] 'How dissatisfied or satisfied are you with...your life overall?'

The original variable was coded from Not satisfied at all = 1 to Completely satisfied = 7. As this is a categorical measure it was re-coded into a binary variable to better model the differences between scores. This was achieved by firstly calculating the standard deviation of each individuals score. The standard deviation records how different each score is from the average of all scores. This has the advantage that it compares all individual's scores to the real average of life satisfaction rather than showing results in terms of the original scale from 1 to 7. Using the original scale of 1 to 7 might be misleading because it seems intuitive that the average score should be the middle score of "neither satisfied nor dissatisfied" = 4 when it is in fact higher than this, as the most common response is "somewhat satisfied with life" = 5. In other words, the distribution of responses is uneven, with more people responding more positively than negatively. This may mislead readers as they may understandably assume an LS score of 4 is average as it is the middle score from 1 to 7 and that these individuals are no cause for concern when evidentially they have lower life satisfaction than average. To avoid these possible confusions the standard deviation of LS for each individual was converted in a binary measure by recoding all standard deviations including and above 0 as 1 and all standard deviations below 0 as 0. This means that our study investigates the factors influencing above and below average life satisfaction.

It is not clear which factors are most important in determining an individual's life satisfaction as people differ in their priorities and vulnerabilities to stressors and difficulties. As there is little established literature defining the factors affecting life satisfaction this work regarded it important to minimise where possible the assumptions made in specifying which factors are important. This work used a statistical technique to refine an initial large set of factors to mathematically determine which factors should be included in each year; this procedure excluded variables where they failed to add explanatory power to models than could be achieved with other variables already included.

Initial large set of factors tested for influence on LS

Financial:
- current economic activity (employment status)
- financial situation
- change in financial position last year
- financial expectations for year ahead
- saves from current income.

Health:
- health status over 12 months
- health problems: anxiety, depression, etc.
- General Health Questionnaire: capable of making decisions
- General Health Questionnaire: enjoy day-to-day activities.

Education:
- highest educational qualification.

Psycho-social:
- General Health Questionnaire: problem overcoming difficulties
- General Health Questionnaire: ability to face problems
- losing confidence.

Relationships:
- present legal marital status.

Emotional support:
- whether living with spouse or partner
- cares for handicapped/other in household
- is there someone who will listen?
- is there someone to help in a crisis?
- relationship of closest friend to respondent
- frequency of meeting people
- someone outside household can help if depressed
- anyone who really appreciates you
- anyone you can count on to offer comfort.

Crime:
- worry about being affected by crime.

Place:
- likes present neighbourhood
- frequency of talking to neighbours.

Social network:
- member of religious organisation
- member of professional association
- member of sports club

- member of voluntary service group
- member of tenants group.

Relationship with children:
- often plays with child(ren)
- often spends leisure time with child(ren).

Selection of factors

Some variables included in the initial large set are likely to measure similar underlying issues affecting LS, for example individuals' perceived financial prosperity/poverty seems likely to be measured by both variables: financial situation over last 12 months and expectation of financial situation over the next 12 months. Including variables that measure a similar or the same issue can create problems in statistical analysis known as collinearity as several variables measuring the same issue can dilute the main underlying effect, misrepresenting results. However, prior to testing each of the variables it is not clear which measures best capture any underlying effect and so it is not clear which to include or exclude from the initial large set of variables. To overcome these problems this project used a method of identifying only those factors that best explain the largest amount of the outcome and removing those factors that do not add additional explanatory power greater than other factors already in the model. This method used an automatic mathematical criterion, know as Stepwise Forward Entering, to decide which factors to include and remove. This method additionally ensures each of the variables in the model significantly influence the outcome when all the other variables are taken into account.

Results

Factors found to be most strongly related to life satisfaction 1997 to 2007

The stepwise logistic regression analysis removed a number of variables from the initial large set of variables on the basis that the removed measures did not significantly improve the explanatory power of models compared to models without them. Explanatory power was determined automatically by assessing significant change in -2 Log Likelihood (-2LL) at the inclusion and exclusion of each variable.

Most variables were found to be significantly related to LS in all or most years. However, a small number were found to influence only in a small number of years; those found to influence in fewer than three years were excluded form the analysis (see table 6 for size of the effects in each year). All variables in the shortlist were not important in all the years but were found to be important in at least three of the nine years, most were important in the majority of years and some in all years.

Table 6: Statistically significant factors in predicting life satisfaction using Stepwise Logistic Regression 1997 to 2007

Variable	Average of all years 1997 to 2007
Confident	0.50
Retired	0.48
GHQ: problem overcoming difficulties	0.47
Unemployed	0.42
Losing confidence	0.41
Employed	0.38
Whether living with spouse or partner	0.35
Cares for handicapped/other in household	0.21
GHQ: enjoy day-to-day activities	0.20
GHQ: ability to face problems	0.17
Financial situation	0.14
GHQ: capable of making decisions	0.13
Frequency of meeting people	0.06
Likes present neighbourhood	0.06
Frequency of talking to neighbours	0.02
Change in financial position last year	0.01
Health status over last 12 months	0.00

Table 7: Effect sizes for each factor included in models in each year 1997 to 2007

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Average of all years
Confidence			2.63	1.32				1.43	1.62	1.51	1.39	1.65
Retired	1.80	1.80	1.46	1.60		1.60	1.75	1.37		1.62	1.56	1.62
Whether living with spouse or partner	1.33	1.40	1.22	1.50		1.48	1.38	1.51	1.48	1.50	0.76	1.36
GHQ: enjoy day-to-day activities	1.60	1.72	1.62	1.62		0.64	0.68	0.64	1.40	1.59	1.57	1.31
Cares for handicapped/ other in household	1.29		1.43	1.47				1.35		1.26	0.77	1.26
Financial situation	1.56	1.51	1.52	1.48		0.68	0.68	0.70	1.44	1.48	1.46	1.25
Likes present neighbourhood	2.11	1.58	1.61	2.02		0.58	0.54	0.63	0.48	0.56	2.07	1.22
GHQ: capable of making decisions						0.90			1.40		1.18	1.16
Married			1.16								1.15	1.16
Health status over 12 months				1.43		0.72	0.73	0.67	1.33	1.52	1.57	1.14
Frequency of meeting people	1.19	1.13	1.14	1.13		0.92	0.87	0.91	1.27	1.10	1.19	1.09
Change in financial position last year			1.07			0.95					1.14	1.05
Frequency of talking to neighbours	1.07	1.07	1.07	1.08		0.91	0.91				1.11	1.03
GHQ: ability to face problems	0.85		0.84				0.86			0.83		0.84
Health problems: anxiety, depression, etc.	0.67	0.63	0.72	0.73		0.73	0.66	0.67		0.75		0.70
Employed	0.83	0.72	0.79	0.63		0.60	0.75	0.63	0.62	0.71	0.64	0.69
Losing confidence	0.71	0.61	0.81	0.69		0.56	0.54	0.67	0.74	0.71	0.66	0.67
Unemployed				0.65		0.73		0.71		0.69	0.52	0.66
GHQ: problem overcoming difficulties	0.56	0.57	0.68	0.67		0.62	0.58	0.64	0.66	0.65	0.63	0.63

It seems likely people will differ in which factors most affect their LS, based on their stage in life. For example, young people will have different concerns to the retired, and ethnic groups and social classes may also differ in their personal criterion for their preferred living conditions such as family life, financial situation and employment. However, this project aims to arrive at an overall estimate of LS for a community characterised by one kind of OAC classification; and so to arrive at a useful estimate for the community it is necessary to regard that community as represented by the most predominant resident OAC group.

To assess how well the variables available in the BHPS account for life satisfaction it is important to examine how well overall the models fit the outcomes. In Ordinary Least Squared Regression how well a model fits, often known as the Goodness of Fit, is assessed using R Sq, Adjusted R Sq or Quasi R Square. These statistics are not used in Logistic regression as the underlying mathematics differs from OLS regression, instead goodness of fit in logistic regression can be assessed using the Homer Lemeshow Test. This test assesses whether the model is random (based on a chi square distribution) and how much it fails to explain the outcome, a model the does not fit the outcome very well will be similar to a random chi square distribution that we would expect if the variables in the model had little impact on the outcome. This means that if the probability is high that the model does not fit a chi square distribution then the model is a good fit to the outcome. Table eight below presents the Homer Lemeshow Tests for each model 1997 to 2007 showing high probability (high p -values) that the final models apart from 1998 were a good fit to the outcome.

Table 8: Hosmer and Lemeshow Test for goodness of fit (similar to R square in Ordinary Least Squares Regression) of each Logistic Regression model 1997 to 2007

Year	Chi square	df	Sig.
1997	13.16	8	0.11
1998	14.65	8	0.07
1999	5.57	8	0.69
2000	4.75	8	0.78
2002	10.56	8	0.23
2003	12.96	8	0.11
2004	6.77	8	0.56
2005	9.14	8	0.33
2006	8.66	8	0.37
2007	10.25	8	0.25

Variables included

Frequency of talking to neighbours: Participants were asked, "How often do you talk to any of your neighbours?" Responses were recoded for analysis as follows: Never = 0, Less than once a month = 1, Once or twice a month = 2, Once or twice a week = 3, On most days = 4. Collected from 1996 to 2007.

Active in social group: Participants were asked, "Do you join in the activities of any of these organisations on a regular basis: social club/working men's club?" Responses were used for analysis as follows: Not mentioned = 0, Active social club = 1. Collected 1991 to 1994 then every second year 1996, 1998...2006.

Cares for handicapped in the home: Participants were asked, "Is there anyone living with you who is sick, disabled or elderly whom you look after or give special help to (for example, a sick or handicapped (or elderly) relative/husband/wife/friend, etc.)?" Responses were used for analysis as follows: No = 0,Yes = 1. Collected 1991 to 2007.

Provides care for non-resident person: Participants were asked, "Do you provide some regular service or help for any sick, disabled or elderly person not living with you?" Responses were used for analysis as follows: No = 0,Yes = 1. Collected 1991 to 2007.

Job satisfaction: Participants were asked, "All things considered, how satisfied or dissatisfied are you with your present job overall?" Responses were used for analysis as follows: Not applicable = 0, Not at all satisfied = 1, Not satisfied = 2, Completely satisfied = 3. Collected 1991 to 2007.

Is there someone you can relax with? Participants were asked, "Is there anyone who you can totally be yourself with?" Responses were used for analysis as follows: No one = 0, Yes, one person = 1, Yes, more than one = 2. Collected 1991 then every other year 1993, 1995...2007.

Anyone who really appreciates you: Participants were asked, "Is there anyone who you feel really appreciates you as a person?" Responses were used for analysis as follows: No one = 0, Yes, one person = 1, Yes, more than one = 2. Collected 1991 then every other year 1993, 1995...2007.

Anyone you can count on to offer comfort: Participants were asked, "Is there anyone who you can really count on to comfort you when you are very upset?" Responses were used for analysis as follows: No one = 0, Yes, one person = 1, Yes, more than one = 2. Collected 1991 then every other year 1993, 1995...2007.

Highest educational qualification: Participants were asked, "What is your highest educational; qualification?" Responses were recoded for analysis as follows: Higher degree =1, First degree = 2, Teaching QF = 3, Other higher QF = 4, Nursing QF = 5, GCE A levels = 6, GCE O levels = 7, Commercial QF = 8, CSE Grades 2–5 = 9, Apprenticeship = 10, Other QF = 11, No QF = 12, Still at school – No QF = 13. Collected 1991 to 2007.

Someone outside the home can help if depressed: Participants were asked, "Is there anyone you could rely on to help you from outside your own household, if you were feeling depressed?" Responses were used for analysis as follows: No = 0,Yes = 1. Collected 1995 then every other year to...2006.

Living with partner: Participants were asked, "Is respondent living with spouse/partner?" Responses were used for analysis as follows: No = 0,Yes = 1. Collected 1991 to 2007.

Likes present neighbourhood: Participants were asked, "Overall, do you like living in this neighbourhood?" Responses were used for analysis as follows: No = 0, Yes = 1. Collected 1991 to 2007.

Current economic activity: Participants were asked, "Please look at this card (D7) and tell me which best describes your current situation? Self-employed = 1, Employed = 2, Unemployed = 3, Retired = 4, Maternity leave = 5, Family care = 6, FT student, school = 7, LT sick, disabled = 8, Government training scheme = 9, Other = 10. Responses were recoded for analysis as follows: Employed = >=1 & <=2, Unemployed = 3, Retired = 4. Collected 1991 to 2007.

Health status over last 12 months: Participants were asked, "Please think back over the last 12 months about how your health has been. Compared to people of your own age, would you say that your health has on the whole been ...". Responses were used for analysis as follows: Very poor = 1, Poor = 2, Fair =3, Good = 4, Excellent = 5. Collected 1991 to 2007.

Health problems (anxiety, depression, etc.): Participants were asked, "Do you have any of the health problems or disabilities listed on this card (D27)? Anxiety, depression or bad nerves, psychiatric problems." Responses were used for analysis as follows: Not mentioned = 0, Anxiety, depression = 1. Collected 1991 to 2007.

Financial situation: Participants were asked, "How well would you say you yourself are managing financially these days? Would you say you are... ". Responses were used for analysis as follows: 1 Finding it very difficult = 1, Finding it quite difficult = 2, Just about getting by = 3, Doing alright = 4, Living comfortably = 5. Collected 1991 to 2007.

Change in financial position last year: Participants were asked, "Would you say that you yourself are better off or worse off financially than you were a year ago?" Responses were used for analysis as follows: Better off = 1, Worse off = 2, About same = 3. Collected 1991 to 2007.

Financial expectations for year ahead: Participants were asked, "Looking ahead, how do you think you will be financially a year from now? Will you be...". Responses were used for analysis as follows: Worse = 1, Same = 2, Better = 3. Collected 1991 to 2007.

Saves from current income: Participants were asked, "Do you save any amount of your income, for example by putting something away now and then in a bank, building society, or Post Office account other than to meet regular bills? Please include share purchase schemes, ISAs and Tessa accounts." Responses were used for analysis as follows: No = 0, Yes = 1. Collected 1991 to 2007.

Capable of making decisions: Participants were asked, "Have you recently...felt capable of making decisions about things?" Responses were used for analysis as follows: Much less = 1, Less so than usual = 2, Same as usual = 3, More so than usual = 4. Collected 1991 to 2007.

Enjoy day-to-day activities: Participants were asked, "Have you recently... been able to enjoy your normal day-to- day activities?" Responses were used for analysis as follows: Much less = 1, Less so than usual = 2, Same as usual = 3, More so than usual = 4. Collected 1991 to 2007.

Problem overcoming difficulties: Participants were asked, "Have you recently... felt you couldn't overcome your difficulties?" Responses were used for analysis as follows: Not at all = 1, No more than usual = 2, Rather more = 3, Much more = 4. Collected 1991 to 2007.

Ability to face problems: Participants were asked, "Have you recently...been able to face up to problems?" Responses were used for analysis as follows: More so than usual = 1, Same as usual = 2, Less so than usual = 3, Much less than usual = 4. Collected 1991 to 2007.

Losing confidence (in asset form): Participants were asked, "Have you recently... been losing confidence in yourself?" Responses were used for analysis as follows: Not at all = 1, No more than usual = 2, Rather more = 3, Much more = 4. Additionally this variable was recoded to create a binary variable for "confident" where Not at all = 1, all other responses = 0. Collected 1991 to 2007.

Present legal marital status: Participants were asked, "What is your current legal marital status? Are you...". Responses were recoded for analysis as follows: Married =1, All other responses = 0. Collected 1991 to 2007.

Is there someone who will listen: Participants were asked "Is there anyone who you can really count on to listen to you when you need to talk?" Responses were used for analysis as follows: No one = 0, Yes, one person = 1, Yes, more than one = 2. Collected 1995 then every other year to...2006.

Is there someone to help in a crisis: Participants were asked, "Is there anyone who you can really count on to help you out in a crisis?" Responses were used for analysis as follows: No one = 0, Yes, one person = 1, Yes, more than one = 2. Collected 1995 then every other year to… 2006.

APPENDIX 4

Output area classification names

WARM uses OAC classifications produced by the Office for National Statistics (ONS). In this appendix we set out the 52 OAC categories and the corresponding social and economic characteristics. We assigned each category a new name for ease of reference.

Subgroups	Far below national average	Far above national average	New name
Blue Collar Communities			
Terraced Blue Collar 1a1	HE qualification All flats Rent (private) No central heating Financial intermediation employment Born outside the UK 2+ car household	Unemployed Terraced housing Lone parent household Rent (public)	Terraced Blue Collar Unemployment and Lone Parents
Terraced Blue Collar 1a2	Rent (private) Detached housing All flats No central heating Born outside the UK Work from home HE qualification	Rent (public) Terraced housing	Terraced Blue Collar
Terraced Blue Collar 1a3	No central heating HE qualification Detached housing	Lone parent household Terraced housing Rent (public)	Terraced Blue Collar Lone Parents
Younger Blue Collar 1b1	HE qualification	Lone parent household Terraced housing Rent (public)	Younger Blue Collar
Younger Blue Collar 1b2	All flats Detached housing HE qualification	Lone parent household No central heating Rent (public) Terraced housing	Younger Blue Collar Low % Detached Housing
Older Blue Collar 1c1	No variables with proportions far below the national average	Terraced housing Rent (public)	Older Blue Collar High % Terrace
Older Blue Collar 1c2	All flats Terraced housing Rent (private) HE qualification Born outside the UK	Rent (public)	Older Blue Collar Low % HE Qualification
Older Blue Collar 1c3	All flats	Rent (public) Terraced housing	Older Blue Collar Low % Flats

Subgroups	Far below national average	Far above national average	New name
City Living			
Settled in the City 2a1	Detached housing Terraced housing Households with non-dependent children Age 5–14 Economically inactive looking after family 2+ car household Working part-time Age 0–4 Lone parent household Rooms per household	Students (full-time) HE qualification No central heating Single person household (not pensioner) Rent (private) All flats	Settled in the City High % Students
Settled in the City 2a2	Detached housing Households with non-dependent children Age 5–14 Terraced housing Mining/quarrying/ construction employment Working part-time Rooms per household Routine/semi-routine occupation	Indian, Pakistani or Bangladeshi Financial intermediation employment Single person household (not pensioner) HE qualification Black African, Black Caribbean or Other Black Public transport to work Born outside the UK Rent (private) All flats	Settled in the City Born Outside the UK
Transient Communities 2b1	Terraced housing Households with non-dependent children Age 5–14	Rent (private) All flats	Transient Communities Low % Terrace
Transient Communities 2b2	Detached housing Households with non-dependent children Routine/semi-routine occupation	Public transport to work Single person household (not pensioner) HE qualification Born outside the UK Rent (private) All flats	Transient Communities Born Outside the UK
Countryside			
Village Life 3a1	All flats Public transport to work Population density	Agriculture/fishing employment Detached housing	Village Life Low % Flats
Village Life 3a2	Population density Public transport to work	Agriculture/fishing employment Detached housing	Village Life
Agricultural 3b1	Terraced housing All flats Population density Rent (public) Public transport to work	2 + car household Work from home Detached housing Agriculture/fishing employment	Agricultural Low % Terraces, High % Detached Housing
Agricultural 3b2	Population density Public transport to work All flats Rent (public) Terraced housing	2 + car household No central heating Rent (private) Work from home Detached housing Agriculture/fishing employment	Agricultural High % Private Rent
Accessible Countryside 3c1	Rent (public) All flats Population density Public transport to work	2 + car household Agriculture/fishing employment Detached housing	Accessible Countryside Low % Flats
Accessible Countryside 3c2	Rent (public) Population density Public transport to work Lone parent household	Work from home Agriculture/fishing employment Detached housing	Accessible Countryside

Subgroups	Far below national average	Far above national average	New name
Prospering Suburbs			
Prospering Younger Families 4a1	Terraced housing Single pensioner household Rent (public) All flats No central heating Age 65+ Rent (private)	2 + car household Detached housing	Prospering Younger Families Low % Terraces + Privately Rented
Prospering Younger Families 4a2	All flats Rent (public) No central heating Single pensioner household Age 65+	2 + car household Detached housing	Prospering Younger Families
Prospering Older Families 4b1	Terraced housing Rent (public) All flats Public transport to work No central heating Lone parent household Rent (private) Single person household (not pensioner)	Detached housing	Prospering Older Families High % Age 45–64
Prospering Older Families 4b2	Terraced housing Rent (public) All Flats No central heating Rent (private) Single person household (not pensioner)	2 + car household Detached housing	Prospering Older Families Low % terraces
Prospering Older Families 4b3	Terraced housing Rent (public) All flats No central heating Single person household (not pensioner) Rent (Private) Routine/semi-routine occupation Lone parent household Divorced Unemployed	Financial intermediation employment HE qualification Rooms per household 2 + car household Detached housing	Prospering Older Families High % HE Qualifications & Financial Intermediation Employment
Prospering Older Families 4b4	All flats Rent (public) No central heating Terraced housing Rent (private) Public transport to work Single person household (not pensioner) Lone parent household	2 + car household Detached housing	Prospering Older Families Low % Lone Parent
Prospering Semis 4c1	Terraced housing All flats Rent (public) Rent (private)	No variables with proportions far above the national average	Prospering Semis Low % Terraces
Prospering Semis 4c2	All flats Rent (public) Rent (private)	Detached housing	Prospering Semis High % Detached Housing
Prospering Semis 4c3	Terraced housing All flats Rent (public) Rent (private)	No variables with proportions far above the national average	Prospering Semis Low % Detached, Terraced & Flats
Thriving Suburbs 4d1	Terraced housing Rent (Public) No central heating Routine/semi-routine occupation	2 + car household Born outside the UK Indian, Pakistani or Bangladeshi Detached housing	Thriving Suburbs Born Outside UK
Thriving Suburbs 4d2	Terraced housing Rent (public) No central heating	Detached housing	Thriving Suburbs

Subgroups	Far below national average	Far above national average	New name
Constrained by Circumstances			
Senior Communities 5a1	2 + car household Detached housing Age 5–14 Age 0–4 Rooms per household Terraced housing	Age 65+ Single pensioner household Rent (public) All flats	Senior Communities Low % Detached Housing, High % Flats, Public Rent
Senior Communities 5a2	Age 0–4 Age 5–14 2 + car household Households with non-dependent children Lone parent household Economically inactive looking after family Age 25–44 Students (full-time) Two adults no children Rooms per household No central heating Financial intermediation employment Detached housing	Age 65+ Single pensioner household Rent (public) All flats	Senior Communities High % Single Pensioner Households, High % Flat, Public Rent
Older Workers 5b1	Detached housing Rent (private) No central heating HE qualification Born outside the UK	Terraced housing All flats Rent (public)	Older Workers Low % Private Rent & Detached Housing
Older Workers 5b2	No variables with proportions far below the national average	Rent (public) All flats	Older Workers High % Flats & Public Rent
Older Workers 5b3	Detached housing	No central heating Terraced housing All flats Rent (public)	Older Workers High % No Central Heating
Older Workers 5b4	Financial intermediation employment Detached housing 2 + car household	Terraced housing All flats Rent (public)	Older Workers Low % Financial Intermediation Employment
Public Housing 5c1	Detached housing No central heating Rent (private) 2 + car household HE qualification Born outside the UK	Unemployed Lone parent household All flats Rent (public)	Public Housing Low % Detached, High % Flats, Public & Private Rent
Public Housing 5c2	Detached housing 2 + car household Terraced housing HE qualification Two adults no children Rooms per household Rent (private)	Divorced Single person household (not pensioner) Public transport to work Lone parent household Unemployed Rent (public) All flats	Public Housing Low % Detached & Terraced, High % Flats, Public Rent
Public Housing 5c3	Detached housing 2 + car household HE qualification	Public transport to work Unemployed Lone parent household All flats Rent (public)	Public Housing Low % Detached, High % Flats, Public Rent
Typical Traits			
Settled Households 6a1	All flats Rent (public)	Terraced housing	Settled Households
Settled Households 6a2	All flats Rent (public) Detached housing	Terraced housing	Settled Households Low % Detached Housing
Least Divergent 6b1	Public transport to work	Rent (private) All flats	Least Divergent High % Flats, Private Rent
Least Divergent 6b2	No variables with proportions far below the national average	All flats	Least Divergent High % Flats

Subgroups	Far below national average	Far above national average	New name
Least Divergent 6b3	No variables with proportions far below the national average	No variables with proportions far above the national average	Least Divergent
Young Families in Terraced Homes 6c1	Detached housing	Rent (private) No central heating Terraced housing	Young Families in Terraced Homes
Young Families in Terraced Homes 6c2	Detached housing Rent (public)	Rent (private) No central heating Terraced housing	Young Families in Terraced Homes High % Flats
Aspiring House-holds 6d1	Rent (public)	Terraced housing	Aspiring Households High % Terraced, Born Outside UK
Aspiring Households 6d2	Rent (public)	All flats	Aspiring Households, Low % Public Rent
Multicultural			
Asian Communities 7a1	Detached housing	Students (full-time) Unemployed Economically inactive looking after family Black African, Black Caribbean or Other Black Rent (private) No central heating Terraced housing Born outside the UK Indian, Pakistani or Bangladeshi	Asian Communities High % Unemployed, Indian, Pakistani or Bangladeshi
Asian Communities 7a2	Detached housing	All flats Born outside the UK Terraced housing Rent (public) Black African, Black Caribbean or Other Black Indian, Pakistani or Bangladeshi	Asian Communities High % Public Rent
Asian Communities 7a3	Detached housing	All flats Rent (private) Terraced housing Public transport to work Born outside the UK Black African, Black Caribbean or Other Black Indian, Pakistani or Bangladeshi	Asian Communities
Afro-Caribbean Communities 7b1	Detached housing 2 + car household	Unemployed Rent (private) Indian, Pakistani or Bangladeshi Public transport to work Rent (public) Born outside the UK All flats Black African, Black Caribbean or Other Black	Afro-Caribbean Communities High % Flats
Afro-Caribbean Communities 7b2	Detached housing 2 + car household Terraced housing Two adults no children Rooms per household	Population density Lone parent household Unemployed Public transport to work Indian, Pakistani or Bangladeshi Born outside the UK Rent (public) All flats Black African, Black Caribbean or Other Black	Afro-Caribbean Communities High % Flats & Public Rent

APPENDIX 5

Case studies: assets and vulnerablities

This appendix gives further detail about the case studies in Part 3. It includes tables on assets and vulnerabilities within each ward used as a case study (this corresponds to stage two of the WARM framework). We use local data from central and local government data sources. Each domain is accorded a colour – red (indicators in this domain are consistently below the local authority average); amber (indicators are in line with local authority averages or mixed performance – above and below); green (indicators are above the local authority average). A list of data sources and the data for each ward is set out in Appendix 6.

ARDWICK assets and vulnerabilities

	Domains	Description	RAG rating
Self	**Life satisfaction**	74% of residents in Ardwick state that they are satisfied with their life. This is marginally higher than the Manchester average.	
Self	**Education**	Relatively low proportion of people have no or low qualifications but education score is slightly higher than average. Slightly higher than average post-16 participation rate.	**Assets:** Good level of participation in further education and low proportion of people without qualifications. **Vulnerabilities:** Poor results at GCSE level.
Self	**Health**	Relatively high proportion of residents report good health. However, this is to some extent in conflict with the actual data. Mental health indicators score is above the Manchester average, as is the health and disability score and illness and disability ratio. Poor score for potential life lost indicators.	**Assets:** High self-reported health. **Vulnerabilities:** Low score on health and disability and for years of potential life lost indicator and mental health.
Self	**Material wellbeing**	High count of job seekers and claimants of incapacity benefits. Poor material wellbeing is reflected in a high income index score and material child wellbeing score. Income deprivation for older people is above the Manchester average. However, relatively low exposure to debt and generally residents are claimants for less than 12 months.	**Assets:** Claimants for short duration and low exposure to credit. **Vulnerabilities:** High proportion of older claimants and older people income deprivation.
Supports	**Strong and stable families**	Marginally higher level of households with divorced residents. Relatively low proportion of lone parent claimants. Also a low proportion of single pensioner households and a low count of carers, but a higher proportion of workless family households.	**Assets:** None. **Vulnerabilities:** Workless households.
Systems and structures	**Local economy**	According to Nomis, there are a high number of vacancies in this ward. Many small businesses operate within this area.	**Assets:** High number of vacancies and high number of small and large industries. **Vulnerabilities:** None.

Systems and structures	**Public services**	High levels of satisfaction with services in the area, specifically for police, fire and rescue and GP services, but to a lesser degree local hospitals. There is good access to services in terms of distance to travel, particularly for employment centres and further education institutions. Child well being index awards this area quite a low score on housing.	**Assets:** High levels of satisfaction of public services and there is close proximity to public services. **Vulnerabilities:** Condition of housing.
	Crime and anti-social behaviour	Crime score for the child wellbeing score is relatively good, compared to Manchester. However, anti-social behaviour, violent crime, burglary and robbery are relatively high. Residents generally feel less safe during the day and at night, than residents that live in Manchester and/or comparator case study site.	**Assets:** Good child wellbeing crime score. **Vulnerabilities:** General fear of crime. Actual crime is higher than the comparator ward average.
	Infrastructure and belonging	A high proportion of people provide unpaid help, and there are high levels of participation in health and education service decision making bodies, as well as decision making bodies that have been set up to tackle crime. Slightly poor child wellbeing housing score. Lower than average proportion of people who feel they belong in their neighbourhood and satisfaction in living in their neighbourhood also low.	**Assets:** A high proportion of people provide unpaid help and participate in local decision making process. **Vulnerabilities:** A low proportion of people feel a sense of belonging to their neighbourhood.

BLACKLEY assets and vulnerabilities

	Domains	Description	RAG rating
Self	**Life satisfaction**	Residents in Blackley experience below the Manchester average levels of life satisfaction.	
	Education	Rate of achieving five GCSEs A*–C is slightly lower than Manchester and comparator rate. High proportion of people with no or low levels of qualifications and high proportion of residents do not stay on post 16. Education child wellbeing score is low.	**Assets:** None. **Vulnerabilities:** Poor attainment at GCSEs and participation rate post-16 is low. High proportion of people with poor or low qualifications.
	Health	Poor health outcomes. Nearly one in two households have one or more people with a limiting long-term illness. Health and disability score is low in contrast to Manchester and comparator area. Proportion of residents that report good health is lower than the Manchester average. Manchester average ratio of 'Years of potential life lost'.	**Assets:** Average ratio for potential life years lost. **Vulnerabilities:** Poor health outcomes.
	Material wellbeing	Smaller number of job seekers, compared to Manchester average and comparator aggregate and average. Lower count of incapacity benefit claimants. However, a higher proportion of people claim for more than 12 months. Relatively high proportion of 18 to 24 year old claimants. Income deprivation affecting older people is low. Comparatively high number of people have County Court Judgments (CCJs).	**Assets:** Smaller number of claimants. Good income deprivation affecting older people score. **Vulnerabilities:** Long-term claimants (for 12 months or more). Degree of exposure to credit and CCJs. Youth unemployment.
Supports	**Strong and stable families**	Blackley has above Manchester rate of married couples and slightly lower rate of households with divorced adults. But there is a high proportion of single pensioner household. Larger number of carers and lone parent claimants.	**Assets:** Comparatively lower divorce rate. **Vulnerabilities:** High proportion of one person pensioner households.

Systems and structures	**Local economy**	Small number of local vacancies and relatively small number of small-scale local businesses. Comparatively large number of residents travel less than 2km to work	**Assets:** None. **Vulnerabilities:** Limited local vacancies and small number of local businesses.
	Public services	Hospitals, fire and rescue and local police have high rates of satisfaction, compared to the Manchester average. Rate of satisfaction is relatively low for GPs. Access to GPs is relatively difficult and residents are disadvantaged by proximity to employment centres according to the Core Accessibility Indicators	**Assets:** High rate of satisfaction for hospitals, fire and rescue and local police. **Vulnerabilities:** Issues of access and low satisfaction for GPs. Long travel time for employment centres.
	Crime and anti-social behaviour	Comparatively a high proportion of people feel safe. Comparatively low level of anti-social behaviour, violent crimes, burglary and robbery. But, poor crime child wellbeing score.	**Assets:** General sense of safety and low crime. **Vulnerabilities:** Poor child wellbeing crime score.
	Infrastructure and belonging	Good child wellbeing housing score – above the Manchester average. Marginally higher than the Manchester average rate of participation in unpaid help and higher than average rate of participation in decision making bodies that support regeneration, and in tenants' groups. Above average level of belonging, but lower than the Manchester average rate of satisfaction with the area as a place to live.	**Assets:** Good housing score. High rate of participation in unpaid activities and decision making bodies and above average rate of people that feel that they belong to their area. **Vulnerabilities:** Low rate of satisfaction with the area as a place to live.

BANDLEY HILL assets and vulnerabilities

Domains	Description	RAG rating
Self	**Life satisfaction**	Unknown.	No data
	Education	Comparatively low rate of educational attainment, specifically low proportion of pupils attain five GCSEs A*–C. High proportion of adults with low or no qualifications and under one in three young people do not stay on to gain further qualifications. Poor education score under child wellbeing.	**Assets:** None. **Vulnerabilities:** High proportion with low or no qualifications. High proportion of young people do not stay on post-16 and low rate of attainment.
	Health	Health is broadly in line with the Hertfordshire average. Self-reported health is good. Good mental health score.	**Assets:** Good health. **Vulnerabilities:**
	Material wellbeing	There are comparatively fewer income support claimants in Bandley Hill than Hertford Sele and there are a lower average number of people that are in receipt of incapacity benefits. Higher proportion of people are short term claimants – for less than 12 months. The proportion of people in receipt of out-of-work benefits is comparatively low. There is high exposure to CCJs, with a higher value. High proportion of youth unemployment.	**Assets:** Comparatively low average of number of claimants. **Vulnerabilities:** Income deprivation affecting older people. High proportion of youth unemployment (31%). Exposure to CCJs, comparatively higher youth unemployment and comparatively low income.
Supports	**Strong and stable families**	Low proportion of single pensioner households and married couples. Comparatively low proportion of people with dependent children. Slightly higher number of carers.	**Assets:** Low proportion of single pensioner households and lone parents. **Vulnerabilities:**
Systems and structures	**Local economy**	Low number of people work within 2km and average number of vacancies per LSOA. A large number of local units employ 0–4 people . Slightly above average walking distance to nearest employment centre.	**Assets:** High number of small businesses. **Vulnerabilities:** Low number of people work within 2km. Employment centres.

Systems and structures	**Public services**	High levels of satisfaction with local police and fire and rescue. Lower than average levels of satisfaction with GP and local hospitals. Barriers index to housing and services score is below average. Distance to public services is average.	**Assets:** Good access to services and levels of satisfaction with fire and rescue services and police. **Vulnerabilities:** Satisfaction with GP and local hospitals.
	Crime and anti-social behaviour	Low levels of actual crime and anti-social behavior. However, a low proportion of people feel safe after dark. Good child wellbeing crime score.	**Assets:** Low levels of actual crime and anti-social behavior (and falling). **Vulnerabilities:** Fear of crime after dark.
	Infrastructure and belonging	Average levels of belonging but below average levels of satisfaction with the area to live in. The housing score is in line with the wider area averages. Largest proportion (marginally) of residents would like to get more involved in local issues. Low proportion of people that have given unpaid help.	**Assets:** Residents would like to be more involved in local issues. **Vulnerabilities:** Comparatively low proportion of people are satisfied with their area as a place to live and low sense of belonging. Low proportion of people that have given unpaid help.

HERTFORD SELE assets and vulnerabilities

Domains	Description	RAG rating
Self	**Life satisfaction**	Unknown.	No data
	Education	A comparatively high proportion of people attain good GCSEs. A high proportion of people participate in education post-16. Good education score and high proportion of people attain level 4 qualifications.	**Assets:** High level of education attainment. **Vulnerabilities:** None.
	Health	In line with the County average of proportion of people who report good health. But relatively poorer illness and disability ratio.	**Assets:** Good health. **Vulnerabilities:**
	Material wellbeing	High number of people claiming income support and incapacity benefits. Child material wellbeing score is relatively poor. High proportion of working age people who are in receipt of out-of-work benefits. However, there is generally less exposure to debt with a low proportion of CCJs and the average value of CCJs is lower. People in work tend to have a marginally higher income.	**Assets:** Good income and low exposure to debt. Low proportion of youth unemployment. **Vulnerabilities:** High proportion of claimants and out-of-work benefits.
Supports	**Strong and stable families**	High number of lone parents. Other data for this area is broadly in line with the Hertfordshire average and comparator average.	**Assets:** None. **Vulnerabilities:** High number of lone parents.
Systems and structures	**Local economy**	Average number of vacancies reported and average number of small and large businesses. Average travel time to nearest employment centre.	**Assets:** High number of reported job vacancies. **Vulnerabilities:** Average distance travelled to work is above the comparator average.
	Public services	Higher than average level of satisfaction with health services – both GP and hospital. But slightly below average rating for local police services and fire and rescue services. Above the average number of FE institutions.	**Assets:** Satisfaction with health services. **Vulnerabilities:** None.

Systems and structures	**Crime and anti-social behaviour**	Higher than average anti-social behavior (though falling rates). Average level of violent crime. Lower proportion of people feel safe during the day and after dark compared to Hertfordshire average.	**Assets:** Low level of violent crime. **Vulnerabilities:** Higher than average level of ant-social behavior and low self-reported feeling of safety.
Systems and structures	**Infrastructure and belonging**	Housing scores are in line with average levels in Hertfordshire. Distances between services are also in line with average. However, a high proportion of people provide unpaid help at least once a month and 5% participate in decision making bodies in their local communities for regeneration and local crime.	**Assets:** A high proportion of people provide unpaid help at least once a month and 5% participate in decision making bodies in their local communities for regeneration and local crime. **Vulnerabilities:** None.

PRIMROSE assets and vulnerabilities

	Domains	Description	RAG rating
Self	**Life satisfaction**	Unknown.	
Self	**Education**	Poor GCSE results but a lower proportion of people with low or no qualifications. High rate of participation post 16 and slightly below average education score.	**Assets:** Comparatively good post 16 rates of participation and small proportion of people with low and no qualifications. **Vulnerabilities:** Poor GCSE results.
Self	**Health**	Generally poor mental health scores and anxiety scores. Below South Tyneside average self reported health and poor health scores.	**Assets:** None. **Vulnerabilities:** Poor mental health scores and anxiety scores. Below South Tyneside average self reported health and poor health scores.
Self	**Material wellbeing**	Approximately average proportion of working age claimants and incapacity benefit claimants. South Tyneside average material wellbeing score. Comparatively lower numbers of CCJ claimants and lower exposure to risk.	**Assets:** Comparatively lower numbers of CCJ claimants and lower exposure to risk.
Supports	**Strong and stable families**	Approximately average proportion of people living in single pensioner households, lone parents, workless households. Slightly below average proportion of lone parents.	**Vulnerabilities:** **Assets:**
Systems and structures	**Local economy**	Comparatively higher number of VAT based businesses and higher number of vacancies.	**Assets:** Comparatively higher number of VAT based businesses. **Vulnerabilities:** Low average number of vacancies
Systems and structures	**Public services**	Average levels of satisfaction with local GP and local hospitals. Travel time to the nearest GP is approximately average and average distance to local GP's.	**Vulnerabilities:** **Assets:**

Systems and structures	**Crime and anti-social behaviour**	Higher rate of crime overall. Specifically higher rates of violent crimes. But comparatively low rates of anti-social behavior and burglary. Higher proportion of people fear crime after dark and during the day.	**Assets:** : Low rates of ASB and burglary **Vulnerabilities:** Fear of crime
	Infrastructure and belonging	Good child wellbeing housing score. Average rate of people that feel that they belong to their neighbourhood and are satisfied with their area as a place to live. Slightly below the ST average rate of volunteering and giving unpaid help. But high rate of activity in local decision making bodies that focus on health or education services.	**Assets:** high rate of activity in health or education services. Good child wellbeing housing score. **Vulnerabilities:** Slightly below the ST average rate of volunteering and giving unpaid help.

BIDDICK HALL assets and vulnerabilities

	Domains	Description	RAG rating
Self	**Education**	Relatively good GCSE attainment. But low level attainment of working age adults and post-16 participation in education. Poor education score.	**Assets:** Relatively good GCSE attainment. **Vulnerabilities:** But low level attainment of working age adults and post-16 participation in education. Poor education score.
	Health	Poor health outcomes. Low proportion record self-reported good health. But comparatively good mental health score (only when compared to the South Tyneside average).	**Assets:** None. **Vulnerabilities:** Low proportion of residents record self-reported good health.
	Material wellbeing	High income support dependency and incapacity benefits. Slightly below the LA average of youth unemployment. Incurring of debts with high number and value of CCJs. Estimated weekly income is below the LA and comparator average.	**Assets:** None. **Vulnerabilities:** High income support and incapacity benefits dependency.
Supports	**Strong and stable families**	Higher proportion of divorced adults, lone parents and workless households. Also, high proportion of single person pensioner households.	**Assets:** None. **Vulnerabilities:** Higher proportion of divorced adults, lone parents and workless households. Also, high proportion of single person pensioner households.
Systems and structures	**Local economy**	Higher number of people travel less than 2km for work, than comparator area. However, fewer VAT based small or large businesses. Low number of vacancies.	**Assets:** **Vulnerabilities:** Low number of vacancies. Few VAT based small or large businesses.

Systems and structures

Public services	High levels of recorded satisfaction for local hospitals and GPs. Access to employment centre is good. Slightly above average walking distance time to nearest GPs.	**Assets:** High levels of recorded satisfaction for local hospitals and GPs. **Vulnerabilities:**
Crime and anti-social behaviour	Slightly below average feelings of safety during the day but perceived lack of safety after dark. Generally crime is lower in this area, compared to Primrose but high incidence of anti-social behavior.	**Assets:** Generally low levels of crime and high levels of perceived safety during the day. **Vulnerabilities:** Fear of crime after dark and anti-social behaviour.
Infrastructure and belonging	Lower than recorded average of people that feel they belong to their area and who are satisfied with their area as a place to live. Low levels of participation in decision making bodies and voluntary activities.	**Assets:** None. **Vulnerabilities:** Low levels of sense of belonging, voluntary activity and participation in decision making bodies.

APPENDIX 6

Data in the case studies

Manchester

Domain	Measure	Survey	Indicator	Date of data collection	Geographical area	Ardwick	Blackley	Manchester
Self	Life satisfaction	Place Survey	All things considered, how satisfied are you with your life as a whole nowadays? (happy)	2008	Ward	74.50%	68%	72.50%
Self	Education	National Indicator dataset	NI 75 - 5 GCSEs inc E&M (%)	2009	Ward	18.80%	21.90%	23.90%
Self	Education	Neighbourhood statistics	Adults (25-54) with no or low qualifications rate ID 2007 (average per LSOA)	2007	Lower Super Output Area	45.4	58.9	46.5
Self	Education	Deprivation indices	Not staying on post 16 rate ID 2007 (average per LSOA)	2007	Lower Super Output Area	25	38.1	31.7
Self	Education	National Indicator dataset	NI 163 Working age population qualified to at least Level 2 or higher	2007/8	Ward	63.60%	63.60%	63.60%
Self	Education	National Indicator dataset	NI 165 Working population qualified to at least level 4 or higher	2007/8	Ward	28.50%	28.50%	28.50%
Self	Education	Child Wellbeing Index 2009	Education score (where 0= the best and 100= the worst) (average per LSOA)	2009	Lower Super Output Area	50.94	59.37	46.42
Self	Health	National Indicator dataset	% of households with one or more person with a limiting long term illness	2008	Ward	41.88	46.71	39.54
Self	Health	Neighbourhood statistics	Mental Health Indicator (ratio) (average LSOA)	2007	Lower Super Output Area	1.44	1.45	1.06
Self	Health	Neighbourhood statistics	Years of Potential Life Lost Indicator (ratio) (average LSOA)	2007	Lower Super Output Area	118.3	97.9	96.6
Self	Health	Child Wellbeing Index 2009	Health and disability score (where -3.41 = the best and 2.99 = the worst) (average LSOA area)	2009	Lower Super Output Area	1.03	1.32	0.73
Self	Health	Place Survey	% of people with good health	2008	Ward	79.60%	59.40%	72.90%
Self	Health	Neighbourhood statistics	Comparative Illness and Disability Ratio ID 2007 (average LSOA area)	2007	Lower Super Output Area	233.6	215.71	189

Self	Health	Neigh-bourhood statistics	Measure of Adults Suffering from Mood or Anxiety Disorders ID 2007 (average LSOA area)	2007	Lower Super Output Area	1.44	1.45	1.05
Self	Material wellbeing = income/ wealth	DWP	Income support (average per LSOA)	Nov-09	Lower Super Output Area	259	144	119
Self	Material wellbeing = income/ wealth	DWP	Incapacity Benefits (average per LSOA)	Nov-09	Lower Super Output Area	97	79	66.89
Self	Material wellbeing = income/ wealth	Neigh-bourhood statistics	Claimants for Less than 12 Months - Rate (Persons, Percentage) (average %)	Jan-07	MSOA (001 and 018 only)	84%	87%	86%
Self	Material wellbeing = income/ wealth	CLG	Income Index (average per LSOA)	2007	Lower Super Output Area	659	557.14	512.8
Self	Material wellbeing = income/ wealth	Nomis	Claimant count (average per LSOA)	May-10	Lower Super Output Area	92	61	69
Self	Material wellbeing = income/ wealth	Nomis	Claimants aged 50+ (average %)	May-10	Ward	11.20%	13.50%	10.90%
Self	Material wellbeing = income/ wealth	Nomis	Claimants aged 18-24 (average %)	May-10	Ward	23.00%	35.10%	30.40%
Self	Material wellbeing = income/ wealth	Child Wellbeing Index 2009	Material wellbeing score (where 0 = the best and 1= the worst) (average per LSOA)	2009	Lower Super Output Area	0.68	0.51	0.44
Self	Material wellbeing = income/ wealth	Depriva-tion indices	Income Depriva-tion Affecting Older People Index (IDAOPI) 2007 (average per LSOA)	2007	Lower Super Output Area	0.52	0.33	0.37
Self	Material wellbeing = income/ wealth	Neigh-bourhood statistics	Total County Court Judgments (total for MSOA)	2005	MSOA (001 only and 018 only)	148	157	7690
Self	Material wellbeing = income/ wealth	Neigh-bourhood statistics	Average Value of CCJs (total for MSOA)	2005	Super Output Area (001 only and 018 only)	1522.51	2508.55	1836.53
Self	Material wellbeing = income/ wealth	Neigh-bourhood statistics	NI 166 Average Weekly Household Total Income Estimate (total for MSOA)	April 07-March 08	MSOA (001 and 018)	410	440	
Supports	Strong and stable families	Neigh-bourhood statistics	People aged 16 and over living in households: Not living in a couple: Divorced	2001	Lower Super Output Area	9.11%	8.30%	7.12%
Supports	Strong and stable families	Neigh-bourhood statistics	Households with no adults in employment: With dependent children	2001	Lower Super Output Area	14.39%	10.09%	10.08%
Supports	Strong and stable families	Neigh-bourhood statistics	One person: Pensioner	2001	Lower Super Output Area	12.80%	19.90%	14.69%
Supports	Strong and stable families	Neigh-bourhood statistics	Married couple households: With dependent children	2001	Lower Super Output Area	8.97%	11.18%	10.52%
Supports	Strong and stable families	Neigh-bourhood statistics	Lone parent households: With dependent children	2001	Lower Super Output Area	12.80%	12.20%	11.17%
Supports	Strong and stable families	DWP	Lone parent (average per LSOA)	Aug-09	Lower super output area	46	52	39.7
Supports	Strong and stable families	DWP	Carer (average per LSOA)	Aug-09	Lower super output area	12	12	10.5
Supports	Social Capital	National Indicator dataset	% who have given unpaid help at least once per month over the last 12 months (NI 6)	2008	Ward	41.25%	21.90%	19.60%
Supports	Social Capital	Place Survey	A member of a group making decisions on local health or education services (%) (NI003)	2008	Ward	4%	2%	3.60%
Supports	Social Capital	Place Survey	A member of a decision making group set up to regenerate the local area (%) (NI003)	2008	Ward	1%	5%	3.70%
Supports	Social Capital	Place Survey	A member of a decision making group set up to tackle local crime problems (%) (NI003)	2008	Ward	6%	3%	3.30%
Supports	Social Capital	Place Survey	A member of a tenants' group decision making committee (%) (NI003)	2008	Ward	3%	8%	5.40%
Systems and structures	Enabling infrastructure	Neigh-bourhood statistics	Barriers to Housing and Services Score	2007	Lower Super Output Area	30.6	25.1	
Systems and structures	Enabling infrastructure	Neigh-bourhood statistics	Difficulty of access to owner-occupation ID 2007	2007	Lower Super Output Area	66.1	66.1	66.1
Systems and structures	Enabling infrastructure	Child Wellbeing Index 2009 I	Housing score (where 0.01 = the best and 93.99 = the worst)	2009	Lower Super Output Area	32.99	28.03	30.5
Systems and structures	Enabling infrastructure	Neigh-bourhood statistics	Housing In Poor Condition score	2007	Lower Super Output Area	0.29	0.27	
Systems and structures	Enabling infrastructure	Neigh-bourhood statistics	Homelessness index	2007	Lower Super Output Area	20.9	20.9	20.9
Systems and structures	Local Economy	Nomis	Vacancies - summary analysis (notified vacancies) (average per LSOA)	Mar-10	Lower Super Output Area	39	3	19
Systems and structures	Enabling infrastructure	National Indicator dataset	Distance travelled to work - less than 2km	2001	MSOA	117	385	
Systems and structures	Local economy	Neigh-bourhood statistics	VAT based local units by employment size band (0-4) (Count)	2004	Ward	265	55	8610 (Mar 07)
Systems and structures	Local Economy	Neigh-bourhood statistics	VAT based local units by employment size band (20+) (Count)	2004	Ward	50	...	2090 (Mar 07)

Systems and structures	Effective public services	Place Survey	Please indicate how satisfied or dissatisfied you are with each of the following public services in your local area - Local police. (very satisfied or fairly satisfied)	2008	Ward	64.70%	53.50%	48%
Systems and structures	Effective public services	Place Survey	Please indicate how satisfied or dissatisfied you are with each of the following public services in your local area – Fire and rescue (very satisfied or fairly satisfied)	2008	Ward	94.00%	86.90%	75.20%
Systems and structures	Effective public services	Place Survey	Please indicate how satisfied or dissatisfied you are with each of the following public services in your local area – GP (very satisfied or fairly satisfied)	2008	Ward	77.00%	72.40%	74.10%
Systems and structures	Effective public services	Place Survey	Please indicate how satisfied or dissatisfied you are with each of the following public services in your local area – Local hospital (very satisfied or fairly satisfied)	2008	Ward	77.50%	74.20%	72.60%
Systems and structures	Crime	Child Wellbeing Index 2009 I	Crime score (where -4.01 = the best and 3.38 = the worst)	2009	Lower Super Output Area	0.11	1.11	0.89
Systems and structures	Crime	Place Survey	How safe or unsafe do you feel when outside in your local area during the day? (safe)	2008	Ward	68.00%	75%	79%
Systems and structures	Crime	Place Survey	How safe or unsafe do you feel when outside in your local area after dark (safe)	2008	Ward	21.80%	30.50%	32.50%
Systems and structures	Crime	NPIA	Burglary	Apr-10	Metropolitan division	51	45	867
Systems and structures	Crime	NPIA	Anti-social behaviour	Apr-10	Metropolitan division	256	206	3775
Systems and structures	Crime	NPIA	Violence	Apr-10	Metropolitan division	73	42	889
Systems and structures	Crime	NPIA	All crime	Apr-10	Metropolitan division	387	224	5838
Systems and structures	Local Economy	Core Accessibility Indicators	Travel time to nearest employment centre by walk/PT - Number between 0 and 120; 999 where journey cannot be made within 120 minutes	2008	Lower Super Output Area	4	11	7
Systems and structures	Local Economy	Core Accessibility Indicators	% target population within 20 minutes by composite mode	2008	Lower Super Output Area	49%	78%	36%
Systems and structures	Enabling infrastructure	Core Accessibility Indicators	Travel time to nearest GP by walk/PT	2008	Lower Super Output Area	7	8	7
Systems and structures	Enabling infrastructure	Core Accessibility Indicators	% of target population weighted by the access to GPs by walk/PT	2008	Lower Super Output Area	70%	64%	70%
Systems and structures	Enabling infrastructure	Core Accessibility Indicators	Number of FE institutions within 30 minutes by walk/PT	2008	Lower Super Output Area	7	5	5
Systems and structures	Enabling infrastructure	Core Accessibility Indicators	Number of primary schools within 15 minutes by walk/PT	2008	Lower Super Output Area	5	5	5
Systems and structures	Enabling infrastructure	Place Survey	NI 2 % of people who feel that they belong to their neighbourhood PSA 21	2008	Ward	31.70%	54%	47.60%

Hertfordshire

Domain	Measure	Survey	Indicator	Date of data collection	Area	Bandley Hill	Hertford Sele	Hertford-shire
Self	Life satisfac-tion	Place Survey	All things considered, how satis-fied are you with your life as a whole nowadays? (happy)	2008	Ward			
Self	Education	National Indicator dataset	NI 75 - 5 GCSEs inc E&M	2009	Ward	41.10%	71.30%	59.30%
Self	Education	Neigh-bourhood statistics	Adults (25-54) with no or low qualifica-tions rate ID 2007 (average per LSOA)	2007	Lower Super Output Area	45.7	41.5	36.4
Self	Education	Deprivation indices	Not staying on post 16 rate ID 2007 (average per LSOA)	2007	Lower Super Output Area	29.5	12.2	22.3
Self	Education	National Indicator dataset	NI 163 Working age population qualified to at least Level 2 or higher	2007/8	Ward	70.90%	73.70%	72.50%
Self	Education	National Indicator dataset	NI 165 Working population qualified to at least level 4 or higher	2007/8	Ward	21.70%	33.10%	32.40%
Self	Education	Child Wellbeing Index 2009 (Output area)	Educa-tion score (where 0= the best and 100= the worst) (average per LSOA)	2009	Lower Super Output Area	31.63	9.04	12.35
Self	Health	National Indicator dataset	% of house-holds with one or more person with a limiting long term illness	2008	Ward	27%	27%	31%
Self	Health	Neigh-bourhood statistics	Mental Health Indi-cator (ratio) (average LSOA)	Jan-07	Lower Super Output Area	-0.736	-0.55	-0.86
Self	Health	Neigh-bourhood statistics	Years of Potential Life Lost Indicator (ratio) (aver-age LSOA)	Jan-07	Lower Super Output Area	62.76	55.55	53.37
Self	Health	Child Wellbeing Index 2009 (Output area)	Health and dis-ability score (where -3.41 = the best and 2.99 = the worst) (aver-age LSOA area)	2009	Lower Super Output Area	-0.54	-0.62	-0.83
Self	Health	Place Survey	% of people with good health	2008	Ward	75.89%	77.90%	75.50%
Self	Health	Deprivation indices	Comparative Illness and Disabil-ity Ratio ID 2007 (aver-age LSOA area)	2007	Lower Super Output Area	101.7	91.5	80.89
Self	Health	Deprivation indices	Measure of Adults Suffering from Mood or Anxiety Disorders ID 2007 (av-erage LSOA area)	2007	Lower Super Output Area	-0.736	-0.55	-0.86
Self	Material wellbeing = income/ wealth	DWP	Income support (average per LSOA)	Aug-09	Lower Super Output Area	27	29	32
Self	Material wellbeing = income/ wealth	DWP	Incapac-ity Benefits (average per LSOA)	Aug-09	Lower Super Output Area	16	23.75	15.8
Self	Material wellbeing = income/ wealth	Neigh-bourhood statistics	Claimants for Less than 12 Months - Rate (Persons, Percentage) (average %)	2007	MSOA	92%	86%	88%/84%
Self	Material wellbeing = income/ wealth	CLG	Income Index (average per LSOA)	Nov-09	Lower Super Output Area	178	197.5	152
Self	Material wellbeing = income/ wealth	Nomis	Claimant count (average per LSOA)	May-10	Ward	29	32	28
Self	Material wellbeing = income/ wealth	Nomis	Claimants aged 50+ (average %)	May-10	Ward	18.50%	18.90%	
Self	Material wellbeing = income/ wealth	Nomis	Claimants aged 18-24 (average %)	May-10	Ward	30.80%	17.30%	
Self	Material wellbeing = income/ wealth	Child Wellbeing Index 2009 (Output area)	Material wellbeing score (where 0 = the best and 1 = the worst)	2009	Lower Super Output Area	0.19	0.21	0.13
Self	Material wellbeing = income/ wealth	IDAOPI	Income Deprivation Affecting Older Peo-ple Index (IDAOPI) 2007 (average per LSOA)	2007	Lower Super Output Area	0.18	0.14	0.14
Self	Material wellbeing = income/ wealth	Neigh-bourhood statistics	Total CCJs (total for MSOA)	2005	MSOA	99	72	N/A
Self	Material wellbeing = income/ wealth	Neigh-bourhood statistics	Average value of CCJs (total for MSOA)	2005	MSOA	2762.75	1234.33	2427.89/ 2951.30

Self	Material wellbeing = income/ wealth	Neigh-bourhood statistics	NI 166 Average Weekly Household Total Income Estimate (total for MSOA)	April 07-March 08	MSOA	620	730	647/863
Supports	Strong and stable families	Neigh-bourhood statistics	People aged 16 and over living in households: Not living in a couple: Divorced	2001	Lower Super Output Area	6.38%	6.75%	5.31%
Supports	Strong and stable families	Neigh-bourhood statistics	Households with no adults in employ-ment: With dependent children	2001	Lower Super Output Area	4.81%	4.68%	
Supports	Strong and stable families	Neigh-bourhood statistics	One person: Pensioner	2001	Lower Super Output Area	10.70%	12.10%	13.32%
Supports	Strong and stable families	Neigh-bourhood statistics	Married couple households: With dependent children	2001	Lower Super Output Area	23.00%	16.00%	20.67%
Supports	Strong and stable families	Neigh-bourhood statistics	Lone parent households: With dependent children	2001	Lower Super Output Area	5.90%	6.70%	5.24%
Supports	Strong and stable families	DWP	Lone parent (average per LSOA)	Aug-09	Lower Super Output Area	14	25	13.7
Supports	Strong and stable families	DWP	Carer (average per LSOA)	Aug-09	Lower Super Output Area	3	5	2.28
Supports	Social Capital	Place Survey	% who have given unpaid help at least once per month over the last 12 months (NI 6)	2008	Ward	20.80%	29.00%	27.00%
Supports	Social Capital	Place Survey	A member of a group making decisions on local health or education services (%) (NI003)	2008	Ward	1%	1%	2.70%
Supports	Social Capital	Place Survey	A member of a decision making group set up to regener-ate the local area (%) (NI003)	2008	Ward	0%	5%	2.20%
Supports	Social Capital	Place Survey	A member of a decision making group set up to tackle local crime problems (%)(NI003)	2008	Ward	2%	5%	2.80%
Supports	Social Capital	Place Survey	A member of a tenants' group deci-sion making committee (%)(NI003)	2008	Ward	3%	3%	4.00%
Systems and struc-tures	Enabling infrastruc-ture	Neigh-bourhood statistics	Barriers to Housing and Serv-ices Score	2007	Lower Super Output Area	27.03	17.74	N/A
Systems and struc-tures	Enabling infrastruc-ture	Neigh-bourhood statistics	Difficulty of access to owner-occupation ID 2007	2007	Lower Super Output Area	68.6	64.5	69.6
Systems and struc-tures	Enabling infrastruc-ture	Child Wellbeing Index 2009 (Output area)	Housing score (where 0.01 = the best and 93.99 = the worst)	2009	Lower Super Output Area	11.27	11.87	11.18
Systems and struc-tures	Enabling infrastruc-ture	Neigh-bourhood statistics	Housing In Poor Condi-tion score	2007	Lower Super Output Area	0.184	0.25	N/A
Systems and struc-tures	Enabling infrastruc-ture	Neigh-bourhood statistics	Homeless-ness index	2007	Lower Super Output Area	6.2	4	7.6
Systems and struc-tures	Enabling infrastruc-ture	National Indicator dataset	Distance travelled to work - less than 2KM	2001	MSOA	70.8	120.5	N/A
Systems and struc-tures	Local Economy	Nomis	Vacancies - summary analysis (notified vacancies)	May-10	Lower Super Output Area	8	12	8
Systems and struc-tures	Local economy	Neigh-bourhood statistics	VAT based local units by employ-ment size band (0-4) (Count)	Mar-07	Ward	60	55	29640
Systems and struc-tures	Local economy	Neigh-bourhood statistics	VAT based local units by employ-ment size band (20+) (Count)	Mar-07	Ward	5	5	N/A
Systems and struc-tures	Effective public services	Place Survey	Please indicate how satisfied or dissatisfied you are with each of the following public services in your local area - Local police. (very satisfied or fairly satis-fied)	2008	Ward	64.00%	62.00%	66%
Systems and struc-tures	Effective public services	Place Survey	Please indicate how satisfied or dissatisfied you are with each of the following public services in your local area – Fire and rescue (very satis-fied or fairly satisfied)	2008	Ward	89.70%	85.70%	87.00%

Systems and structures	Effective public services	Place Survey	Please indicate how satisfied or dissatisfied you are with each of the following public services in your local area – GP (very satisfied or fairly satisfied)	2008	Ward	77.50%	91.00%	87.00%
Systems and structures	Effective public services	Place Survey	Please indicate how satisfied or dissatisfied you are with each of the following public services in your local area – Local hospital (very satisfied or fairly satisfied)	2008		68.50%	80.50%	69.00%
Systems and structures	Crime	Child Wellbeing Index 2009 (Output area)	Crime score (where-4.01 = the best and 3.38 = the worst)	2009	Lower Super Output Area	0.25	0.33	-0.05
Systems and structures	Crime	Place Survey	How safe or unsafe do you feel when outside in your local area during the day? (safe)	2008	Ward	89.00%	90%	95%
Systems and structures	Crime	Place Survey	How safe or unsafe do you feel when outside in your local area after dark? (safe)	2008	Ward	43.60%	45.90%	60.00%
Systems and structures	Crime	NPIA	Burglary	Apr-10	Metropolitan division	2	2.3	712
Systems and structures	Crime	NPIA	Anti-social behaviour	Apr-10	Metropolitan division	23	31.7	4790.7
Systems and structures	Crime	NPIA	Violence	Apr-10	Metropolitan division	6.3	7.3	908.3
Systems and structures	Crime	NPIA	All crime	Apr-10	Metropolitan division	24.7	26.3	5704
Systems and structures	Local Economy	Core Accessibility Indicators	Travel time to nearest employment centre by walk/PT - Number between 0 and 120; 999 where journey cannot be made within 120 minutes	2008	Lower Super Output Area	12	9	9
Systems and structures	Local Economy	Core Accessibility Indicators	% target population within 20 minutes by composite mode	2008	Lower Super Output Area	100%	100%	98%
Systems and structures	Enabling infrastructure	Core Accessibility Indicators	Travel time to nearest GP by walk/PT	2008	Lower Super Output Area	12	12	21 (average per LSOA area)
Systems and structures	Enabling infrastructure	Core Accessibility Indicators	% of target population weighted by the access to GPs by walk/PT	2008	Lower Super Output Area	53%	51%	57%
Systems and structures	Enabling infrastructure	Core Accessibility Indicators	Number of FE institutions within 30 minutes by walk/PT	2008	Lower Super Output Area	5	7	4 (average per LSOA area)
Systems and structures	Enabling infrastructure	Core Accessibility Indicators	Number of primary schools within 15 minutes by walk/PT	2008	Lower Super Output Area	5	4	4
Systems and structures	Enabling infrastructure	Place Survey	Influence	2008	Ward	33	33	29.40%
Systems and structures	Enabling infrastructure	Place Survey	More involved - Yes	2008	Ward	25	24	22.60%
Systems and structures	Enabling infrastructure	Place Survey	More involved - Depends	2008	Ward	62.7	57	67%
Systems and structures	Enabling infrastructure	Place Survey	NI 2 % of people who feel that they belong to their neighbourhood PSA 21	2008	Ward	47.00%	69%	61.00%

South Tyneside

Domain	Measure	Survey	Indicator	Date of collection	Area	Biddick Hall (South shields constitu-ency)	Primrose (Jarrow constitu-ency)	South Tyneside
Self	Life satisfac-tion	Place Survey	All things considered, how satisfied are you with your life as a whole nowadays? (happy)	2008	Community Area			
Self	Education	National Indicator dataset	NI 75 - 5 GCSEs inc E&M	2009	Parlia-mentary constituency only	50.60%	43.90%	47.70%
Self	Education	Deprivation indices	Adults (25-54) with no or low qualifications rate ID 2007	2007	LSOA	61%	52.50%	50.6
Self	Education	Deprivation indices	"Not staying on post 16 rate ID 2007"	2007	LSOA	51	35.6	35.7
Self	Education	National Indicator dataset	NI 163 Working age population qualified to at least Level 2 or higher	2007/8	Ward	68.00%	68.00%	68.00%
Self	Education	National Indicator dataset	NI 165 Working population qualified to at least level 4 or higher	2007/8	Ward	22.00%	22.00%	22.00%
Self	Education	Child Well-being Index 2009	Education score (where 0 = the best and 100 = the worst)	2009	LSOA	46.04	33.57	31.28
Self	Health	National Indicator dataset	% of house-holds with one or more person with a limiting long term illness	2008	Community Area	39%	39%	34
Self	Health	Neigh-bourhood statistics	Mental Health Indicator (ratio)	Jan-07	LSOA	0.74	0.8	0.57
Self	Health	Neigh-bourhood statistics	Years of Potential Life Lost Indicator (ratio)	Jan-07	LSOA	80.6	74.3	72.5
Self	Health	Child Well-being Index 2009	Health and disability score (where -3.41 = the best and 2.99 = the worst	2009	LSOA	0.68	0.56	0.46
Self	Health	Place Survey	% of people with good health	2008	Community Area	61.00%	64.00%	70.00%
Self	Health	CLG	Comparative Illness and Disabil-ity Ratio ID 2007	2007	LSOA	171	164.5	152.8
Self	Health	CLG	Measure of Adults Suffering from Mood or Anxiety Disorders ID 2007	2007	LSOA	0.74	0.81	0.57
Self	Material wellbeing = income/ wealth	DWP	Income support	Aug-09	LSOA	99	65	65.1
Self	Material wellbeing = income/ wealth	DWP	Incapacity Benefits	Aug-09	LSOA	41	34.2	33.9
Self	Material wellbeing = income/ wealth	Neigh-bourhood statistics	Claimants for Less than 12 Months - Rate (Persons, Percentage)	Jan-07	MSOA	14%	12%	
Self	Material wellbeing = income/ wealth	CLG	Income Index	2007	LSOA	464	340.83	330.63
Self	Material wellbeing = income/ wealth	Nomis	Claimant count	May-10	LSOA	75	57	60
Self	Material wellbeing = income/ wealth	Nomis	Claimants aged 50+ (average %)	May-10	Ward	20.30%	20.10%	18.20%
Self	Material wellbeing = income/ wealth	Nomis	Claimants aged 18-24 (average %)	May-10	Ward	26.50%	24.80%	28.00%
Self	Material wellbeing = income/ wealth	Child Well-being Index 2009	Mate-rial wellbeing score (where 0 = the best and 1= the worst)	2009	LSOA	0.43	0.3	0.28
Self	Material wellbeing = income/ wealth	IDAOPI	Income Deprivation Affect-ing Older People Index (IDAOPI) 2007	2007	LSOA	0.34	0.29	0.29
Self	Material wellbeing = income/ wealth	Neigh-bourhood statistics	Total County Court Judg-ments	2005	MSOA (016 only and 015 only)	144	98	1,946
Self	Material wellbeing = income/ wealth	Neigh-bourhood statistics	Average Value of County Court Judgments	2005	MSOA	1,675.83	1,531.35	1,800.61
Self	Material wellbeing = income/ wealth	Neigh-bourhood statistics	NI 166 Aver-age Weekly Household Total Income Estimate	April 07-March 08	MSOA	450	490	530
Supports	Strong and stable families	Neigh-bourhood statistics	People aged 16 and over living in households: Not living in a couple: Divorced	2001	LSOA	8.08%	6.76%	7.13%
Supports	Strong and stable families	Neigh-bourhood statistics	Households with no adults in employment: With depend-ent children	2001	LSOA	12.49%	8.84%	7.92%

Supports	Strong and stable families	Neigh-bourhood statistics	One person: Pensioner	2001	LSOA	18.83%	17.22%	17.22%
Supports	Strong and stable families	Neigh-bourhood statistics	Married couple households: With depend-ent children	2001	LSOA	13.05%	15.45%	15.45%
Supports	Strong and stable families	Neigh-bourhood statistics	Lone parent households: With depend-ent children	2001	LSOA	14.00%	9.66%	8.97%
Supports	Strong and stable families	DWP	Lone parent	Aug-09	LSOA	49	21.6	23.9
Supports	Strong and stable families	DWP	Carer	Aug-09	LSOA	9	9.16	7.33
Supports	Social Capital	Place Survey	% who have given unpaid help at least once per month over the last 12 months (NI 6)	2008	Community Area	8.00%	12.00%	16.00%
Supports	Social Capital	Place Survey	A member of a group making decisions on local health or education services (%) (NI003)	2008	Community Area	2%	7%	4.00%
Supports	Social Capital	Place Survey	A member of a decision making group set up to regenerate the local area (%)(NI003)	2008	Community Area	1%	1%	2.00%
Supports	Social Capital	Place Survey	A member of a decision making group set up to tackle local crime problems (%) (NI003)	2008	Community Area	1%	2%	2.00%
Supports	Social Capital	Place Survey	A member of a tenants' group deci-sion making committee (%)(NI003)	2008	Community Area	1%	2%	2.00%
Systems and struc-tures	Enabling infrastruc-ture	Neigh-bourhood statistics	Barriers to Housing and Services Score	2007	LSOA	21	25	N/A
Systems and struc-tures	Enabling infrastruc-ture	Neigh-bourhood statistics	Difficulty of access to owner-occupation ID 2007	2007	LSOA	65.1	65.1	
Systems and struc-tures	Enabling infrastruc-ture	Child Well-being Index 2009	Housing score (where 0.01 = the best and 93.99 = the worst)	2009	LSOA	9.94	7.84	9.16
Systems and struc-tures	Enabling infrastruc-ture	Neigh-bourhood statistics	Housing In Poor Condi-tion score	2007	LSOA	0.16	0.17	N/A
Systems and struc-tures	Enabling infrastruc-ture	Neigh-bourhood statistics	Homeless-ness index	2007	LSOA	9.6	9.6	
Systems and struc-tures	Enabling infrastruc-ture	National Indicator dataset	Distance travelled to work - less than 2km (count: average per LSOA)	2001	MSOA	92	79	
Systems and struc-tures	Local Economy	Nomis	Vacancies - summary analysis (no-tified vacan-cies) (total number)	May-10	LSOA	3	1	9
Systems and struc-tures	Local economy	Neigh-bourhood statistics	VAT based local units by employment size band (0-4)	Mar-07	Ward	15	60	1435
Systems and struc-tures	Local economy	Neigh-bourhood statistics	VAT based local units by employment size band (20+)	Mar-07	Ward	5	10	365
Systems and struc-tures	Effective public services	Place Survey	Please indicate how satisfied or dissatisfied you are with each of the following public services in your local area – GP (very satisfied or fairly satisfied)	2008	Community Area	93.00%	86.00%	86.00%
Systems and struc-tures	Effective public services	Place Survey	Please indicate how satisfied or dissatisfied you are with each of the following public services in your local area – Local hospital (very satisfied or fairly satis-fied)	2008	Community Area	82.00%	80.00%	78.00%
Systems and struc-tures	Crime	Child Well-being Index 2009 Index 2009	Crime score (where-4.01 = the best and 3.38 = the worst)	2009	LSOA	0.66	0.41	0.18
Systems and struc-tures	Crime	Place Survey	How safe or unsafe do you feel when outside in your local area during the day? (safe)	2008	Community Area	82.00%	80%	86%
Systems and struc-tures	Crime	Place Survey	How safe or unsafe do you feel when outside in your local area after dark? (safe)	2008	Community Area	36.00%	43.00%	47.00%
Systems and struc-tures	Crime	NPIA	Burglary	Apr-10	Metropolitan division	4.3	3.7	67.6
Systems and struc-tures	Crime	NPIA	Anti-social behaviour	Apr-10	Metropolitan division	68.3	51.3	1030.7

Systems and structures	Crime	NPIA	Violence	Apr-10	Metropolitan division	8.7	10.3	142.3
Systems and structures	Crime	NPIA	All crime	Apr-10	Metropolitan division	45	54.7	739.3
Systems and structures	Local Economy	Core Accessibility Indicators	Travel time to nearest employment centre by walk/PT - Number between 0 and 120; 999 where journey cannot be made within 120 minutes	2008	LSOA	9	10	9
Systems and structures	Local Economy	Core Accessibility Indicators	% target population within 20 minutes by composite mode	2008	LSOA	100%	100%	100%
Systems and structures	Enabling infrastructure	Core Accessibility Indicators	Travel time to nearest GP by walk/PT	2008	LSOA	10	8	8
Systems and structures	Enabling infrastructure	Core Accessibility Indicators	% of target population weighted by the access to GPs by walk/PT	2008	LSOA	59%	65%	65%
Systems and structures	Enabling infrastructure	Core Accessibility Indicators	Number of FE institutions within 30 minutes by walk/PT	2008	LSOA	3	3	2
Systems and structures	Enabling infrastructure	Core Accessibility Indicators	Number of primary schools within 15 minutes by walk/PT	2008	LSOA	5	5	5
Systems and structures	Enabling infrastructure	Place Survey	NI 2 % of people who feel that they belong to their neighbourhood PSA 21	2008	Community Area	59.00%	63%	64.00%

APPENDIX 7

Definition of indicators for resilience and wellbeing

Below we set out the definitions of the national and local indicators presented in appendix 6.

NI 101 Children in care achieving 5 A*–C GCSEs (or equivalent) at Key Stage 4 (including English and mathematics)
Of all children in care (for at least a year) who were in year 11, this is the percentage who achieved the equivalent of at least 5 A*–C GCSEs (including English and maths).

Proportions of working age adults (aged 25–54) in the area with no or low qualifications (LSOA level)
The percentage of adults aged 25–54 with no qualifications or with qualifications below NVQ.

Proportion of young people not staying on at school or school level education above 16 (LSOA level)
Proportion of children aged 17+ not staying on in education, either at school or in further education (FE) (calculated by subtracting the proportion of children still receiving Child Benefit at age 17)
(Numerator: Those aged 17 still receiving Child Benefit in 2006
Denominator: Those aged 15 receiving Child Benefit in 2004.
The indicator is subtracted from 1 to produce the proportion not staying in education.)

Percentage of people of working age qualified to at least Level 2 = NI 163 – Proportion of population aged 19–64 for males and 19–59 for females qualified to at least Level 2 or higher
Proportion of working age (19 years to retirement age) population qualified to at least Level 2 or higher. Qualified to Level 2 and above: people are counted as being qualified to Level 2 and above if they have achieved at least either 5 GCSEs grades A*–C (or equivalent, i.e., O levels, CSE Grade 1s), two A/S levels, or any equivalent or higher qualification in the Qualifications and Credit Framework. Age group: 19–59 inclusive for women and 19–64 inclusive for men.

Percentage of people of working age qualified to Level 4 and above = NI 165 – Proportion of population aged 19–64 for males and 19–59 for females qualified to at least Level 4 or higher
Proportion of working age (19 years to retirement age) population qualified to at least Level 4 or higher. People are counted as being qualified to Level 4 or above if they have achieved qualifications equivalent to NQF levels 4–8. (Level 4–6 qualifications include foundation or first degrees, recognised degree-level professional qualifications, teaching or nursing qualifications, diploma in higher education, HNC/HND or equivalent vocational qualification). Qualifications at level 7–8 include higher degrees, and postgraduate level professional qualifications. Age group: 19–59 inclusive for women and 19–64 inclusive for men.

Child Wellbeing Index – Education score
This uses a variety of indicators of education, and then uses maximum likelihood factor analysis to generate weights for combining them. Indicators were:

- two year rolling average of points score at Key Stages 2 and 3 derived from test score
- two year rolling average of capped points score at Key Stage 4
- secondary school absence rate – based on two year average
- proportion of children not staying on in school or non-advanced further education or training beyond the age of 16
- proportion of those aged under 21 not entering higher education.

Mental health indicator – rate
The proportion of adults under 60 suffering from mood or anxiety disorders, presented as a derived score. The value 0 is approximately the average proportion across all SOAs in England. Based on prescribing, suicides, and health benefits data. The data shown represents a ratio or "standardised measure" of mental illness, rather than an absolute count or percentage. A figure of less than 0 shows a lower prevalence of mental illness compared to the expected figure given the age and gender distribution in the area. Conversely, a figure of greater than 0 indicates a higher prevalence compared to the expected value

Years of potential life lost (YPLL) (LSOA level)
Numerator: Mortality data in five-year age sex bands, for 2001–05.
Denominator: Total resident population plus communal establishments minus prison establishment population (resident non-staff) from ONS supplied LSOA population estimates 2005, in five-year age sex bands.

Looking at the 'Value', a figure of less than 100 represents fewer years of potential life lost in that area and a figure above this shows more years of potential life lost in comparison to the expected figure in that area.

Method: Blane and Drever (1998) (with shrinkage applied to age–sex rates and an upper age of 75).

Child Wellbeing Index – health score (LSOA level)
Three health indicators were combined with equal weights: proportion of children aged 0–18 admitted to hospital in an emergency; proportion of children aged 0–18 attending hospital as outpatients; and proportion of children aged 0–16 receiving Disabled Living Allowance.

Comparative Illness and Disability Ratio (CIDR) (LSOA level)
The number of people in receipt of IS Disability Premium, AA, DLA, SDA, IB as an age and sex standardised ratio of the total resident population.

Measure of adults under 60 suffering from mood or anxiety disorders (LSOA level)
A modelled measure of adults under 60 suffering from mood (affective), neurotic, stress-related and somatoform disorders. Based on data for prescribing, hospital episodes, deaths attributed to suicide and health benefits.

Income index (average per LSOA)
This domain aims to capture the proportion of the population experiencing income deprivation. The indicators that make up this domain include: adults and children in Income Support Households, adults and children living in households in receipt of Income Based Job Seekers Allowance, adults and children in Pension Credit (Guarantee) households, households in receipt of Working Tax Credit, or Child Tax Credit, whose income is less than 60 per cent of the median before housing costs, and National Asylum Support Service (NASS) supported asylum seekers in receipt of subsistence only and accommodation support.

Child Wellbeing Index – Material wellbeing score
This is a comprehensive, non-overlapping count of children living in households in receipt of both in-work and out-of-work means-tested benefits. Indicators are the percentage of children aged 0–15 who live in households claiming: Income Support; Income-Based Job Seekers' Allowance; Pension Credit (Guarantee); Working Tax or Child Tax Credit whose equivalised household income (excluding housing benefits) is below 60 per cent of the median before housing costs; or Child Tax Credit whose equivalised income (excluding housing benefits) is below 60 per cent of the median before housing costs. The indicators are summed and expressed as a rate of the total child population aged 0–15.

Income Deprivation Affecting Older People Index (IDAOPI) 2007 (average per LSOA)
Proportion of the population aged 60 and over who are Income Support, Jobseeker's Allowance or Incapacity Benefit claimants.

Proportion of the working-age population who are in receipt of out-of-work benefits
This indicator measures the percentage of the working age population who are claiming out-of-work benefits. Working age benefits include the main out-of-

work client group categories (unemployed people on Jobseekers Allowance, Lone Parents on Income Support, Incapacity Benefits customers, and others on income-related benefits with the exception of carers who are not subject to activation policies in the same way as other groups). The working age population is defined as the sum of females aged 16–59 plus males aged 16–64. Data are presented as a rolling average of 4 quarters to account for seasonal variation.

*** NI 166 Average Weekly Household Total Income Estimate (total for MSOA)**
Model-based estimates of income for Middle Layer Super Output Areas (MSOAs). The estimates have been produced using a modelling methodology that enables survey data to be combined with Census and administrative data. The survey data used within the modelling process was obtained from the 2004–05 Family Resources Survey (FRS). The choice of the FRS enabled each of the four survey variables on income to be modelled. The estimates and confidence intervals produced are values of the average MSOA income for the following four income types: 1) Average weekly household total income (unequivalised). 2) Average weekly household net income (unequivalised). 3) Average weekly household net income before housing costs (equivalised). 4) Average weekly household net income after housing costs (equivalised).

*** Lone parent (average per LSOA)**
Working Age Benefit Claimants and is derived from the Work and Pensions Longitudinal Study (WPLS). Benefit claimants categorised by their statistical group (their main reason for interacting with the benefit system). In the case of lone parents it is Income Support claimants with a child under 16 and no partner. This dataset does not double count claimants who receive multiple benefits.

*** Carer (average per LSOA)**
Working Age Benefit Claimants and is derived from the Work and Pensions Longitudinal Study (WPLS). Benefit claimants categorised by their statistical group (their main reason for interacting with the benefit system). In the case of lone parents it is Carers Allowance claimants. This dataset does not double count claimants who receive multiple benefits.

Distance travelled to work – less than 2km
The number of people aged 16–74, who were usually resident in the area at the time of the 2001 Census, and travelled less than 2km to their place of employment.

Barriers to Housing and Services score (LSOA)
The indicator is a combination of two indicators: 'Geographical Barriers', which measures road distances to: GP premises, primary schools, Post Office, and supermarket/convenience stores; and 'Wider Barriers', which includes: difficulty of access to owner-occupation, homelessness and overcrowding.

There are two sub-indicators: 'Geographical Barriers', which includes road distances to a) GP premises, b) primary school, c) Post Office and d) supermarket or convenience store; and 'Wider Barriers', which includes e) difficulty of access owner-occupation, f) homelessness and g) overcrowding.

Difficulty of access to owner-occupation
This is an indicator score that gives a measure of access to affordable housing based on house prices and income/earnings.

Child wellbeing index – Housing score
Four indicators are used to measure access to housing and quality of housing, which are then combined with equal weights. Indicators of access to housing are: Overcrowding (occupancy rating); Shared accommodation: (people aged 0–15 living in shared dwellings as a proportion of all children 0–15 in each LSOA); and Homelessness (concealed families containing dependent children as a proportion of all families with dependent children). Quality of housing is measured by: Lack of central heating (children aged 0–15 years old living in accommodation without central heating as a proportion of all children aged 0–15).

Homelessness index (LSOA)
Percentage of households for whom a decision on whether their application for assistance under the homeless provisions of housing legislation has been made.

Housing in poor condition score (LSOA)
Probability that any house in the LSOA will fail to meet 'Decent Homes Standard' as modelled by the Building Research Establishment.

Child wellbeing index – Crime score
Four component indicators are weighted according to maximum likelihood factor analysis for the population aged 0–15. The indicators are: Burglary rate, Theft rate, Criminal damage rate, and Violence rate.

APPENDIX 8

Contrasting international examples

Case study one: Gallup's Wellbeing Index Summary

The Gallup-Healthways Well-Being Index was developed to establish official statistics on the state of wellbeing in the United States. Blending psychology and medical science (Gallup's behavioural and polling research with Healthways' health and wellbeing support services), the index tracks the wellbeing of no fewer than 1,000 U.S. residents, aged 18 and older, 350 days per year. The index also includes findings from leading scientists in the areas of survey research, behavioural economics, and health.[100]

The Gallup-Health ways Well-Being Index claims to provide a comprehensive, real-time view of the public's wellbeing in the United States with the aim of giving governments, health planners, employers and communities an insight into the health and prosperity of their populations.

Indicators

- The Gallup-Healthways Well-Being Index **Composite Score** is comprised of six sub-indices: Life Evaluation, Emotional Health, Physical Health, Healthy Behaviour, Work, Environment and Basic Access.
- The **Life Evaluation** Sub-Index is partially based on the Cantril Self-Anchoring Striving Scale and combines the evaluation of one's present life situation with one's anticipated life situation five years from now.
- The **Emotional Health** Sub-Index is primarily a composite of respondents' daily experiences, asking respondents to think about how they felt yesterday along nine dimensions.
- The **Physical Health** Sub-Index is comprised of questions related to: body mass index, disease burden, sick days, physical pain, daily energy, history of disease and daily health experiences.
- The **Healthy Behaviour** Sub-Index includes items measuring lifestyle habits with established relationships to health outcomes.
- The **Work Environment** Sub-Index surveys workers on several factors to gauge their feelings and perceptions about their work environment. The Basic Access Sub-Index is based on thirteen items measuring residents' access to food, shelter, healthcare and a safe and satisfying place to live.

- **Basic Access** is based on 13 items measuring residents' access to food, shelter, healthcare, and a safe and satisfying place to live.

Methods

- The Gallup-Healthways Well-Being Index, Gallup is based on completed interviews from 1,000 U.S. adults nationally, seven days a week, excluding only major holidays.
- The survey methods rely on live interviewers, dual-frame random-digit-dial (RDD) sampling – which includes landlines as well as wireless phone sampling – and a random selection method for choosing respondents within a household.
- Daily tracking includes Spanish-language interviews and interviews in all 50 states. The data is weighted daily to compensate for disproportionalities in selection probabilities and non-response.
- The data is weighted to match targets from the U.S. Census Bureau by age, sex, region, gender, education, ethnicity, and race. For results based on each monthly sample, one can say with 95 per cent confidence that the maximum margins of sampling error are as shown.

For more information visit www.well-beingindex.com

Case study two: Roots of the BNP, IPPR research on community resilience

IPPR research suggests that there are four 'domains' to social resilience: (i) economic, (ii) political, (iii) community, and (iv) individual.

Strength in each of these areas means that a community has access to the resources it needs to help respond to disruption and stress. An index has been constructed that measures variables in each domain in English 'top-tier' local authorities (county councils, metropolitan borough councils and unitary authorities).[101]

This spatial scale was chosen because a broad range of data on economic, social and political wellbeing is available at this 'level' – though not all indicators are, meaning that the ones chosen for the index were selected both for theoretical and practical data availability reasons. Combining these variables allows us to compare resilience across local authorities in the UK. Table 10 sets out the variables used in the index.

Table 10: ippr's resilience indicators

Resilience Domain	Indicator	Rationale
Economic	Unemployment (International Labour Organization measure)	People who are employed have – on average – access to more resources than those who are unemployed. Evidence suggests that they are wealthier, happier and more self-confident, and have more social contacts and networks than those who are unemployed. These are all resources that people can draw on in a time of shock or crisis.
Economic	Business survival rate (survival rates for businesses five years after start-up)	The collapse of the financial sector and resulting recession has placed severe stress on businesses. Those areas with high levels of business survival show resilience to the shock of recession.
Political	Voter turn-out at national elections (turnout in 2005 general election)	High voter turnout demonstrates that people are willing to participate in society and use official channels to solve problems. Low voter turnout suggests people are disenchanted with the political system and may feel alienated.
Political	Feeling able to influence local decision making (% of people who feel able to influence local decision making)	If people feel that they are empowered to change things at the local level, they are more likely to be able to come together to respond to a crisis. They are also more likely to use established processes and institutions to effect change in their locality, rather than more divisive means.
Community	Social cohesion (% of people who agree that their area is one where people from different backgrounds get along)	Cohesion is the 'glue' that binds society together. In the face of external shocks (such as recession and high unemployment), areas with low levels of cohesion are more likely to experience social unrest. Tolerance, respect and positive interactions mean communities can adapt and support change, rather than breaking up under pressure.
Community	Crime (crimes per 1,000 of the population)	Areas with high levels of crime demonstrate social breakdown in response to tough circumstances. Crime can also lead to fear and distrust, which in turn damage a community's ability to work together and adapt to other external shocks.
Individual	Health (% of people reporting their health as good or very good)	Good health forms the basis of individual wellbeing. When people feel healthy and 'well' they will be more capable of confronting challenges. Good health is also the building block of people's ability to work with and relate to others, both of which are key to resilience.
Individual	Qualifications	High qualifications and skills mean an individual is better able to adapt to changing economic circumstances. This is particularly important in a globalised knowledge economy that favours those with flexible skills. Qualifications and skills are also associated with the personal ability to respond to social challenges.

ippr carried out a regression based analysis of the data which disprove some embedded assumptions of the reasons behind the growing popularity of the BNP in particular places (such as Stoke-on-Trent, Thurrock and Barnsley). The table above highlights variables that correlate most with factors related to resilience.

Case study three: new economics foundation, National Accounts of Wellbeing

In 2006–07, nef produced a survey that included a detailed module of 50 wellbeing questions, designed by the University of Cambridge, nef and other partners. As a result, it is argued to be the most comprehensive and detailed international survey of wellbeing ever undertaken.

The nef approach is based on the European Social Survey(ESS),[102] which began mapping long-term attitudinal and behavioural change in Europe in 2001. Covering attitudes to religion, politics, discrimination and pressing policy concerns, the data reveal intriguing contrasts and similarities between amongst over 30 European countries.

Measuring the wellbeing of populations across areas of traditional policy making, and looking beyond narrow, efficiency-driven economic indicators enable policy makers greater scope of understanding the real impact of their decisions on people's lives. This promotes a cross-cutting and more informative approach to policy making. National Accounts of Wellbeing aims to provide opportunities for national governments to reconnect with their citizens and to address the democratic deficit now facing many European nations through better engagement between national governments and the public.

National Accounts of Wellbeing are based on two wellbeing domains: personal and social.

Personal wellbeing is made up of five main components:

1. **Emotional wellbeing:** This is comprised of the subcomponents: positive feelings (how often positive emotions are felt) and absence of negative feelings (the frequency with which negative emotions are felt).
2. **Satisfying life:** Having positive evaluation of your life overall, representing the results of four questions about satisfaction and life evaluations.
3. **Vitality:** Having energy, feeling well rested and healthy, and being physically active.
4. **Resilience and self-esteem:** A measure of individuals' psychological resources, comprised of: self-esteem (feeling good about yourself); optimism (feeling optimistic about your future); resilience (being able to deal with life's difficulties).

5. **Positive functioning:** This can be summed up as 'doing well'. It includes four subcomponents: autonomy (feeling free to do what you want and having the time to do it); competence (feeling accomplishment from what you do and being able to make use of your abilities); engagement (feeling absorbed in what you are doing and that you have opportunities to learn); meaning and purpose (feeling that what you do in life is valuable, worthwhile and valued by others).

Social wellbeing is made up of two main components:

1. **Supportive relationships:** The extent and quality of interactions in close relationships with family, friends and others who provide support.
2. **Trust and belonging:** Trusting other people, being treated fairly and respectfully by them, and feeling a sense of belonging with and support from people where you live.

For more information see www.nationalaccountsofwellbeing.org

Case study four: Euromodule

The Euromodule project was initiated by the Research Unit "Social Structure and Social Reporting" at the Social Science Research Centre Berlin (WZB) and the Social Indicators Department at the Survey Research Centre Mannheim (ZUMA). Bringing in a number of other academic collaborators from different European nations, the costs of implementing cross-national research were kept lower by deploying a stepwise, bottom-up strategy that began by adding short modules into different types of existing surveys in participating countries.

It aims to integrate objective observations with subjective measures of wellbeing by weighting them equally. This combined approach has been used in several survey projects, e.g. in the Scandinavian Welfare Survey and the German welfare research.

This branch of welfare research combines the Swedish approach with its socio-political focus and the socio-psychological approach of the American tradition. Welfare and quality of life are thus influenced by the constellation of objective living conditions and subjective wellbeing: "Quality of life can be understood as... good living conditions that go along with positive subjective wellbeing."[103]

It is based on a view of personal development combined with opportunities defined as "liveability".[104/105] This provides the basis for new concepts surrounding the issue of welfare highlighting specific aspects of the societal components of welfare, namely social cohesion, social exclusion, and social capital. These concepts refer to the "quality" of a given society.

"Quality of society" refers to particular characteristics of society, and its central institutions, which may have a positive or negative influence on individual welfare, are subsumed under the term. When these characteristics are evaluated by the population we speak of the perceived quality of society.

The different aspects of welfare covered by the Euromodule are illustrated in Table 11. The Euromodule can be used as a uniform instrument to investigate these aspects in a representative fashion.

Table 11: Taxonomy of welfare concepts

	Objective	**Subjective**
Individual level	Objective living conditions (e.g. income)	Subjective well-being (eg income satisfaction)
Societal level	Quality of society (eg income distrubution)	Perceived quality of society (eg perceived strength of conflicts between rich and poor)

1 **Objective living conditions:** housing, household composition, social relations,* participation, standard of living, income, health, education and work, personal environment and safety.
2 **Subjective wellbeing:** domain satisfaction (see above), general life satisfaction, happiness, anxieties and anomia, subjective class position, importance of various life domains,* optimism/pessimism about various social concerns,* evaluation of own living conditions.*
3 **(Perceived) quality of society:** social conflicts, trust in other people, degree of achievement of public goods (freedom, security, social justice),* living standards in other European nations in comparison to own country,* preconditions for social integration.*
4 **Background variables** (so far not included in objective living conditions): age, gender, type of community, martial status, employment status, occupation (current/former).

(* optional part)

Case study five: Toronto's Neighbourhood Wellbeing Index

The Neighbourhood Wellbeing Index (NWI) is an innovative way to measure and present information concerning the vitality of neighbourhoods in Toronto. Data is collected from a variety of sources including Statistics Canada's demographic statistics and the city's own administrative databases. The NWI is an integral part of the Council's newly adopted Community Partnership Strategy and contributes to the Canadian open data initiative (OpenTO) by acting as an open database.

The data, although also held on an open database, is primarily presented as part of an online smart-map initiative whereby local residents can visually browse neighbourhood indicators and identify priority areas themselves. This means that service providers for youth or elderly services, for example, can quickly identify residents' perceptions of need.

The information is organised in two main 'data clusters' that are used as measures of a neighbourhood's wellbeing. This allows for a finer examination of Toronto's neighbourhoods, which can be added to over time as more data becomes available.

Population characteristics: age, gender language, ethnicity, family structure and income.

Human services infrastructures: community facilities, libraries, parks, police stations, schools, etc.

For more information visit: http://buildingstrongcommunities.wordpress.com/2010/04/11/community-partnership-strategy-neighbourhood-well-being-index/

APPENDIX 9

The Local Wellbeing Project domain framework for measuring wellbeing

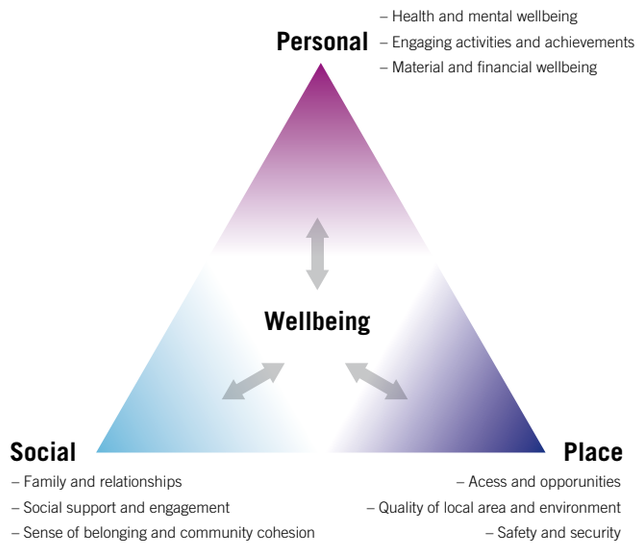
This appendix describes the approach to measuring wellbeing at the local level, carried out by the new economics foundation for the Local Wellbeing Project. This was the starting point for the development of WARM.

The Local Wellbeing Project's initial work exploring how wellbeing could be measured at the local level suggested using a blend of satisfaction and experiential indicators, covering the key domains or areas that are recognised to have an important influence on people's experience of life. WARM adopts the same principles set out in this initial work but has refined and updated the model.

Measuring wellbeing in relation to a personal-social-place based structure provides a bounded, but holistic, way to think of wellbeing and incorporates the key dimensions of how people experience their lives at a local level:

- how they feel about their own lives (e.g. health, work, financial circumstances)
- how they feel about those around them (e.g. friends, neighbours, community)
- how they feel about where they live (e.g. neighbourhood quality, accessibility, safety).

Figure A2: Personal-social-place based wellbeing



National indicators

This framework was then compared to the then (2008) national indicator set, which included six indicators that measure aspects of subjective wellbeing in relation to different areas of residents' lives.[106]

Sense of belonging and community cohesion
NI 1: % of people who believe people from different backgrounds get on well together
NI 2: % of people who feel they belong to their neighbourhood
NI 23: perceptions that people in the area treat one another with respect and dignity

Quality of local area and environment
NI 5 overall/general satisfaction with local area

Health and mental wellbeing
NI 119 self-reported measure of people's overall health and wellbeing

Access and opportunities
NI 4 % of people who feel they can influence decisions in their locality

Some of these indicators are 'borderline' wellbeing measures and could be adapted to measure subjective wellbeing more directly, although this would compromise the ability to compare results with other local authorities (e.g. Do residents personally feel that they are treated with dignity and respect in their local area? rather than their perception as to whether this is something taking place locally).

Other indicators in the national indicator set were closely related to measuring wellbeing in relation to different domains (e.g. NI 3 Civic Participation and NI 6 Participation in Regular Volunteering in relation to social engagement and participation) but are not identified as measures of wellbeing here as they do not capture feelings or experiences directly.

In addition to the national indicators, some other domain level indicators were also available and in use. These include indicators drawn from the library of local performance indicators at that time (e.g. fear of crime) or those developed locally by local authorities and their partners. However, there remain a number of gaps.

The report suggested that local authorities and their partners could usefully develop a comprehensive set of domain level wellbeing indicators for use at the local level, drawing on both the national indicator set and locally derived indicators.

Figure A3: Measuring wellbeing by domains: an example

	PERSONAL			SOCIAL			PLACE		
DOMAIN	Health & mental wellbeing	Material & financial wellbeing	Engaging activities & achievment	Family & relationships	Social support & engagement	Sense of belonging & cohesion	Quality of local area & environment	Safety & security	Access & opportunities
OBJECTIVE INDICATORS	All age all cause mortality rate (NI 120) Adult participation in sport (NI 8)	Working age people on out of work benefits (NI 152 Average earnings of employees in the area (NI 166)	GCSE or equivalent qualifications (NI 75) Young people's involvement in positive activities (NI 110)	Proportion of children in poverty (NI 116) Under 18 conception rate (NI 112)	Civic participation in local area (NI 3) Participation in regular volunteering (NI 6)	Population in transience (Local Indicator) Number of racially motivated incidents (Local Indicator)	Level of air quality (NI 194) Street & environmental cleanliness (NI 195)	Serious violent crime rate (NI 15) People killed or seriously injured in road traffic accidents (NI 47)	Number of vulnerable people achieving independent living (NI 141) Number of new affordable homes (NI 155)
SUBJECTIVE INDICATORS	Self-reported measure of overall health & wellbeing (NI 119) Self-report limiting long-term illness (Local indicator)	% people who feel they are coping on present income (NEW) % people satisfied with present standard of living (NEW)	% people who feel they seldom have time to do things they really enjoy (NEW) % people who feel unable to demonstrate competence in daily life (NEW)	% people satisfied with their personal relationships (NEW) Experiential measures of time spent with family (NEW)	% people who feel they have other people to turn to/ discuss problems with (NEW) % people satisfied with support received from others (NEW)	% people who believe people from different backgrounds get on well together (NI 1) % people who feel they belong to their neighbourhood (NI 2)	Overall/ general satisfaction with local area (NI 5) % people satisfied with access to local green spaces (NEW)	Fear of crime during day and at night (Local indicator) Perceptions of anti-social behaviour (NI 17)	% people who feel they can influence decisions in their locality (NI 4) Fair treatment by local services (NI 140)

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This report presents a new tool to measure wellbeing and resilience (WARM). The report sets out the conditions which contribute to wellbeing, from level of life satisfaction, the quality of the social networks to the wider local infrastructure. WARM arranges this data to construct a story about how a community is faring. It shifts focus away from looking solely at a communities deficits, such as poor health and social isolation, and sharpens the focus on community assets. This is central to understanding the capacity of a community to help itself. We argue that WARM measures what matters at a local level.

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