

A City of Wellbeing

The what, why & how of measuring
community wellbeing

Researched, Written & Produced by Karen Warner and Margaret Kern for
The City of Santa Monica Office of Wellbeing

December 2013

A City of Wellbeing

The what, why & how of measuring community wellbeing

1: Introduction

2: The What of Wellbeing

Defining Wellbeing

A Framework for Understanding Community Wellbeing

Defining the Wellbeing Index

3: Why Wellbeing? An Emerging Imperative

Wellbeing and Policymaking

Counting What Matters: Quantity vs. Quality

The Economics of Wellbeing

4: How Is Community Wellbeing Measured: It's Complicated

Community-level Perspectives

Domains of Wellbeing

Subjective vs. Objective Measures

Inherent Complications

5: Measurement In Action: A Horizon Scan

Overview of Existing Measurement Tools

Lessons Learned

6: Conclusion

Implications for Policymakers

Counting What Counts

Appendix: Resources

History & Evolution of Happiness and Measured Wellbeing

Organizations

Publications

Featured Wellbeing Indexes

References

End Notes

1: Introduction

“The good opinion of mankind, like the lever of Archimedes, with the given fulcrum, moves the world.”

- Thomas Jefferson, 1814¹

This is a story about changing the world by what is measured -- counting what matters. It has a cast of characters: Socrates and Aristotle; Jeremy Bentham and Thomas Jefferson; Simon Kuznets and Robert F. Kennedy; Nicolas Sarkozy and David Cameron; Amartya Sen and Joseph Stiglitz; Martin Seligman and Daniel Gilbert; His Majesty the King Jigme Khesar Namgyel Wangchuck, the Fourth King of Bhutan, and the City of Santa Monica – among a cast of millions, including you and me.

This story has a central hero – the wellbeing index – and this whitepaper will examine its past, present, and future in an exploration of the what, why, and how of community wellbeing:

- What is wellbeing and how is wellbeing defined at the community level?
- Why does measuring and prioritizing wellbeing matter and how does it relate to public policy?
- How is wellbeing measured at the community level?

First, we will define the architecture of wellbeing, grounding existing theory within a social ecological framework. Then, we will define the building blocks of collective wellbeing at the local level.

Promoting a better life for citizens is a core goal of democratic governments. Leaders are elected on the implied promise that they will somehow improve people’s lives. While government alone cannot directly make us happier, it is a steward of those things that can: the economy, our surroundings, our community, and the culture in which we live.²

By the end of this whitepaper, you will see that wellbeing can be measured. What can be measured can be managed. Communities can yield great benefit by prioritizing wellbeing, and it should be imperative for government to redefine the lens through which it views progress and success based upon the values of the people it serves.

Wellbeing measurement is an emerging field, representing a promising trend in academic, policy, and public arenas, fueled by the availability of new sources of data and new ways to engage with the public. The concept of measuring wellbeing is relatively new to most governments, incorporating meaningful measures of how people are doing into the traditional assessment of performance, prosperity, and progress will be key to government remaining relevant to people’s lives. Those governments that have already invested resources in measuring wellbeing, including countries like Bhutan, France, Canada, Australia, and the UK, can provide important lessons as leaders in this global movement, supported by psychology, sociology, epidemiology, and economics among other disciplines. Why should a government create a comprehensive, multifaceted understanding of human flourishing? Because, when all is said and done, government exists to preserve and promote the wellbeing of the people.

For more than 50 years, there has been a tendency for governmental bodies to view the mandate to make life better for their citizens through the lens of economic growth. Focus has been on ensuring a reasonable distribution of resources and opportunities, providing affordable access to services like housing, education, healthcare, that might otherwise be inaccessible, and securing people from the major threats against which they cannot secure themselves.³ Through policies and decisions about how to spend finite resources, through laws that regulate what can and cannot be done, and through the creative use of knowledge and ability to bring programs and services to those who need them most, government is perfectly positioned to understand and take action to improve our wellbeing.

In parallel, however, collective wellbeing – the greatest good for the greatest number of people – has been the spoken and unspoken goal of democratic governance. The cultivation and support of wellbeing requires collaborative participation by many actors, including the government, who tends to the public sector; the citizenry, who tend to families, communities, and culture; and institutions, including business, religion, media, entertainment, and non-governmental organizations (NGOs).^{4 5 6} Proactively addressing wellbeing at the local level is a logical next step for city government.⁷ While local government can be seen as being slow to change, they are uniquely positioned to begin to measure wellbeing and to adapt their policies accordingly. Nations, communities, Nobel laureates, ordinary citizens, academics, economists, technologists, politicians, and policymakers are increasingly embracing collective wellbeing as a viable goal of governance. Still, it should be noted, since the policy tools for influencing wellbeing are at an early stage of development, few policies have been tested for their impact on wellbeing.

We hope that this foundational document will accelerate the ability of individuals, institutions, and governments large and small to embrace the concept of measuring wellbeing through the creation of a wellbeing index, easing the start-up process by providing a birds' eye view of the current and quickly moving landscape for marrying wellbeing measurement and government policy.

2: The What of Wellbeing

"Happiness is serious business."

—Nic Marks, Founder of the Centre for Well-Being, new economics foundation (nef)⁸

Defining Wellbeing

"Happiness" and "wellbeing" are often used interchangeably, but they are fundamentally different. "Happiness" communicates its appeal across a spectrum of audiences. It's easy for the general public to understand it.⁹ However, the definition of happiness is a moving target, depending upon one's background and perspective. The word "happiness" can be easily confused with the *emotion* of pleasure. In contrast, the word "wellbeing" draws upon the traditions of Aristotle and the ancient Greek philosophers as well as contemporary positive psychology to marry two traditions together: *hedonia* – a state of pleasure – and *eudaimonia* – a life experienced as meaningful and engaging.^{10 11} *Wellbeing*, as it is used in the context of measurement and social change, deliberately emphasizes this Aristotelian concept of living well and reaching our full human potential.¹² At the individual level, *wellbeing* may be defined as living a meaningful life, characterized by feeling empowered to make change, be happy, healthy, and connected to one's environment and community.

Even researchers who study happiness and wellbeing often interchange the two, while offering diverse definitions to distinguish them. To some, individual happiness is about feeling good, enjoying life and wanting the feeling to last. To others, it is a higher ratio of positive to negative feelings. Some focus on objective life components that people need to thrive. Others focus on subjective perspectives, in which individuals evaluate for themselves the degree of wellbeing they are experiencing. Despite the diversity of definitions, a common theme is that wellbeing is more than the lack of problems; it involves thriving – not merely surviving – in one's life.

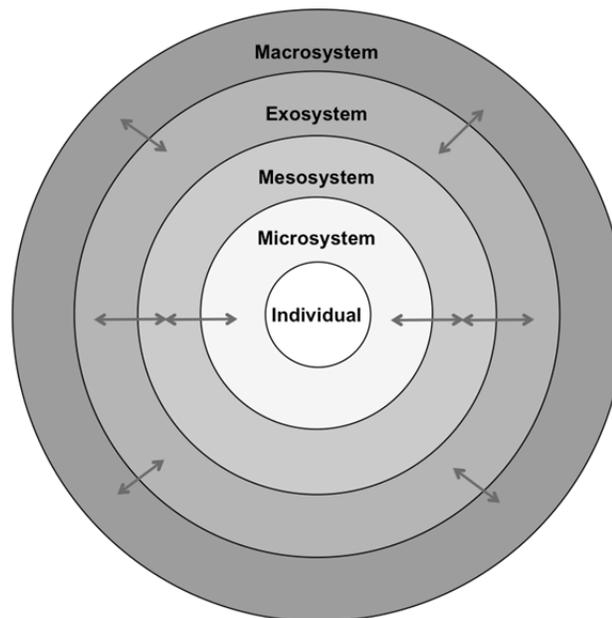
Inconsistent definitions also arise from whose wellbeing we focus on. Psychologists focus primarily on *individual* perspectives – *your* personal flourishing. Sociologists and economists focus primarily on *society's* perspective – the *nation's* or the *community's* flourishing. Since the community can be seen as the collected interests of the individual, individual wellbeing and collective wellbeing are mutually interdependent.¹³ Therefore, community wellbeing is *relational*: a positive state where the wellbeing of any one individual depends highly on the wellbeing of that individual's relationships and on the wellbeing of the community in which he or she lives.¹⁴ From this perspective, cultivating wellbeing is not the job of the collective nor the individual. It is a shared responsibility; a process that is dynamic and interactive, telescoping interdependently, from the personal level to the group level and back again.¹⁵

A Framework for Understanding Community Wellbeing

Inherent in the relationship between individual and collective wellbeing is the concept of a human development *ecosystem*. For centuries, individuals and governments have been striving to set and meet each other's standards, however imperfectly. Urie Bronfenbrenner, founder of the US federal program Head Start and one of the world's leading scholars on the impact of public policy on child development, calls the interdependence of individuals and societies the "Ecosystem of Human Development."^{16 17} Sufficient checks and balances between individual and collective wellbeing are needed, or else it is too easy for both sides to become unbalanced.¹⁸

For example, the government may choose to increase jobs by drilling for oil. The oil workers and the oil companies win in terms of financial gain, but the planet is negatively impacted, with potentially long-term consequences to the individuals who inhabit it. Or, an investor may choose to amass as much personal fortune as possible by selling subprime mortgages. That investor might increase company profits and his or her own personal wealth and quality of life, but contributes to the destabilization of the economy, as well as disrupting the earning power and quality of life of his or her neighbors.

Bronfenbrenner's *socioecological model* (pictured below) illustrates that an individual's development occurs within four systems – like a set of nested Russian dolls – the microsystem, mesosystem, exosystem, and macrosystem.



Source: Adapted from Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22(6), 723.

- **Microsystem:** The system in which the individual lives. This includes the individual's immediate influences, such as family, peers, school, church, workplace, and neighborhood.
- **Mesosystem:** The system of interconnections that individuals in the microsystem have with each other, whether or not they actually know one another. It can be thought of as two microsystems interacting, such as the home and school environments, or work-versus-home tensions.
- **Exosystem:** The system of institutions that indirectly affect the individual and his or her microsystem, including governments and social policy, the broader community, mass and social media, institutions, non-governmental organizations, and businesses.
- **Macrosystem:** The larger socio-cultural context, including norms, expectations, ideologies, and attitudes about the nation, government, religion, ethnicity, race,

and economic class.^{19 20}

This model captures the dynamic and relational nature of collective wellbeing by placing the wellbeing of the individual in the context of a larger system of interdependent actors and groups and by highlighting how the state of the larger system impacts the wellbeing of the individual and vice versa. Each level is dependent upon the others.²¹

How do the individual and the government interact within this multilevel framework? Individuals want a good quality of life for themselves and those in their microsystems (e.g., family, coworkers, neighbors). Most governments, working at the exosystem level, aim to provide for people directly by meeting basic needs, and indirectly through programs and policies (e.g., environmental initiatives, healthcare, education).

From a socioecological perspective, wellbeing theory and application needs to engage across these four systems, to include individuals, communities, society, and the relationships that connect them. The wellbeing index can serve as a bridge, providing a common language and purpose. It is a metric that could be used by institutions and communities to influence and be influenced by individual perspectives of satisfaction. In turn, as individual wellbeing adjusts upward in response to the community-level programs, wellbeing at the collective level also increases.

Defining the Wellbeing Index

The term “wellbeing index” may describe any of a number of composite measures being used all over the world at international, national and subnational levels to measure a society’s relation of wellbeing to progress (see Section 5 for a summary of existing measures). While they go by different names – signaling not so much what they measure (e.g., life satisfaction, use of time, health), but what they hope to achieve – national happiness, sustainability, a productive workplace – wellbeing indexes tend to have several characteristics in common.

1: Each index is designed around an overarching goal or problem to be solved.

For example, the Bristol Workplace Wellbeing Charter was developed to raise the wellbeing of workers on the job. It measures targeted indicators such as *leadership, attendance, healthy eating, and physical activity*.²² In contrast, the Greater New Haven Community Index was developed to learn about opportunities and challenges facing residents of the region. It measures a broader set of domains (*demographics, housing, education, public safety, economy, health, civic vitality, and environment*).²³

2: Wellbeing indexes have several successive goals.

- To understand the initial state of wellbeing for a community.
- To identify disparities and domains where wellbeing falls short.
- To identify areas to strengthen or adjust policies and programs to sustain existing levels of wellbeing and build additional wellbeing.

To serve as an evidence-based lens into policy adaptation, data collected by indexes may be used to:

- *Monitor progress* and identify fluctuations, growth, or decline over time.
- *Inform policy design* for different populations affected by policy.
- *Assess policies* by showing costs and benefits of different decisions in order to adjust accordingly to lower costs and maximize results.²⁴

The extent to which measures are descriptive (describing the state of the community) versus prescriptive (used to inform policy) depends upon the perspectives of policy makers and constituents. Governments should proceed with caution. Researchers are the first to admit that any tools that study the returns on policymaking are imperfect.²⁵ However, wellbeing indexes are continually moving toward greater precision and accuracy. Ultimately, wellbeing index results should produce a return on investment (ROI), impacting the overall financial health or prosperity of the measuring entity (country, city, corporation, etc.).

3: Indexes typically measure wellbeing at periodic intervals across a spectrum of indicators. Frequency of measurement and specific indicators vary. Typical indicators include (*life satisfaction, the environment, educational attainment, and community vitality*).²⁶

In the past, repeated measures have presented challenges. However, rapid advancements in social media and technology will soon allow local government to experiment with ways to leverage ever-present personal technologies such as sensors and smartphones to actively and passively gather subjective and objective wellbeing data. For example, Somerville, Massachusetts has been measuring happiness for the past two years using traditional surveys and interviews.²⁷ Taking advantage of new technology, they recently announced a partnership with The H(app)athon Project, which leverages technology to help cities better assess the circumstances and places where people experience a sense of wellbeing. Somerville's mayor, Joe Curtatone says, "It's an ambitious idea, but I know that the data will help us run the city as much as it will help residents find resources that they might not know about otherwise."²⁸ As another example, the World Well-being Project at the University of Pennsylvania, a collaboration of computer scientists and psychologists, is pioneering techniques to unobtrusively measure psychological and medical well-being through online social media.²⁹ These scientists are using the social media communication that is already taking place at various social media sites like Facebook and Twitter in the hope that their insights and analyses will help individuals, organizations, and governments choose actions and policies that are not only in the best economic interest of their people and institutions, but which truly improve their wellbeing.³⁰

When taken together, wellbeing indexes combine different interacting indicators to offer a big-picture profile of progress toward specified goals. A weighting system that combines different domains into a single criterion allows comparison of the cost and benefits of various cuts and expenditures, and several scholars have suggested that such a weighting is a requirement of rational public policy.³¹

Putting wellbeing at the heart of policymaking is a promising new approach to governance at the local and national levels. This approach is supported by research efforts that have evolved over the past three decades, as we explain in the next section.

3: Why Wellbeing? An Emerging Imperative

"Most people would agree that prosperity is more than just the accumulation of material wealth, it is also the joy of everyday life and the prospect of being able to build a better life in the future."

– Legatum Institute, 2012 Prosperity Index³²

The quest for wellbeing is not new. To philosophers like Socrates, Plato, and Aristotle, the search for the flourishing life was an act of purpose, not chance. Happiness did not just happen; it was the highest good to pursue.³³ Starting with the Greek and Roman eras, the focus was on individual wellbeing. However, happiness was sought and attained by relatively few. It was not until the Enlightenment that we see a shift toward "modern Western happiness" and the rise of a happiness imperative. Happiness became not merely a hoped-for state, but a right or entitlement.³⁴

The intersection of wellbeing and public policy is also not new, and has its current roots in the Enlightenment. Bhutan's 1729 Legal Code stated that "if the government cannot create happiness for its people, there is no purpose for the government to exist."³⁵ In 1776, Thomas Jefferson penned the US Declaration of Independence, claiming, "We hold these truths to be self-evident, that all men are ... endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness."³⁶ The words invoked the Aristotelian tradition that happiness and civic virtues, such as courage, moderation, and justice, engage the collective government in the social aspect of the pursuit of happiness.³⁷ Finally, in 1781, we see the first attempt to measure happiness in a rational and scientific sense. British philosopher and social reformer Jeremy Bentham suggested a classification of various pains and pleasures rated by their *utility* for either producing pleasure or for preventing pain. Bentham's philosophy of Utilitarianism noted that we ought to do whatever will bring the greatest good for the greatest number of persons, and government can and should legislate on the basis of this principle.³⁸

What *is* new is the convergence of philosophy and science around the issue of wellbeing. Recent decades have seen the coming together of economists, seeking to know what people value;³⁹ neuroscientists, who want to know how the brain responds to rewards;⁴⁰ sociologists, seeking to alleviate disparities and problems across communities;⁴¹ and psychologists, who want to know empirically what people feel.⁴² These disparate disciplines, all pursuing the intersection where wellbeing meets data, have landed happiness on the world's *scientific* agenda. Happiness is now winning Nobel prizes and getting published in *Science* magazine, prompting governments to consider how to increase the wellbeing of their citizenry through measurement.⁴³

Wellbeing and Policymaking

With science to back it up, the field is now seeing another shift. Wellbeing measurement is transitioning from academia to mainstream society. According to the Centre for Bhutan Studies, wellbeing measurement has entered a period of intense innovation.⁴⁴ Governments around the world are beginning to harness wellbeing metrics to get a full understanding of their citizens. In their oft-cited *Report by the Commission on the Measurement of Economic Performance and Social Progress*, Nobel laureate and economist Joseph Stiglitz and his colleagues state that it is possible, and desirable, for governments to

collect meaningful and reliable data on both subjective and objective wellbeing.⁴⁵ Leveraging this work, the UK's Coalition Government 2010 Budget Report committed resources to developing wellbeing and sustainability indicators across the UK.⁴⁶ Internationally renowned researchers such as Martin Seligman,⁴⁷ Ed Diener, John Helliwell,⁴⁸ Dolan and Metcalfe,⁴⁹ Felicia Huppert,⁵⁰ and Nic Marks⁵¹ suggest that the measurement of wellbeing is logically aligned with public policy.⁵²

The wellbeing of any community depends on the influences of the macrosystem in which it operates. This is driven, in part, by what is valued, as indicated by what is measured. Jacksonville's wellbeing thought leader Ben Warner notes, "What we value we measure; what we measure we do; what we do, we value."⁵³ The macrosystem houses the attitudes and ideologies of any given culture, providing the lens through which the wellbeing of a culture may be assessed.

Counting What Matters: Quantity vs. Quality

At the heart of much of the impetus for these wellbeing indexes lays this story's most misunderstood character – the Gross Domestic Product, a national indicator of economic health. Until recently, the world's developed countries have largely relied upon the GDP as the key measure of value. But GDP's reign as the sole measure of national wellbeing is increasingly coming into question.

An often referred to criticism of the GDP took place on the US presidential campaign trail in 1968, when Robert Kennedy, addressing students at the University of Kansas, said: "Too much and for too long, we seem to have surrendered personal excellence and community values in the mere accumulation of material things. Our Gross National Product... counts air pollution and cigarette advertising, and ambulances to clear our highways of carnage... special locks for our doors and the jails for the people who break them... Yet the gross national product does not allow for the health of our children, the quality of their education or the joy of their play."⁵⁴

By the time Robert Kennedy made this speech, the gross national (now "gross domestic")⁵⁵ product prevailed as the primary measure of a country's success. Unfortunately, GDP falls far short of Kennedy's vision. It is simply the dollar value of a country's economic output. Formally, it is the monetary value of all the finished goods and services produced within a country's borders within a specific time period. To Kennedy's point, it is a blunt instrument with which to measure how a country is doing. It does not account for the quality of our lives or the joy we experience or how empowered people feel to make change in order to reach their full potential. Yet despite Kennedy's speech, nearly 50 years later, the GDP continues to be the primary metric of a country's success. By examining how we got here, we'll create context for why wellbeing matters.

Throughout history, the time-honored gauge of a nation's performance was ranking by military victories. Issues as varied as education and public health were justified in terms of their impact on a nation's relative military priorities. During the 20th century, due in large part to the Great Depression and its aftermath, the lens shifted from military superiority to economic prosperity. During that crisis, the US federal government was struck by how few indicators of economic information actually existed. Enter Simon Kuznets, a Russian-born economist who went on to win the Nobel Prize in economics. The metric he helped the US Department of Commerce design was based on a standard for

measuring gross national product. It quickly took hold, with policies developed based on their impact on economic growth.

Today, most of the developed countries, especially members of the Organization for Economic Co-operation and Development (OECD)⁵⁶, have come to rely on the GDP as the most widely used measure of national health. According to William Nordhaus, a Yale economist who thinks about economic measurement for a living, the GDP "is one of the greatest inventions of the 20th century...it is an awesome thing." It allows the government to make fast yet informed policy responses to economic crises. For example, in the 2008 recession, the US government was able to quickly put into place a stimulus package using the information provided by the GDP. What was noticeably absent was an assessment of how people impacted by the crisis were doing.⁵⁷

GDP is an important, albeit insufficient, metric. It's a measure of market production, not living standards. There is a growing consensus among economists, including Joseph Stiglitz, who has worked on finding alternative measures to the GDP, that although the GDP provides *economic growth indicators*, it is *insensitive to context*.⁵⁸ Even Kuznets, its creator, has said, "The welfare of a nation can scarcely be inferred from a measure of national income." The GDP, therefore, may not only not measure the subjective markers with which we experience wellbeing, it masks and misleads.⁵⁹

To illustrate this point, Stiglitz asks us to imagine that we are driving an unusual car, one that has only one gauge on its dashboard (instead of the usual array of indicators). That single gauge is like the GDP. If we want to know how the car is functioning, this single gauge conveys only one piece of data – our speed, for example. That is useful information, but it certainly does not tell the whole story. How much gas is in the tank? Is the engine too warm or too cold? How far have we traveled? We want a car – and, Stiglitz argues, a government – that has a dashboard that is big enough to provide multiple indicators of performance, but not so big that it becomes overwhelming.⁶⁰

If traditional measures are insufficient, then how can we measure what does matter to us? The wellbeing index may serve as Stiglitz's dashboard.

Wellbeing and the GDP

Here is an example to illustrate how the GDP operates relative to wellbeing.

Let's say Kate is working from home and she decides she wants a snack. She has nothing in the refrigerator, so she gets on her bike and rides over to the farmer's market in her neighborhood. She buys a locally grown apple for a dollar, rides her bike home, and drinks a glass of water from the kitchen tap. Since she rode her bike, bought something locally grown, and drank water from the tap, the GDP would record her impact as a little more than a dollar and change.

Now, say she decides to run the same errand, but she drives her car instead. She goes to the local Mega Market, buys a kiwi and a bottle of imported spring water, and then drives back home. By driving her car, she has consumed gas that will need to be replaced: let's call that \$5.50; the Mega Market has marked up the kiwi she bought to \$2 to cover the cost of importing and stocking it; and the bottle of water cost her a whopping \$2.50. The GDP registers all that as \$10, a tenfold increase in the GDP indicator, errand over errand. On this metric alone, it looks like Kate's second errand has actually caused the economy to grow and prosper. But not so fast. For what is essentially the same errand, let's look at what happens in context on the other side of the scorecard.

Driving instead of biking adds pollutants to the environment. Buying at the Mega Market only encourages the huge carbon footprint required to stock, package, and maintain so much inventory to serve so many types of buyers. The kiwi and the designer water have come all the way from New Zealand and France, respectively, and, along with production of the plastic bottle, consume fossil fuels in production and transport. The bottle itself will likely end up in a landfill, where it will fail to decompose.

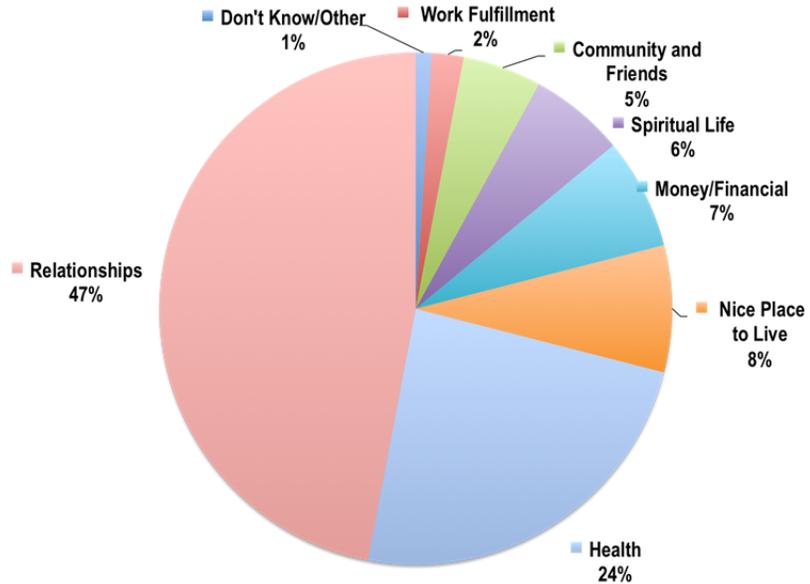
What's more, if Kate were to be injured in a car accident on her way home from the store, the GDP would have a field day, adding on the economic impact of the ambulance, the emergency room, prescription drugs and doctor bills. While, for Kate, an accident would seriously erode her subjective wellbeing, it would look through the lens of the GDP as economic prosperity.

Adapted from a PBS animation, *Well-being In the New Economy*.

The Economics of Wellbeing

The relationship between life satisfaction and income is well-traveled ground. It's much studied, sometimes challenged, and hotly debated.⁶¹ At the center of the debate is the Easterlin paradox. Formulated in 1974 by economist Richard Easterlin, it says that as individuals get richer, they do not necessarily become happier. Through international comparisons of prosperity, Easterlin noted that although the rich are generally happier than the poor, once basic needs are met, neither GDP growth nor higher GDP per capita increases happiness.⁶² People tend to judge their lives to be better as they become richer, *up to a point*. There seems to be a set point beyond which increases in income do not relate to greater levels of happiness (in the US, about \$75,000 per year for a family of four).⁶³

A consistently-stated rationale for governments to invest in the measurement of wellbeing is that policymakers want to balance economic and material growth with the preservation of intangibles – the more nuanced things we value. According to a poll conducted by the BBC (illustrated below), our family, friends, and neighbors – followed by matters of health – make up nearly three-quarters of the factors that influence our happiness.⁶⁴



Factors That Influence Happiness

Adapted from *Prosperity Without Growth*, The Sustainable Development Commission

A growing body of evidence suggests that wellbeing and happiness, along with companion constructs such as life satisfaction, resilience, optimism, grit, and self-determinism, are related to many socially-valued outcomes, including stronger marriages, lower rates of divorce, increased educational and work-related accomplishments, community involvement, and better health outcomes.^{65 66 67 68} The implication for governments is that to increase wellbeing basic needs should be the first priority, but once those needs are met, policy should focus less on economic growth and more on ways to support and enhance other valued aspects of life, such as access to medical care, clean air and water, and arts and cultural programs.⁶⁹ These programs support the health and wellbeing of community members, who in turn are more productive and more involved with their community. The implication for the entire ecosystem is that the individual and the collective, working together, have the potential to create an upward spiral of wellbeing.

GDP isn't going away any time soon, but the time has come to move beyond a sole focus on economic measures. A wellbeing index can complement GDP to create a deeper understanding of a community's needs. Helliwell notes, "Next time we have a comprehensive spending review, let's not just guess what effect various policies will have on people's wellbeing. Let's actually know."⁷⁰ Further, if individuals see that their government is embracing a wellbeing index in order to prioritize social programs that meet their needs and priorities, "that fact alone," says subjective-wellbeing researcher, Richard Eckersley, "can restore people's belief in a broader social ideal and a commitment to the common good."⁷¹ With this perspective in mind, we turn to the challenging questions of how the wellbeing index works and we explore its implications for policy.

4: How Is Community Wellbeing Measured: It's Complicated

"Changing the balance of what is measured and reported on a regular basis is likely to change the nature of policy thinking among both policymakers and those living with the policy results."

– John Helliwell and Christopher Barrington-Leigh⁷²

There is a lot that contributes to a person's – and a community's – wellbeing. Health, safety, purpose, relationships, and education all play a role in the level of one's wellbeing. Disparate measures related to each exist or could easily be collected. How does one bring them together to create a composite picture of the collective wellbeing of people in a community?

Many subjective wellbeing measures are directed at the individual level. Objective data is collected at the community, regional, or national level. Bringing the two together is complicated, but not impossible. The good news: cities already do this to an extent, collecting data on traffic, crime, the environment, infrastructure, urban planning, and so forth. The trick is bringing this information together to create a multifaceted understanding of wellbeing.

The measures of collective wellbeing that *are* in place are largely at the global or national levels. Less focus has been geared toward measuring community or local progress. Yet the existing administrative infrastructures of local governments may be especially suited to developing the framework essential to measuring social progress at a local level. And often the data collection processes for a local measurement framework are already in place.⁷³

Still, wellbeing measurement is complicated. Decision making and delivery around measurement-based policy requires good local data, a framework for analysis, an understanding of the goals, challenges, and limitations of measuring wellbeing, and the alignment of shared objectives among the various partnerships and agencies that comprise the local government and its stakeholders. To measure wellbeing most effectively, local authorities, in partnership with key stakeholders, must come to know what drives better outcomes for residents and communities.⁷⁴

There is a healthy respect for the complexity of this and acknowledgement that talk about measuring wellbeing is speculative and experimental.⁷⁵ Regions within a country and neighborhoods within a city often have different sets of social, cultural, and civic requirements, depending upon where people are in their lives and what they value. How can a policymaker develop initiatives to cultivate wellbeing for diverse constituents? It's not possible, nor desirable, to insist that the entire planet adopt a single definition of wellbeing and a single standard for measuring it. What is possible is to create a community to share best practices around the process of measuring wellbeing, as we begin to do here.

Community-Level Perspectives

A *community* is a collection of individuals in an ecosystem drawn together by shared activity and experience and who subscribe to a set of common principles, group norms, relationships, networks, and shared beliefs. Especially in the age of social media and digital communities, the definition of "local" is not necessarily fixed by geography; it is a space that can be bounded by physical as well as social parameters.

Returning to Bronfenbrenner's socioecological model, the notions of *local* and *community* take hold at the microsystem level and extend to the mesosystem,

since the clusters of networks that form communities can include interactions with churches, schools, public spaces, and housing. A community provides a bounded, observable space from which local government can detect, analyze, and amend social trends; communities comprised of neighborhoods provide a useful basis upon which local government can organize policy and deliver interventions.⁷⁶

Of the existing non-local wellbeing indexes, the majority do not measure *personal* wellbeing, so much as the *conditions* that enable people to flourish. These conditions can be impacted at the collective level. This trend fits directly into the socioeconomic model. By carefully constructing indexes that measure thriving at the community level, we can potentially nudge people toward individual wellbeing.

Local government's ability to shape community wellbeing depends upon its capacity to recognize and respond to the paramount and varied needs of its residents. For instance, Sir Michael Lyons, non-executive chairman of the English Cities Fund and Participle Ltd., adopted the term "place shaping" to describe "the creative use of powers and influence to promote the general wellbeing of a community and its citizens." In an inquiry into the form, function, and funding of the local British government, Lyons championed the strategic role of local government and its partnerships as "agents of place," engaged in shaping local identity and in matching services provided to the actual needs and preferences of residents. Place shaping starts developing a narrative about the community's needs by asking two basic questions: what kind of place is this, and what kind of place do we want it to be? The wellbeing index begins where this idea of place-shaping leaves off: it helps policy makers collect and analyze the answers that will shape the place.⁷⁷

Jacksonville, Florida offers an example of place shaping in action, through its Quality of Life Progress Report (published annually). Ben Warner, of the Jacksonville Community Council, understands the power of leveraging story and narrative in both creating, and being accountable to, the community's vision of wellbeing. "JCCI is driven by the bold idea that together, we can build a better community... We bring people together to learn about our community, engage in problem-solving, and act to make positive change... Our vision is to be a place where people matter."⁷⁸ By Lyons' definition, Jacksonville's wellbeing index continually engages its constituents in shaping place, and by extension, wellbeing.

Domains of Wellbeing

Wellbeing domains and indicators are carefully-selected windows into measuring what matters at the individual level against the index's overarching goal. We use the word "domain" to apply to the highest-level social condition that is measured by the indexes (*Education, Health, Safety, etc.*). Within each domain, there is a set of indicators against which objective and subjective data may be gathered. For example, under the domain category *People in the New Haven* index, indicators are *Population Change; Race and Immigration; Households and Families; Young Children; Youth Opportunity; College Readiness; and Educated Workforce*. There is no one set of domains and indicators that will measure wellbeing across the spectrum of desired outcomes for all the desired populations; nor is there currently a comprehensive wellbeing indicator set available for use by local authorities and their partners as a starting point to begin to capture people's subjective experience of life.

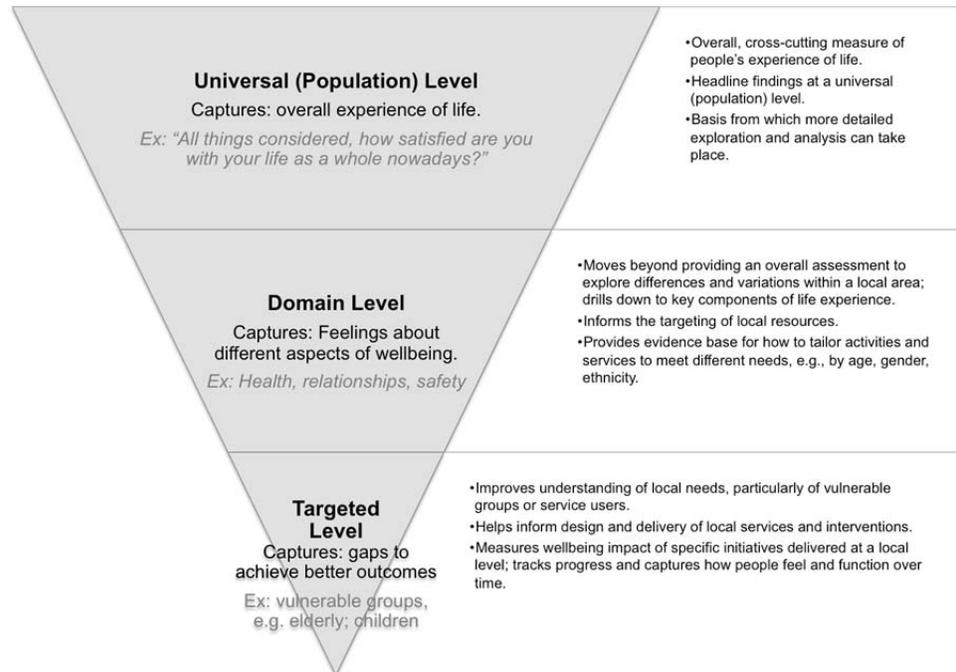
To bring sense to the various measures, domains and indicators for each index

may already integrate social values, reflecting what the originators believe best convey the measurable wellbeing of those surveyed. Indicators may reflect the populace's cultural, psychosocial, economic, political, and physical environments, all of which may influence the state of wellbeing; and they may also seek to measure aspects of subjective wellbeing that reach into the realm of values, meaning, and spirituality. Donella Meadows, writing in the last decade, has said, "the right indicators actively help. The presence of clear, powerful information almost automatically stimulates problem solving and action."⁷⁹ She further notes: "The indicators a society chooses to report to itself about itself are surprisingly powerful. They reflect collective values and inform collective decisions."⁸⁰

For the average citizen, wellbeing is unlikely to be dependent on any single domain, but is rather the sum of the weighted indicators, taken altogether and inclusive of subjective measures (i.e. *How satisfied are you with your community?*) and objective measures: the availability of public transportation, for example, or the vibrancy of the local economy, and so on.

At the local level, there are multiple domains that must be measured and weighted to reflect the needs of the citizens, the community, and the overarching goals of the index itself. Not surprisingly, many of these domains parallel areas typically being collected by wellbeing indexes at the national level. Relationships, health, economy, education, community vitality, safety, and environmental issues are all logical domains of both national and community wellbeing. Knowledge of the sources of data already being collected at the local level, and a process for gathering and analyzing new data, will be imperative for a successful effort.

In their work on The Local Wellbeing Project – a partnership established in 2007 between the Young Foundation, Professor Richard Layard at the Centre for Economic Performance at the London School of Economics, the Improvement and Development Agency (IDeA), and three local authorities (Hertfordshire County Council, Manchester City Council, and South Tyneside Metropolitan Borough Council) and in collaboration with nef – researchers suggested a three-tiered framework for wellbeing measurement at the local level: a) universal or population level; b) domain level; and c) targeted level. This framework provides local authorities with a place to start when designing metrics. It is noted that the universal level and the domain level are particularly relevant in the beginning of measurement efforts, as data at these levels can be used to determine needs, priorities and outcomes and to establish a strong benchmark for "who we are; and who we want to be." Longer term, it is anticipated that this focus will shift to the more granular targeted level, with its emphasis on wellbeing measurement and action, especially toward specific users of services and the most vulnerable in the population. The following figure illustrates how these suggested levels might interact.⁸¹



Framework for measuring wellbeing at the local level

Adapted from *The Local Wellbeing Project*, Steuer & Marks, September 2008

Subjective versus Objective Measures

To measure valued outcomes, Stiglitz and colleagues suggest that indexes should include both subjective and objective evaluation criteria in their design for data collection.⁸² *Subjective* criteria seek to capture the personal feelings and experiences of people's quality of life. *Objective* criteria measure status and trends such as crime rates, housing prices, air quality, the environment, and educational attainment.

In terms of community wellbeing, researchers stress the importance of exploring how the various subjective and objective indicators intersect and interrelate across different communities to provide a lens on wellbeing. For example, in Jacksonville, working in the area of public safety, one might measure objective data, like crime rates, and combine it with performance data, like police response times. They could look at subjective indicators – for example, *Have you been the victim of a crime in the past 12 months?* And: *Are you satisfied with the quality of public safety services provided?* Finally to tie the measure together, they might ask: *Do you feel safe walking alone in your neighborhood at night?* Each individual data point of objective information and subjective opinion may have limited meaning in its own right; but taken in aggregate, they provide a more comprehensive picture of the efficacy of the policies and programs impacting public safety – where they work and where they may be broken.

Further, strides are being made in the gathering of both subjective *and* objective wellbeing data. According to H(app)athon's John Havens, "Increasingly, sensors will provide a form of objective wellbeing data. Imagine if measurement could be linked with a tool like a Fit Bit so citizen heart rates could be measured in response to policy implementation, or just day-to-day city events. This data collected will be

objective – one’s heart rate measured while sitting in a traffic jam on the way to work, for example. We are gathering subjective data as well, but our hope is to make a big contribution in eliminating survey bias. People may control their answers to active survey questions, but not their biometric data. In this sense, governments (with full permission of their citizens, using protected personal data clouds with aggregated, anonymous responses) could know almost more about how their citizens feel about certain policies than the citizens themselves do.”⁸³

By gathering, analyzing, and interpreting information about individual’s subjective wellbeing alongside a view of the objective data, institutions can continually evaluate whether people are helped or harmed. And although this approach provides no black-and-white answers, the many tones of grey provide meaningful insights for enhancing human systems. Further, experts are now working toward a consensus that the combination of questions that reflect the hedonic, the eudaimonic, and the evaluative understanding of wellbeing present the greatest chance of having a full picture emerge from population surveys.^{84 85}

Inherent Complications

For every assumption we believe we can make about happiness, contradictions abound. The creators and sustainers of Bhutan’s GNH Index put it this way: “Happiness is a very deeply personal experience and any measure of it is necessarily imperfect.” To be sure, differing perspectives of happiness complicate the measurement of wellbeing at the local level.⁸⁶ As Steuer and Marks of the centre for wellbeing at nef (the new economics foundation) point out, a focus on wellbeing will surely challenge our conventional assumptions.⁸⁷

According to RAND Corporation, early local pioneers in measuring quality of life have been around since the 1960s, though it wasn’t until the mid-2000s that they began to emerge as possible place and policy shapers.⁸⁸ The economic downturn of 2008 and the struggles of the world economy have further highlighted to governments the need for measures that reach beyond the GDP. Although to date there are few frameworks from which to draw conclusive evidence of the impact of the local wellbeing measurement on public policy design, there are numerous frameworks that are being developed. In the next section, we provide insights from these early adopters.

5: Measurement In Action: A Horizon Scan

“Our message to the world is simple: Every nation, every community, needs to answer two questions. First, what is important to our community? What we value, we measure; what we measure, we do; what we do, we value. The second question is, who gets to decide what is important?”
– Ben Warner, Jacksonville Community Council, Inc.⁸⁹

This section provides an overview of existing national and local wellbeing indexes that have gained the most traction in their quest to measure what matters at the community and societal levels. Several national indexes (Australia, Bhutan, Canada, and the UK) have been included to provide contrast and perspective. Although there are indexes that are being developed elsewhere in the world, the selected indexes are high-profile examples or models for measurement, that we believe best contribute to the global and local conversation for evolving best practices around creating and analyzing wellbeing indexes. Each one engages stakeholders in the selection of domains and indicators, and considers such place shaping questions as “Who are we today and who do we want to be in the future?”

Highlights of Existing Wellbeing Indexes

In order to establish a “statement of common understanding of wellbeing” among central and local government in their pursuit of wellbeing measures, in 2006 the UK’s Whitehall Wellbeing Working Group advanced this definition (italics added):

“Wellbeing is a positive physical, social and mental state; it is not just the absence of pain, discomfort and incapacity. It arises not only from the action of individuals, but from a host of collective goods and relationships with other people. It requires that basic needs are met, that individuals have a sense of purpose, and that they feel able to achieve important personal goals and participate in society. It is enhanced by conditions that include supportive personal *relationships*, involvement in empowered *communities*, good *health*, *financial security*, rewarding *employment*, and a healthy and attractive *environment*. Government’s role is to enable people to have fair access now and in the future to the social, economic and environmental resources needed to achieve wellbeing. An understanding of the combined effect of policies on the way people experience their lives is important for designing and prioritizing them.”⁹⁰

While there are no universal definitions of local wellbeing, this Whitehall definition summarizes the current consensus on the range of domains (in italics) by which local wellbeing may be measured. Each of these domains might be segmented into a checklist of measurable indicators, many of which are already routinely surveyed and are known to be reliable (e.g., health statistics, crime levels), others of which will need to be added (e.g., sense of purpose, goal achievement).

Wellbeing indexes fall across a spectrum. They include grassroots indexes driven by local community leaders interested in raising wellbeing in their communities; indexes that promote wellbeing in specific domains (e.g., parenting, workplace) and a better understanding of what makes people happy and engaged; and multidimensional indexes that combine multiple subjective and objective domains, mirroring some of the established national and international wellbeing indexes. Gross National Happiness USA (GNHUSA)⁹¹ is an organization formed by

community leaders with the goal of supporting grassroots efforts to bring the idea of gross national happiness to communities across the US. Their pilot, *Measuring What Matters VT*, is an example of a grassroots effort; *Somerville's Report on Wellbeing*, and *Seattle's Sustainable Seattle* fall in the middle, and Santa Monica aims to/seeks to be closest to the multidimensional end of the index spectrum.

Selected indexes (in alphabetical order):

- Bhutan Gross National Happiness Index (national level)
- Bristol Workplace Wellbeing Charter
- Canadian Index of Wellbeing (national level)
- Greater New Haven Community Index
- Gross National Happiness USA
- Hertfordshire Forward
- Jacksonville Quality of Life Progress Report
- Manchester Community Strategy
- Roquetes, Barcelona and Lindängen, Malmö Case Studies
- Santa Monica Local Wellbeing Index
- Somerville Report On Wellbeing
- Spirit of South Tyneside
- Sustainable Seattle
- UK National ONS Wellbeing Index (national level)

In the following tables, we highlight this information for each of these featured indexes:

- The name and date of establishment of the index
- Targeted level: national or local
- A brief description
- The "overall goal," that is, the problem the index was designed to resolve
- The website address
- Domains measured

Note: The descriptions and goals are taken verbatim from the index's own materials and reports, and edited for brevity and clarity.

Horizon Scan

Index:	Bhutan Gross National Happiness Index, 2008/2010, Bhutan⁹²	
Level:	National	
Description:	Bhutan's Gross National Happiness Index is based upon a robust multidimensional methodology, designed to create policy incentives for government, NGOs and businesses to increase GNH. The statistically reliable, normatively important indicators emphasize different aspects of wellbeing and different ways of meeting these underlying human needs.	
Overall goal:	"We strive for the benefits of economic growth and modernization while ensuring that in our drive to acquire greater status and wealth we do not forget to nurture that which makes us happy to be Bhutanese...The duty of government is to ensure that...the happiness and wellbeing of our people are nurtured and protected" (Ura et al, 2012 p 6).	
Website:	www.grossnationalhappiness.com	
Domains:	<ol style="list-style-type: none"> 1. Community vitality 2. Cultural diversity & resilience 3. Education 4. Ecological diversity & resilience 5. Health 	<ol style="list-style-type: none"> 6. Good governance 7. Living standards 8. Psychological wellbeing 9. Time use

Index:	Bristol Workplace Wellbeing Charter, 2012, Bristol, UK⁹³	
Level:	Local	
Description:	Bristol's Workplace Wellbeing Charter recognizes the positive way in which we manage business and support the workforce. The Charter involves: <ul style="list-style-type: none"> • Self-assessing against a set of nationally agreed standards. • Devising an action plan to drive future change. • Working with staff and other organizations to implement good practice. • Reducing sickness absence and improving staff wellbeing. 	
Overall goal:	Proactive management of employees' physical and mental health can produce a range of important business benefits, including reduction of sickness absence; lost time due to accidents and associated costs; greater staff engagement and productivity; reduced staff turnover recruitment and costs.	
Website:	www.bristol.gov.uk/page/business-bristol/workplace-wellbeing-charter	
Domains:	<ol style="list-style-type: none"> 1. Leadership 2. Attendance management 3. Health and safety 4. Mental health & wellbeing 	<ol style="list-style-type: none"> 5. Smoking 6. Physical activity 7. Healthy eating 8. Alcohol & substance abuse

Index:	Canadian Index of Wellbeing, 2011⁹⁴	
Level:	National	
Description:	The Canadian Index of Wellbeing seeks to enable all Canadians to share in the highest wellbeing status by identifying, developing and publicizing statistical measures that offer clear, valid, and regular reports on progress toward the wellbeing goals and outcomes Canadians seek as a nation.	
Overall goal:	To ensure leading-edge, ongoing research and development of the CIW including further refinement of common standards, pilot testing of sub-indexes, collection and compilation of data for health, social, economic, and environmental variables and trends.	
Website:	uwaterloo.ca/canadian-index-wellbeing/	
Domains:	<ol style="list-style-type: none"> 1. Community vitality 2. Culture 3. Education 4. Future Security 	<ol style="list-style-type: none"> 5. Health 6. Relationships 7. Safety 8. Standards of living

Index:	Greater New Haven Community Index, 2012, New Haven, CT⁹⁵	
Level:	Local	
Description:	The Greater New Haven Community Index presents opportunities and challenges that face the metropolitan region where we live, work, study, and play. People are encouraged to engage neighbors, policy makers, businesses, and institutions in a dialogue about the future of this region.	
Overall goal:	The Wellbeing Survey measures progress toward longstanding community priorities, including the need to ensure that children have the opportunity to succeed and to boost the financial security of families. The data can help leaders understand the significant barriers residents face to economic success, educational achievement, health, housing, and other aspects.	
Website:	http://www.ctdatahaven.org/wellbeingsurvey	
Domains:	<ol style="list-style-type: none"> 1. Demographics 2. Housing 3. Education 4. Public safety 	<ol style="list-style-type: none"> 5. Economy 6. Health 7. Civic Vitality 8. Environment

Index:	Gross National Happiness USA, 2008, Vermont (Pilot)⁹⁶	
Level:	Local	
Description:	Brings Bhutan’s Gross National Happiness concepts to the US. The non-partisan, non-profit organization organized Measure What Matters, a collaborative of data experts in Vermont. Since then the state of Vermont became the first state to pass legislation enabling development of alternative indicators and to assist in making policy.	
Overall goal:	GNHUSA believes that we will get what we measure, advocating for measures that go beyond economic production and consumption to indicators that better reflect values. GNHUSA supports grassroots efforts of communities throughout the US to adopt alternative measures of wellbeing.	
Website:	www.gnhusa.org	
Domains:	<ol style="list-style-type: none"> 1. Psychological wellbeing 2. Physical health 3. Time balance 4. Community vitality 5. Education 	<ol style="list-style-type: none"> 6. Culture 7. Environment 8. Good governance 9. Standard of living

Index:	Hertfordshire Forward, 2006, Hertfordshire, UK⁹⁷	
Level:	Local	
Description:	Hertfordshire’s Local Strategic Partnership identified health and wellbeing as a key challenge for the county over the next 15 years. Building on earlier work looking at the dimensions of public health, Hertfordshire Forward has broadened its focus to consider a wider range of quality of life and wellbeing issues. Local assessments of wellbeing draw on surveys from wider fields, such as residents’ perceptions of their locality. The results of this broader view helping statutory bodies understand and reflect upon what contributes to the quality of life and wellbeing of Hertfordshire’s citizens. Local partners recognize that existing methods of data collection have their limitations since they currently allow for a county-wide analysis of quality of life and are not suitable for disaggregation to neighborhood or district levels. Therefore, ways of measuring wellbeing in a robust way – which allows analysis and comparison of different domains and population groups – is now a priority for the county. (Source: nef).	
Overall goal:	Hertfordshire is generally a prosperous county and the residents enjoy some of the highest standards of living in the country. However this headline masks pockets of relative deprivation and we do not wish to be complacent about the future – for that reason Hertfordshire Forward has identified “health and wellbeing” as a key challenge which needs to be addressed between now and 2021. Wellbeing of the residents does not just depend upon promoting healthier lifestyles, but by ensuring that everyone has the opportunity to share in the prosperity through improving access to education and employment.	
Website:	www.hertsdirect.org	
Domains:	<ol style="list-style-type: none"> 1. Economy 2. Children and young people 3. Health and older people 	<ol style="list-style-type: none"> 4. Better places to live 5. Community safety 6. Transport, access and sustainable development

Index:	Jacksonville Quality of Life Progress Report, 1985, Jacksonville, Florida⁹⁸	
Level:	Local	
Description:	Jacksonville's Quality of Life Progress Report positions itself as the oldest and longest-running measurement of the well-being of a community in the world. Every year since 1985, a citizens' group has reviewed the indicators and made the necessary adjustments to keep the measures on point for community needs.	
Overall goal:	In 1985, residents of Jacksonville were invited to help define what matters and how they could know if they were making progress as a community toward a shared vision of the future. A nation (or a community) that invites the citizenry to be part of the decisionmaking process will increase its well-being through that participation.	
Website:	www.jcci.org/quality-of-life-report	
Domains:	<ol style="list-style-type: none"> 1. Educational excellence 2. Vibrant economy 3. Moving around (transportation) 4. Community safety 5. Environment 	<ol style="list-style-type: none"> 6. Responsive government 7. Social wellbeing 8. Healthy community 9. Arts, culture, and recreation

Index:	Manchester Community Strategy, 2006, Manchester, UK⁹⁹	
Level:	Local	
Description:	Manchester City Council and the Manchester Partnership welcome the development of a wellbeing measurement. The Community Strategy aims to increase material prosperity and wellbeing so that Manchester's residents become wealthier, live longer, and have happier and healthier lives. It is recognized that public services cannot achieve these things on their own, raising expectations and a sense of wellbeing will be fundamental to achieving this. Currently we use two Local Public Service Agreement targets to measure the progress in this area and welcome any further mechanisms to chart the progress.	
Overall goal:	The vision set out in Manchester's Community Strategy states that by 2015, residents should be wealthier, live longer, healthier and happier lives. This vision is at the heart of Manchester's explicit priority to promote aspiration, wellbeing and happiness. This cannot be achieved through public services alone; improving expectations and a sense of wellbeing among citizens is fundamental.	
Website:	www.manchesterpartnership.org.uk	
Domains:	<ol style="list-style-type: none"> 1. Population growth 2. Local Economy 3. Median incomes 	<ol style="list-style-type: none"> 4. Life expectancy/health 5. Community 6. Resident satisfaction

Index:	Roquetes, Barcelona and Lindängen, Malmö, 2012 ¹⁰⁰ (WARM Case Studies)	
Level:	Local	
Description:	Roquetes and Lindängen are similar neighborhoods that developed as a consequence of rapid urban expansion due to an influx of migrants from surrounding areas in the post-war industrial period. As such, both neighborhoods have higher levels of unemployment and deprivation compared to surrounding areas. The WARM framework was introduced to develop case studies to test the framework.	
Overall goal:	To introduce the wellbeing and resilience measurement framework (WARM) in two case study neighborhood sites, Roquetes, Barcelona and Lindängen, Malmö, to test the extent to which a WARM framework can be adopted in different European cities. The case studies explored how useful the existing framework is in capturing local progress, cultural and political discrepancies and identifying gaps in the existing framework.	
Website:	www.eframeproject.eu	
Domains:	<ol style="list-style-type: none"> 1. Life satisfaction 2. Education 3. Health 4. Employment 	<ol style="list-style-type: none"> 5. Family 6. Volunteering and caring 7. Civic participation and belonging

Index:	Santa Monica Local Wellbeing Index, 2013, Santa Monica, CA ¹⁰¹	
Level:	Local	
Description:	In 2013, the City of Santa Monica won the Bloomberg Philanthropies' Mayors Challenge to create a Local Wellbeing Index to measure community wellbeing, and then use the findings to inform City decision-making and resource allocation processes.	
Overall goal:	To create a dynamic measurement tool using a blend of objective and subjective information, in order to make decisions within city government to actively improve wellbeing.	
Website:	www.smgov.net/wellbeing	
Domains:	<ol style="list-style-type: none"> 1. Economic Vitality 2. Social Connections 3. Physical & Mental Health 	<ol style="list-style-type: none"> 4. Education & Care 5. Local Context

Index:	Somerville Report On Wellbeing, 2011, Somerville, MA ¹⁰²	
Level:	Local	
Description:	Somerville, Massachusetts tracks resident happiness as part of their census in order to measure the happiness and well-being among the city's residents. (The survey will soon be conducted through H(app)athon Project's survey app.)	
Overall goal:	Somerville surveys its residents on their happiness and wellbeing and sends a copy to each household.	
Website:	www.somervillema.gov/departments/somerstat/report-on-well-being	
Domains:	A series of questions on subjective wellbeing, such as: "How happy are you right now?"	

Index:	Spirit of South Tyneside, 2006, South Tyneside, UK¹⁰³	
Level:	Local	
Description:	Spirit of South Tyneside is the combined Local Area Agreement, Local Neighborhood Renewal Strategy and Community Strategy. It sets out how to tackle the communities' priorities and regeneration of the most deprived neighborhoods. The plans for wellbeing are integral to the continuing transformation of the borough, economically, environmentally and socially.	
Overall goal:	South Tyneside recognizes the impact that promoting culture and wellbeing can have on people's lives, whether it's to improve health, help people into jobs or help them achieve their full potential.	
Website:	www.southtyneside.info	
Domains:	1. Bins & Recycling 2. Business 3. Housing & Council Tax 4. Jobs 5. Leisure & Libraries	6. People & Care 7. Planning & Environment 8. Schools & Learning 9. Transportation & Streets

Index:	Sustainable Seattle, 1991, Seattle, WA¹⁰⁴	
Level:	Local	
Description:	Sustainable Seattle developed local indicators of happiness in 1991 as an alternative to GDP, in partnership with other local organizations. The work in Seattle continues, with an emphasis on social justice and catalyzing citizen dialogue and action in pursuit of happiness, sustainability and love.	
Overall goal:	To bring together individuals, organizations, and businesses as responsible stewards for a sustainable future through innovation, education and on-the-ground projects. To create a region of livable, socially just communities with healthy ecosystems and vital local economies.	
Website:	http://sustainableseattle.org	
Domains:	1. Environment 2. Population & Resources	3. Economy 4. Culture & society

Index:	UK National ONS Wellbeing Index, 2011¹⁰⁵	
Level:	National	
Description:	Within the UK, the Office of National Statistics (ONS) is developing new measures of national wellbeing. The aim is to provide a fuller picture of how society is doing by supplementing existing economic, social and environmental measures that are relevant to what matters to people beyond the measures provided by the GDP.	
Overall goal:	Wider and systematic consideration of wellbeing has the potential to lead to better decisions by government, markets and the public and as such will lead to better outcomes.	
Website:	www.ons.gov.UK/ons/guide-method/user-guidance/well-being/index.html	
Domains:	1. Where we live 2. Natural environment 3. Economy 4. Education and skills 5. Governance	5. Health 6. Relationships 7. Personal Finance 8. Personal wellbeing 9. Culture and society

Lessons Learned

Common lessons can be learned from studying measures of wellbeing:

- *Partner with key stakeholders.* The vision, values, and priorities of various stakeholders across community groups share commonalities but also have diverse perspectives. Find ways to connect and explore with these groups.
- *Identify and leverage existing processes and data.* Many measures already exist for various aspects of social progress. At the local level, relevant data is likely already being collected. Instead of reinventing the wheel, take advantage of what is there and then supplement with what is missing. Make investments in technologies that will make data collection and reporting as seamless as possible at the targeted levels.
- *Leverage new technologies.* Stay up to date on new developments that can simplify data collection, especially self-reported data. Platforms are continually being developed that combine the emerging active and passive practices surrounding big data and privacy with ever-present end user technology like smartphones to capture quality information about how people feel in the moment and what gives them meaning. Learn from what people do, not just what they say.
- *Align on a set of standards.* Determine what constitutes wellbeing for the community and agree on these at the local agency level. All stakeholders must align with goals and objectives and with what constitutes quality in measurement.
- *Communicate.* Don't underestimate the power of over-communicating. Capture and communicate agreements, decisions, and commitments, as well as results. People surveyed have a vested interest in understanding the vision and seeing progress toward it, along with knowing the results. Use infographics and other media to help people embrace results and take action.
- *Model the way for the global wellbeing community.* Although a few of the local highlighted indexes here have been measuring wellbeing for more than a decade, the art and science of this entire effort is nascent. When you determine a best practice, keep track of it and share it with others.
- *You are not alone.* If you are up against a particularly intractable problem inside your project group, reach out to your wellbeing-index colleagues. Odds are someone else has solved for it ahead of you.¹⁰⁶

The pioneering efforts that are highlighted here represent only the beginning. Local governments will benefit from focusing strategic efforts. Externally, they can learn from those who have gone before them. A number of agencies, universities, think tanks, and non-profit organizations are ready to help, share best practices, and provide guidance. In Appendix 1, we list a variety of resources that can be helpful.

Internally, local governments must call upon their partnerships and agencies – those community stakeholders such as local businesses, religious and community leaders, elected officials, city councils, health initiatives, law enforcement authorities, and vested others – to align policy and practice with the data of wellbeing measurement at the local level.

6: Conclusion

“Give me a place to stand on, and with my lever I will move the earth.”
– Archimedes¹⁰⁷

Measures of wellbeing have the potential to change social and political spheres in several fundamental ways. Economists and social scientists can come together with robust and rigorously collected statistical evidence to expand indicators beyond economic prosperity. Further, wellbeing is a desirable product of public policy. Governments exist to make people’s lives better. The wellbeing index can bridge governments and their citizens, providing a common language and enabling them to work together to reimagine the future.

Implications for Policymakers

Identifying the policy or program gaps across populations gives policymakers the rationale to search for mechanisms and strategies to correct course and or design new courses of action. For example, when Canada launched its Canadian Index of Wellbeing (CIW), they were surprised to find that economic growth had far outpaced Canadians’ increases in wellbeing. According to a message from the CIW co-chairs: “A year [after we launched our first index] we are now able to track the significant impact the 2008 recession has had on the quality of life of everyday Canadians...The CIW provides a broader depth of understanding that, when partnered with GDP, gives us the evidence needed to help steer Canada forward and build a society that responds to the call for greater fairness.”

We must take care to remember the imperfections, the complexity and contradictions of wellbeing measures. Efforts around the world are still in their infancy, and numerous technical, cultural, and organizational challenges lie ahead. Still, experts agree that the opportunity is worth the work. Consider the following benefits of the local wellbeing index:

- **Connects initiatives** that cities already are engaged in.
- **Leverages existing sources** of data and methodologies for data collection that are already in place.
- **Experiments with new technologies** for simplifying and improving data collection and quality.
- **Breathes new life into public-sector outcomes** by using private-sector strategies, such as the application of metrics to drive decisions.
- **Enables insights** that have heretofore been hidden, shining a light into areas that previously were only guessed at.
- **Supports local authorities** and their stakeholders in capturing the qualities of people’s experiences in subjective, self-reported, answers about real situations, rather than by indicators that merely are a proxy for first-hand experience.
- **Creates a greater understanding** of local needs, and targets resources to the groups and areas where they are most needed, which may be different from where they are assumed to be today.
- **Tracks progress** toward the community’s vision for wellbeing.
- **Takes the measure of place today**, while helping to shape the place of tomorrow.¹⁰⁸

Of course, the ultimate implication of introducing the wellbeing index into the realm of policy making is that it expands the positive relationship between the individual citizens and their collective government. Local government can serve as a welcome and relevant presence in people's lives and the people, in turn, can have the tools to engage their local government in a dialogue that is generative and productive. In this way, both the citizens and their government, together, will deliver upon the promise to do the greatest good, for the greatest number of people. Together they can approach the City of Wellbeing.

Counting What Counts

What gives a place its shape and vibrancy? What makes it a great place to live where its citizens have the opportunity not merely to survive, but to thrive? How can a city best serve its residents? This paper has made the case for one tool -- the local wellbeing index -- in all its current and potential forms, to drive fresh ideas, innovation, and change. The time-honored metrics of economic productivity fostered by the Gross Domestic Product are not going away any time soon. But as John C. Havens, founder of The H(app)athon Project and author of *Hacking H(app)iness: Why Your Personal Data Counts and How Tracking It Can Change the World* argues, "Around the world, countries are beginning to measure their citizen's lives and governmental actions via a wider lens. Multiple factors beyond financial metrics are being evaluated to see how people can live balanced lives beyond solely monetary measures." He further notes, "The Happiness Economy is redefining wealth."¹⁰⁹

Institutions, companies, governments, and their citizenry are reinventing the blunt instruments of measurement in favor of measuring what Robert Kennedy once told us matters: "the health of our children, the quality of their education, and the joy of their play."¹¹⁰ If we want to create a flourishing society, we must continue to mainstream the wellbeing index. In this way we will count what truly counts.

Appendix: Resources

The following list of resources, while by no means complete, represents a good starting point for exploring the growing phenomenon of indexes that measure wellbeing.

History and Evolution of Happiness and Measured Wellbeing

Aristotle. (1985). *Nicomachean ethics*. (T. Irwin, Trans.). Indianapolis, IN: Hackett. (Original work written fourth century B.C.E.).

Bentham, J. (1781). *Introduction to the principles of utility*. Oxford: Clarendon Press.

Easterlin, R. A. (1974). Does economic growth improve the human lot? Some empirical evidence. In P. A. David and M. W. Reder (Eds), *Nations and Households in Economic Growth: Essays in Honor of Moses Abramovitz* (pp. 89-125). New York: Academic Press.

Hamilton, C. (2008, January 27). The surprising origins and meaning of the "Pursuit of Happiness," *History News Network*. Retrieved from <http://hnn.us/articles/4646O.html>

Kennedy, R. F. (1968, March 18). Address, University of Kansas, Lawrence, Kansas. Retrieved from <http://rfkcenter.org>.

Kuznets, S. (1934). "National Income, 1929-1932". 73rd U.S. Congress, 2d session, Senate document no. 124, page 7. Retrieved from <http://library.bea.gov/u?/SOD,888>

Jefferson, T. (1814). Letter from Thomas Jefferson to M. Correa de Serra. In Lipscomb and Bergh (Eds). *The Writings of Thomas Jefferson, Memorial Edition, 1903-04*. Washington, D.C., 14, p. 222.

Locke, J. (1690/1964). *An essay concerning human understanding: In four books, 1*, p. 223. Raleigh, NC: Hayes Barton Press.

McMahon, D. M. (2006). *Happiness: A history*. New York: Atlantic Monthly Press.

Melchert, N. (2002). *Aristotle: The reality of the world. The good life. The great conversation: A historical introduction to philosophy*, 4th ed. (pp. 186-198). Boston: Beacon Hill.

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist; American Psychologist*, 55(1), 5.

Stiglitz, J. E., Sen, A. & Fitoussi, J. P. (2009). *Social progress report: Report of the commission on the measurement of economic performance and social progress*. Paper presented at the first plenary meeting for the Commission on the Measurement of Economic Performance and Social Progress, Paris.

Ura, K., Alkire, S., Zangmo, T., & Wangdi, K. (2012). *An extensive analysis of GNH Index, May 2012*. Thimphu, Bhatan: Centre for Bhutan Studies. ISBN 978-99936-14-67-8.

Wills, G. (1978). *Inventing America: Jefferson's Declaration of Independence*. New York: Houghton Mifflin Harcourt.

Organizations¹¹¹

Action for Happiness:	www.actionforhappiness.org
Authentic Happiness:	www.authentichappiness.sas.upenn.edu/Default.aspx
Beyond GDP:	http://ec.europa.eu/environment/beyond_gdp/index_en.html
Center for Bhutan Studies:	www.bhutanstudies.org.bt
The Centre for Well-being, nef:	www.neweconomics.org
Community Indicators Victoria:	www.communityindicators.net.au
Delivering Happiness:	www.deliveringhappiness.com
Greater Good:	http://greatergood.berkeley.edu
GNH USA:	www.gnhusa.org
GPI Atlantic:	www.gpiatlantic.org
GPI Maryland:	http://green.maryland.gov/mdgpi/
GPI Pacific:	www.gpipacific.org
The H(appathon) Project:	http://happathon.com

Happiness Institute: www.thehappinessinstitute.com
World Database of Happiness: <http://worlddatabaseofhappiness.eur.nl>
World Values Survey: www.worldvaluessurvey.org
The World Wellbeing Project: www.wwbp.org
The Young Foundation: www.youngfoundation.org

Publications

Books

Bok, D. (2010). *The politics of happiness: What governments can learn from the new research on well-being*. Princeton and Oxford: Princeton University Press.

Buettner, D. (2012). *The Blue Zones: 9 lessons for living longer from the people who've lived the longest*. National Geographic Books.

Csikszentmihalyi, M. (1997). *Finding flow*. New York: Basic Books.

Diener, E., Lucas, R., Schimmack, U., & Helliwell, J. F. (2009). *Well-being for public policy*. Oxford: Oxford University Press.

Fredrickson, B. (2009). *Positivity: Groundbreaking research reveals how to embrace the hidden strength of positive emotions, overcome negativity, and thrive*. New York: Crown.

Frey, B. S., & Stutzer, A. (2010). *Happiness and economics: How the economy and institutions affect human well-being*. Princeton University Press.

Havens, J. (2014). *Hacking Happiness: Why Your Personal Data Counts and How Tracking it Can Change the World*. New York: Tarcher.

Kahneman, D., Diener, E., & Schwarz, N. (2003). *Well-Being: The foundations of hedonic psychology*. New York: Russell Sage Foundation.

Layard, R. (2011). *Happiness: Lessons from a new science*. Penguin.

Lyubomirsky, S. (2008). *The how of happiness: A new approach to getting the life you want*. New York: Penguin

Parker, G. B., & Hyett, M. Pawelski, J. O., & Moores, D. (2012). *The eudaimonic turn: Well-being in literary studies*. New Jersey: Fairleigh Dickinson University Press.

Peterson, C. (2006). *A primer in positive psychology*. New York: Oxford University Press.

Seligman, M. E. P. (2011). *Flourish: A new understanding of happiness and well-being and how to achieve them*. London: Nicholas Brealey.

Seligman, M. E. P., & Peterson, C. (2004). *Character strengths and virtues: A handbook and classification*.

Articles: Popular Press

Aldrick, P. (2009, September 14). Nicolas Sarkozy wants 'well-being' measure to replace GDP. Retrieved from <http://www.telegraph.com/finance/economics/689582/Nicolas-Sarkozy-wants-well-being-measure-to-replace-GDP.html?fb>

Anderson, J. (2013, March 13). City of Santa Monica named as one of five winners in Bloomberg Philanthropies' Mayors Challenge. Retrieved from http://www.smgov.net/Main/News_Tab/City_of_Santa_Monica_Named_as_One_of_Five_Winners_in_Bloomberg_Philanthropies'_Mayors_Challenge.aspx

Annear, Steve. (2013, June 5). Somerville will measure residents' happiness with a mobile app. Retrieved from <http://www.bostonmagazine.com/news/blog/2013/06/05/somerville-well-being-survey-happathon-app/>

Bernanke, B. S. (2010, May 8). The economics of happiness. Commencement address at University of South Carolina, Columbia, SC.

Bernanke, B. S. (2012, August 6). Remarks on economic measurement. Delivered to the 32nd General Conference of the International Association for Research in Income and Wealth.

Cambridge, Massachusetts.

City of Santa Monica. (2013). The wellbeing project. Application for The Mayors Challenge, Bloomberg Philanthropies Finalist. Wellbeing index application shared in conference call notes, University of Pennsylvania, Positive Psychology Center (April 24, 2013).

Cronin, B. (2013, April 10). Well-being gauge looks beyond GDP. *The Wall Street Journal*. Retrieved from <http://online.wsj.com/article/SB10001424127887324010704578414643005466164.html#>

Fox, J. (2012, January-February). The economics of wellbeing. *Harvard Business Review*, 90(1/2), 78-83.

Gertner, J. (2010, May 13). The rise and fall of the G. D. P. *New York Times*. Retrieved from <http://www.nytimes.com/2010/05/16/magazine/16GDP-t.html?pagewanted=all>

Gilbert, D. (2012, January-February). The science behind the smile. *Harvard Business Review*, 90(1/2), 85-90.

Havens, J. (2012, June 13). The value of a happiness economy. Retrieved from <http://mashable.com/2012/06/13/happiness-economy/>

Marks, N. (Creator) (2013, March 20). Huffington Post (Poster). Happiness is a serious business. Retrieved from http://www.huffingtonpost.co.U.K./nic-marks/happiness-is-a-serious-business_b_2914174.html.

Meacham, J. (2013, June 27). Free to be happy, *Time Magazine*, 182(2), 38-40.

O'Connor, P. (Creator). (2013, February 20). Huffington Post (Poster). Mayors challenge finalist: Santa Monica (Video, Vote). Retrieved from http://www.huffingtonpost.com/pam-oconnor/mayorschallenge-santa-mo_b_2711428.html?utm_hp_ref=mayors-challenge/

Sherman, L. (2013, March 4). World's happiest places: A new report reveals where people feel most positive about their lives. *Forbes Online*. Retrieved from www.travel.yahoo.com/p-interests-27761674

Stearns, P. N. (2012, January-February). The history of happiness. *Harvard Business Review*, 90(1/2), 104-108.

Stiglitz, J. E. (Creator). FORAtv (Poster). (2008, February 5). In conversation with Vishakha Desai, Asia Society, New York, NY. [Video]. Retrieved from <http://www.youtube.com/watch?v=QUaJMntW6GA&feature=fvw>

Stratton, A. (2010, November 14). David Cameron aims to make happiness the new GDP. *The Guardian*. Retrieved from <http://www.guardian.co.UK/politics/2010/nov/14/david-cameron-wellbeing-inquiry>

Thomas, J., & Evans, J. (2010). There's more to life than GDP but how can we measure it?. *Economic & Labour Market Review*, 4(9), 29-36.

Walsh, Z. D. A source list on wellbeing and happiness measurement, as well as links to popular resources, is available at <http://zacharydavidwalsh.com>.

Warner, B. (2013, September 9). JCCI: EngageJAX! Retrieved from jcci.org/jcciblog/entry/jcci-and-making-the-world-a-happier-place.

Warner, B. (Creator). TEDx Jacksonville, Connecting Currents (Poster). (2013, October 26). Retrieved from <http://www.jcci.org/jcciblog/blogger/benwarner/statistic/tag/measuring-progress#!Community-Engagement-Matters/zoom/mainPage/image3a1>

Articles: Research and Scholarship

Abdallah, S., Stoll, L., & Eiffe, F. (2013). Quality of Life in Europe: Subjective Wellbeing. European Foundation for the Improvement of Working and Living Conditions (Eurofound). Luxembourg: Publications Office of the European Union. ISBN 978-92-8971-120-3 doi:10.2806/37878

Adler, M. (2012). Well-being and fair distribution: beyond cost-benefit analysis. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1980339. Oxford: Oxford University Press.

- Adler, M. D. (2013). Happiness surveys and public policy: what's the use?. *Duke LJ*, 62, 1509-1747.
- Bacon, N., Brophy, M., Mguni, N., Mulgan, G., & Shandro, A. (2010). The state of happiness: Can public policy shape people's wellbeing and resilience. London: The Young Foundation.
- Berridge, K. C., & Kringelbach, M. L. (2011). Building a neuroscience of pleasure and well-being. *Psychology of Well-Being: Theory, Research and Practice*, 1(3). doi:10.1186/2211-1522-1-3
- Braun, A. A. (2009). Gross National Happiness in Bhutan: A living example of an alternative approach to progress. *Social Impact Research Experience Journal (Sire)*. University of Pennsylvania, Wharton, 1-142.
- Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In Lerner, R. M. and Damon, W. (Eds) *Handbook of child psychology* (6th ed., pp. 793-828). Hoboken, NJ: John Wiley & Sons.
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22(6), 723.
- Bronsteen, J., Buccafusco, C., & Masur, J. (2012). Well-being analysis vs. cost-benefit analysis. *Duke Law Journal, Forthcoming*, 2013-05.
- Deci, E. L., & Ryan, R. M. (2008). Hedonia, eudaimonia, and well-being: An introduction. *Journal of Happiness Studies*, 9(1), 1-11.
- Diener, E. (2009). Assessing well-being: The collected works of Ed Diener, *Social Indicators Research Series 39*. doi: 10.1007/978-90-48-2354-4.1.
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American psychologist*, 55(1), 34.
- Diener, E. (2009). Assessing well-being: The collected works of Ed Diener, *Social Indicators Research Series, 39*. Doi: 10.1007/978-90-48-2354-4.1.
- Diener, E., & Chan, M. Y. (2011). Happy people live longer: subjective well-being contributes to health and longevity. *Applied Psychology: Health and Well-Being*, 1(1), 1-43.
- Diener, E., & Suh, E. (1997). Measuring quality of life: Economic, social, and subjective indicators. *Social Indicators Research*, 40(1-2), 189-216.
- Dolan, P., & Metcalfe, R. (2012). Measuring subjective wellbeing: recommendations on measures for use by national governments. *Journal of social policy*, 41(2), 409-427.
- Dolan, P., Layard, R., & Metcalfe, R. (2011). Measuring subjective well-being for public policy. Special Paper No. 23, March.
- Dolan, P., & Metcalfe, R. (2012). Measuring subjective wellbeing: recommendations on measures for use by national governments. *Journal of Social Policy*, 41(2), 409-427.
- Duncan, G. (2013). Should happiness-maximization be the goal of government?. In *The Exploration of Happiness* (pp. 303-320). Springer Netherlands.
- Eckersley, R. (2009). Population measures of subjective wellbeing: How useful are they? *Social Indicators Research*, 94(1), 1-12.
- Fasolo, L., Galetto, M., & Turina, E. (2011). A pragmatic approach to evaluate alternative indicators to GDP. *Quality & Quantity*, 47(2), 633-657. doi 10.1007/s1135-011-9537-7
- Forgeard, M. J., Jayawickreme, E., Kern, M. L., & Seligman, M. E. (2011). Doing the right thing: Measuring wellbeing for public policy. *International Journal of Wellbeing*, 1(1).
- Fowler, J. H., & Christakis, N. A. (2008). Dynamic spread of happiness in a large social network: Longitudinal analysis over 20 years in the Framingham heart study. *British Medical Journal*, 337, a2338.
- Helliwell, J. F., & Barrington-Leigh, C. P. (2010). Viewpoint: Measuring and understanding subjective well-being. *Canadian Journal of Economics/Revue canadienne d'économique*. 43(3) 729 - 753. doi: 10.1111/j.1540-5982.2010.01592.x
- Hervas, C., & Vazquez, C. (2012). *Validation of a brief measure of integrative well-being in seven languages: The Pemberton Happiness Index*. Manuscript under review
- Howell, R. T., Kern, M. L., & Lyubomirsky, S. (2007). Health benefits: Meta-analytically

- determining the impact of well-being on objective health outcomes. *Health Psychology Review*, 7(1), 83-136.
- Huppert, F. A. (2009a). A new approach to reducing disorder and improving well-being. *Perspectives on Psychological Science*, 4, 108 - 111.
- Huppert, F. A. (2009b). Psychological well-being: Evidence regarding its causes and consequences. *Applied Psychology: Health and Well-being*, 1, 137 - 164.
- Huppert, F. A., & So, T. T. (2013). Flourishing across Europe: Application of a new conceptual framework for defining well-being. *Social Indicators Research*, 110(3), 837-861.
- Kahneman, D., & Deaton, A. (2010). High income improves evaluation of life but not emotional well-being. *Proceedings of the National Academy of Sciences*, 107(38), 16489-16493.
- Kahneman, D., Wakker, P. P., & Sarin, R. (1997). Back to Bentham? Explorations of experienced utility. *The Quarterly Journal of Economics*, 112(2), 375-406.
- Kern, M. L., Eichstaedt, J. C., Schwartz, H. A., Park, G., Ungar, L. H., Stillwell, D. J., Kosinski, M., Dziurzynski, L., & Seligman, M. E. P. (2013, November 25). From “Sooo Excited!!!” to “So Proud”: Using Language to Study Development. *Developmental Psychology*. Advance online publication. doi: 10.1037/a0035048
- Keyes, C. L. M. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior*, 43, 207 - 222.
- Layard, R. (2005). Rethinking public economics: The implications of rivalry and habit. *Economics and Happiness*, 147-170.
- Layous, K., & Lyubomirsky, S. (2012). The how, who, what, when and why of happiness: Mechanisms underlying the success of positive activity interventions. In J. Gruber & J. Moskowitz (Eds.), *Light and dark side of positive emotion*. Oxford: Oxford University Press.
- Liberal Democrats. (2011). A new purpose for politics: quality of life (Policy Paper No. 102). ISBN: 978-1-907046-39-1.
- Locke, E. A. (1996). Motivation through conscious goal setting. *Preventive Psychology*, 5, 117-124.
- Lyons, M. (2007, March). The Lyons Inquiry into the Future of Local Government final report. Retrieved from <http://www.webarchive.org.uk/pan/15454/20070428/www>.
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success?. *Psychological Bulletin*, 131(6), 803-855.
- Martens, U., & Stephenson, A. (2013). Encounter: The pursuit of happiness. *The Focus*, XIII(1). Retrieved July 7, 2013 from www.egonzehnder.com/files/50-53_kahneman_1.pdf
- McMahon, D. M. (2012). The pursuit of happiness in history. In S. David, I. Boniwell, & A. Conley Ayers (Eds), *Oxford Handbook of Happiness*, 319). Oxford: Oxford University Press.
- Mguni, N., & Caistor-Arendar, L. (2013, March 31). European framework for measuring progress: Report on conceptual framework to measure social progress at the local level and case studies. European Union under the 7th Research Framework Programme (Theme SSH-2011-3) Grant Agreement number 290520, Deliverable 9.1. Retrieved from www.eframeproject.eu?id=29-29k.
- Myers, D. G. (2004). Human connections and the good life: Balancing individuality and community in public policy. *Positive Psychology in Practice*, 641-657.
- Oishi, S., Graham, J., Kesebir, S., & Galinha, I. C. (2013). Concepts of happiness across time and cultures. *Personality and Social Psychology Bulletin*, 39(5), 559-577.
- Pressman, S. D., & Cohen, S. (2005). Does positive affect influence health?. *Psychological Bulletin*, 131(6), 925.
- Prilleltensky, I. (2005). Promoting well-being: Time for a paradigm shift in health and human services. *Scandinavian Journal of Public Health*, 33(Suppl 66): 53 - 60.
- Ryan, R. M., & Deci E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 42, 141-166.

- Ryff, C. D., & Singer, B. (1998). The contours of positive human health. *Psychological Inquiry*, 9, 1 – 28.
- Ryff, C. D., & Singer, B. (2002). From social structure to biology: Integrative science in pursuit of human health and well-being. In Snyder, C. R., & Lopez, S. J. (Eds.), *Handbook of Positive Psychology* (pp. 541-555). New York: Oxford University Press.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069.
- Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: a practice-friendly meta-analysis. *Journal of Clinical Psychology*, 65(5), 467-487. doi: 10.1002/jclp.20593
- Smart, D., & Sanson, A. (2005). What is life like for young Australians today, and how well are they faring? *Family Matters*, 70, 46 – 53.
- Steuer, N., & Marks, N. (2008). *Local Wellbeing: Can We Measure It?* Centre for Wellbeing at the new economics foundation (nef), with Young Foundation.
- Stevenson, B., & Wolfers, J. (2008, August 25). *Economic growth and subjective well-being: reassessing the Easterlin paradox*. Paper presented at the 3rd annual conference on Empirical Legal Studies Papers, Cornell University Law School.
- Veenhoven, R. (2004). The greatest happiness principle. Happiness as an aim in public policy. *Positive psychology in practice (John Wiley and Sons Inc., Hoboken, NJ, USA)*.
- Veenhoven, R. (2008). Healthy happiness: Effects of happiness on physical health and the consequences for preventive health care. *Journal of Happiness Studies*, 9(3), 449-469.
- Warner, K. (2012). "The Wellbeing Index: A Landscape of Worldwide Measures and the Potential for Large-Scale Change." University of Pennsylvania, Scholarly Commons: Repository. Retrieved from http://repository.upenn.edu/mapp_capstone/46
- Waterman, A. S. (1993). Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of personality and social psychology*, 64(4), 678.
- Whitehall Wellbeing Working Group. (2006, October). Strong and prosperous communities. Retrieved from <http://www.communities.gov.uk/publications/localgovernment/strongprosperous>
- World Wellbeing Project. University of Pennsylvania. Retrieved from <http://www.wwbp.org>

Featured Wellbeing Indexes

- Australia Unity Wellbeing Index (2013). Retrieved from <http://www.australianunity.com.au/about-us/Wellbeing>
- Butler, J., & Kern, M. L. (2013). *The PERMA-Profiler: A brief multidimensional measure of flourishing*. Manuscript in preparation.
- Bristol Workplace Wellbeing Charter Event Presentation. (2013). Retrieved from <http://www.bristol.gov.uk/page/business-bristol/workplace-wellbeing-charter>
- Canadian Index of Wellbeing (CIW). (2013). Retrieved from <https://uwaterloo.ca/canadian-index-wellbeing/about-canadian-index-wellbeing>
- Center for Bhutan Studies (CBS). (2011). *GNH indicators and thresholds of the 2010 GNH Index*. Retrieved from <http://www.grossnationalhappiness.com/articles/>
- Cummins, R. (2010). What makes us happy: Ten years of the Australian Unity Wellbeing Index. Retrieved from <http://www.australianwellbeing.com.au/news/Pages/Whatmakesushappy.aspx>
- Gallup-Healthways Well-Being Index (2013). Retrieved from <http://www.well-beingindex.com>
- Genuine Progress Indicator (GPI). (2013). Retrieved from http://rprogress.org/sustainability_indicators/genuine_progress_indicator.htm
- Greater New Haven Community Index. (2013). Retrieved from

<http://www.ctdatahaven.org/communityindex>

Gross National Happiness Index. (2013). Retrieved from <http://www.grossnationalhappiness.com>

Gross National Happiness USA. Retrieved from <http://www.gnhusa.org>

Happy Planet Index (HPI). (2013). Retrieved on July 17, 2013 from <http://www.happyplanetindex.org>

JCCI: Engaging People for Community Change. Retrieved from <http://www.jcci.org/quality-of-life-report>

Legatum Institute. (2012a). The 2012 Legatum Prosperity Index. Retrieved from <http://www.prosperity.com/KeyFindings-1.aspx>

Office of National Statistics (ONS). Organisation for Economic Co-operation and Development (OECD) (2011). *How's life?* Measuring what matters: National statistician's report well-being. Washington: OECD Publishing.

Organisation for Economic Co-operation and Development (OECD) Better Life Index. (2013). Retrieved on the national debate on measuring national wellbeing. July 5, 2013 Retrieved from <http://www.ons.gov.UK/ons/guide-method/user-guidance/well-being/about-the-programme/index.html><http://www.oecd.org/betterlifeindex>

Office of National Statistics Well-Being Index (ONS Well-Being Index). (2013). Retrieved from <http://www.ons.gov.UK/ons/guide-method/user-guidance/well-being/index.html>, United Kingdom.

PERMA-Profiler. (2013). In development at the Positive Psychology Center, University of Pennsylvania, Philadelphia, PA. Retrieved from https://sasupenn.qualtrics.com/SE/?SID=SV_bd5KWGQczyGfEMJ

Santa Monica Local Wellbeing Index. (2013). Retrieved from <http://www.smgov.net/wellbeing/>

Somerville's Happiness Survey

Somerville, MA. Report on Wellbeing. Retrieved from http://www.somervillema.gov/sites/default/files/documents/Somerville_Well_Being_Report.pdf

State of the USA. (2013). Retrieved from <http://www.stateoftheusa.org>

Sustainable Seattle. Retrieved from <http://sustainableseattle.org/home>

United Nations Human Development Index. (2013). Retrieved from www.hdr.undp.org.

References

- Abdallah, S., Stoll, L., & Eiffe, F. (2013). Quality of Life in Europe: Subjective Wellbeing. European Foundation for the Improvement of Working and Living Conditions (Eurofound). Luxembourg: Publications Office of the European Union. ISBN 978-92-8971-120-3 doi:10.2806/37878
- Anderson, J. (2013, March 13). City of Santa Monica named as one of five winners in Bloomberg Philanthropies' Mayors Challenge. Retrieved from http://www.smgov.net/Main/News_Tab/City_of_Santa_Monica_Named_as_One_of_Five_Winners_in_Bloomberg_Philanthropies'_Mayors_Challenge.aspx
- Annear, Steve. (2013, June 5). Somerville will measure residents' happiness with a mobile app. Retrieved from <http://www.bostonmagazine.com/news/blog/2013/06/05/somerville-well-being-survey-happathon-app/>
- Archimedes quote retrieved from www.math.nyu.edu/~%20ocorres/Archimedes/contents.html
- Aristotle. (1985). *Nicomachean ethics*. (T. Irwin, Trans.). Indianapolis, IN: Hackett. (Original work written fourth century B.C.E.).
- Australia Unity Wellbeing Index (2013). Retrieved from www.australianunity.com.au/about-us/Wellbeing
- Bacon, N., Brophy, M., Mguni, N., Mulgan, G., & Shandro, A. (2010). The state of happiness: Can public policy shape people's wellbeing and resilience. London: The Young Foundation.
- Bentham, J. (1781). Introduction to the principles of utility. Oxford: Clarendon Press.
- Berridge, K. C., & Kringelbach, M. L. (2011). Building a neuroscience of pleasure and well-being. *Psychology of Well-Being: Theory, Research and Practice*, 1(3). doi:10.1186/2211-1522-1-3
- Bristol Workplace Wellbeing Charter Event Presentation. (2013). Retrieved from <http://www.bristol.gov.uk/page/business-bristol/workplace-wellbeing-charter>
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22(6), 723.
- Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In Lerner, R. M. and Damon, W. (Eds) *Handbook of child psychology* (6th ed., pp. 793-828). Hoboken, NJ: John Wiley & Sons.
- Butler, J., & Kern, M. L. (2013). *The PERMA-Profilers: A brief multidimensional measure of flourishing*. Manuscript in preparation.
- Canadian Index of Wellbeing (CIW). (2013). Retrieved from <https://uwaterloo.ca/canadian-index-wellbeing/about-canadian-index-wellbeing>
- Center for Bhutan Studies (CBS). (2011). *GNH indicators and thresholds of the 2010 GNH Index*. Retrieved from <http://www.grossnationalhappiness.com/articles/>
- City of Santa Monica. (2013). The wellbeing project. Application for The Mayors Challenge, Bloomberg Philanthropies Finalist. Wellbeing index application shared in conference call notes, University of Pennsylvania, Positive Psychology Center (April 24, 2013).
- Cummins, R. (2010). What makes us happy: Ten years of the Australian Unity Wellbeing Index. Retrieved from <http://www.australianwellbeing.com.au/news/Pages/Whatmakesushappy.aspx>
- Deci, E. L., & Ryan, R. M. (2008). Hedonia, eudaimonia, and well-being: An introduction. *Journal of Happiness Studies*, 9(1), 1-11.
- Diener, E. (2009). Assessing well-being: The collected works of Ed Diener, *Social Indicators Research Series 39*. doi: 10.1007/978-90-48-2354-4_1.
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American psychologist*, 55(1), 34.
- Diener, E., & Chan, M. Y. (2011). Happy people live longer: subjective well-being contributes to health and longevity. *Applied Psychology: Health and Well-Being*, 3(1), 1-43.
- Dolan, P., Layard, R., & Metcalfe, R. (2011). Measuring subjective well-being for public policy. Special Paper No. 23, March.

- Dolan, P., & Metcalfe, R. (2012). Measuring subjective wellbeing: recommendations on measures for use by national governments. *Journal of Social Policy, 41*(2), 409-427.
- Easterlin, R. A. (1974). Does economic growth improve the human lot? Some empirical evidence. In P. A. David and M. W. Reder (Eds), *Nations and Households in Economic Growth: Essays in Honor of Moses Abramovitz* (pp. 89-125). New York: Academic Press.
- Eckersley, R. (2009). Population measures of subjective wellbeing: How useful are they? *Social Indicators Research, 94*(1), 1-12.
- Gertner, J. (2010, May 13). The rise and fall of the G. D. P. *New York Times*. Retrieved from <http://nor>
- Gilbert, D. (2012, January-February). The science behind the smile. *Harvard Business Review, 90*(1/2), 85-90.
- Greater New Haven Community Index. (2013). Retrieved from <http://www.ctdatahaven.org/communityindex>
- Gross National Happiness Index. (2013). Retrieved from <http://www.grossnationalhappiness.com>
- Gross National Happiness USA. Retrieved from <http://www.gnhusa.org>
- Havens, J. (2014). *Hacking Happiness: Why Your Personal Data Counts and How Tracking it Can Change the World*. New York: Tarcher.
- Helliwell, J. F., & Barrington-Leigh, C. P. (2010). Viewpoint: Measuring and understanding subjective well-being. *Canadian Journal of Economics/Revue canadienne d'économique, 43*(3) 729 - 753. doi: 10.1111/j.1540-5982.2010.01592.x
- Howell, R. T., Kern, M. L., & Lyubomirsky, S. (2007). Health benefits: Meta-analytically determining the impact of well-being on objective health outcomes. *Health Psychology Review, 1*(1), 83-136.
- Huppert, F. A. (2009b). Psychological well-being: Evidence regarding its causes and consequences. *Applied Psychology: Health and Well-being, 1*, 137 - 164.
- Kahneman, D., & Deaton, A. (2010). High income improves evaluation of life but not emotional well-being. *Proceedings of the National Academy of Sciences, 107*(38), 16489-16493.
- Kahneman, D., Diener, E., & Schwarz, N. (2003). *Well-Being: The foundations of hedonic psychology*. New York: Russell Sage Foundation.
- Kennedy, R. F. (1968, March 18). Address, University of Kansas, Lawrence, Kansas. Retrieved from <http://rfkcenter.org>.
- Kern, M. L., Eichstaedt, J. C., Schwartz, H. A., Park, G., Ungar, L. H., Stillwell, D. J., Kosinski, M., Dziurzynski, L., & Seligman, M. E. P. (2013, November 25). From "Sooo Excited!!!" to "So Proud": Using Language to Study Development. *Developmental Psychology*. Advance online publication. doi: 10.1037/a0035048
- Kuznets, S. (1934). "National Income, 1929-1932." 73rd US Congress, 2d session, Senate document no. 124, page 7. Retrieved from <http://library.bea.gov/u?/SOD,888>
- Jefferson, T. (1814). Letter from Thomas Jefferson to M. Correa de Serra. In Lipscomb and Bergh (Eds). *The Writings of Thomas Jefferson, Memorial Edition, 1903-04*. Washington, D.C., 14, p. 222.
- JCCI: Engaging People for Community Change. Retrieved from <http://www.jcci.org/quality-of-life-report>
- Layard, R. (2011). *Happiness: Lessons from a new science*. Penguin.
- Layard, R. (2005). Rethinking public economics: The implications of rivalry and habit. *Economics and Happiness, 147-170*.
- Legatum Institute. (2012b). Unique global inquiry into wealth and wellbeing: The 2012 Legatum Prosperity Index Brochure. Retrieved from www.prosperity.com

- Lyons, M. (2007, March). The Lyons Inquiry into the Future of Local Government final report. Retrieved from <http://www.webarchive.org.uk/pan/15454/20070428/www>.
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success?. *Psychological Bulletin*, *131*(6), 803-855.
- Marks, N. (Creator) (2013, March 20). Huffington Post (Poster). Happiness is a serious business. Retrieved from http://www.huffingtonpost.co.uk/nic-marks/happiness-is-a-serious-business_b_2914174.html.
- Martens, U., & Stephenson, A. (2013). Encounter: The pursuit of happiness. *The Focus*, *XIII*(1). Retrieved July 7, 2013 from www.egonzehnder.com/files/50-53_kahneman_1.pdf
- McMahon, D. M. (2012). The pursuit of happiness in history. In S. David, I. Boniwell, & A. Conley Ayers (Eds), *Oxford Handbook of Happiness*, *3*(19). Oxford: Oxford University Press.
- Meacham, J. (2013, June 27). Free to be happy, *Time Magazine*, *182*(2), 38-40.
- Meadows, D. H. (1998). Indicators and information systems for sustainable development, Sustainability Institute, Hartland Four Corners VT.
- Mguni, N., & Caistor-Arendar, L. (2013, March 31). European framework for measuring progress: Report on conceptual framework to measure social progress at the local level and case studies. European Union under the 7th Research Framework Programme (Theme SSH-2011-3) Grant Agreement number 290520, Deliverable 9.1. Retrieved from www.eframeproject.eu?id=29-29k.
- O'Connor, P. (Creator). (2013, February 20). Huffington Post (Poster). Mayors challenge finalist: Santa Monica (Video, Vote). Retrieved from http://www.huffingtonpost.com/pam-oconnor/mayorschallenge-santa-mo_b_2711428.html?utm_hp_ref=mayors-challenge/
- Office of National Statistics (ONS). Organisation for Economic Co-operation and Development (OECD) (2011). *How's life? Measuring what matters: National statistician's report well-being*. Washington: OECD Publishing.
- Organisation for Economic Co-operation and Development (OECD) Better Life Index. (2013). Retrieved on the national debate on measuring national wellbeing. July 5, 2013 Retrieved from <http://www.ons.gov.uk/ons/guide-method/user-guidance/well-being/about-the-programme/index.htmloecdbetterlifeindex.org>
- Office of National Statistics Well-Being Index (ONS Well-Being Index). (2013). Retrieved from <http://www.ons.gov.uk/ons/guide-method/user-guidance/well-being/index.html>, United Kingdom.
- Pressman, S. D., & Cohen, S. (2005). Does positive affect influence health?. *Psychological Bulletin*, *131*(6), 925.
- Prilleltensky, I. (2005). Promoting well-being: Time for a paradigm shift in health and human services. *Scandinavian Journal of Public Health*, *33*(Suppl 66): 53 - 60.
- Santa Monica Local Wellbeing Index. (2013). Retrieved from <http://www.smgov.net/wellbeing/>
- Seligman, M. E. P. (2011). *Flourish: A new understanding of happiness and well-being and how to achieve them*. London: Nicholas Brealey.
- Somerville, MA. Report on Wellbeing. Retrieved from http://www.somervillema.gov/sites/default/files/documents/Somerville_Well_Being_Report.pdf
- Stearns, P. N. (2012, January-February). The history of happiness. *Harvard Business Review*, *90*(1/2), 104-108.
- Steuer, N., & Marks, N. (2008). *Local Wellbeing: Can We Measure It?* Centre for Wellbeing at the new economics foundation (nef), with Young Foundation.
- Stevenson, B., & Wolfers, J. (2008, August 25). *Economic growth and subjective well-being: reassessing the Easterlin paradox*. Paper presented at the 3rd annual conference on Empirical Legal Studies Papers, Cornell University Law School.
- Stiglitz, J. E. (Creator). FORAtv (Poster). (2008, February 5). In conversation with Vishakha Desai, Asia Society, New York, NY. [Video]. Retrieved from

<http://www.youtube.com/watch?v=QUaJMntW6GA&feature=fvw>

Stiglitz, J. E., Sen, A. & Fitoussi, J. P. (2009). *Social progress report: Report of the commission on the measurement of economic performance and social progress*. Paper presented at the first plenary meeting for the Commission on the Measurement of Economic Performance and Social Progress, Paris.

Stratton, A. (2010, November 14). David Cameron aims to make happiness the new GDP. *The Guardian*. Retrieved from <http://www.guardian.co.uk/politics/2010/nov/14/david-cameron-wellbeing-inquiry>

Sustainable Seattle. Retrieved from <http://sustainableseattle.org/home>

Ura, K., Alkire, S., Zangmo, T., & Wangdi, K. (2012). *An extensive analysis of GNH Index, May 2012*. Thimphu, Bhatan: Centre for Bhutan Studies. ISBN 978-99936-14-67-8.

Walsh, Z. D. (Creator and Poster). Retrieved from www.zacharydavidwalsh.com

Warner, B. (Creator). TEDx Jacksonville, Connecting Currents (Poster). (2013, October 26). Retrieved from <http://www.jcci.org/jcciblog/blogger/benwarner/statistic/tag/measuring-progress#!Community-Engagement-Matters/zoom/mainPage/image3a1>

Warner, B. (2013, September 9). JCCI: EngageJAX! Retrieved from jcci.org/jcciblog/entry/jcci-and-making-the-world-a-happier-place.

Warner, K. (2012). "The Wellbeing Index: A Landscape of Worldwide Measures and the Potential for Large-Scale Change." University of Pennsylvania, Scholarly Commons: Repository. Retrieved from http://repository.upenn.edu/mapp_capstone/46

Waterman, A. S. (1993). Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of personality and social psychology*, 64(4), 678.

Whitehall Wellbeing Working Group. (2006, October). Strong and prosperous communities. Retrieved from <http://www.communities.gov.uk/publications/localgovernment/strongprosperous>

Wills, G. (1978). *Inventing America: Jefferson's Declaration of Independence*. New York: Houghton Mifflin Harcourt.

World Wellbeing Project. University of Pennsylvania. Retrieved from <http://www.wwbp.org>

About the Authors

Karen Warner, MA, is founder and CEO of Tangible Group and an Assistant Instructor for *Positive Psychology and the Institution* in University of Pennsylvania's Masters of Applied Positive Psychology (MAPP) program. Karen has considerable experience translating research into applied interventions via coaching and consulting in the corporate and public sectors. Her master's thesis, *The Wellbeing Index: A Landscape of Worldwide Measures and the Potential For Large-Scale Change*, reviewed existing global wellbeing indices, their domains, and their indicators. In addition, she currently collaborates with The H(app)athon Project, supporting their efforts to help cities and non-profits leverage the known best practices of wellbeing measurement. Prior to founding Tangible, Karen served as Vice President of Worldwide Marketing for a private equity firm.

Margaret P. Kern, Ph.D. is a Postdoctoral fellow at the University of Pennsylvania. Her research focuses on how psychosocial characteristics impact health and wellbeing (www.margaretkern.org). Her recent work includes wellbeing measurement, particularly as applied to individuals, schools, and workplace organizations. Over the past three years, she has developed brief measures of flourishing for individuals and organizations. In addition, she is a leading team member of Penn's World Well-being Project (www.wwbp.org), a collaboration among computer scientists and psychologists to use language from social media to shed light on psychosocial processes that impact health and happiness.

About the City of Santa Monica Office of Wellbeing

The City of Santa Monica Office of Wellbeing oversees the successful implementation of The Wellbeing Project, a grant-funded project to measure, define, and actively improve community wellbeing.

For more information:
phone: 310-458-8310
email: wellbeing@smgov.net
web: www.smgov.net/wellbeing

Endnotes

- ¹ Jefferson, T. (1814). Letter from Thomas Jefferson to M. Correa de Serra. In Lipscomb and Bergh (Eds). *The Writings of Thomas Jefferson, Memorial Edition, 1903-04*. Washington, D.C., 14, p. 222.
- ² Bacon, N., Brophy, M., Mguni, N., Mulgan, G., & Shandro, A. (2010). The state of happiness: Can public policy shape people's wellbeing and resilience. *London: The Young Foundation*, p. 7.
- ³ IBID, p. 11
- ⁴ Ura, Alkire, Zangmo, & Wangdi, 2012
- ⁵ Cummins, R. (2010). What makes us happy: Ten years of the Australian Unity Wellbeing Index. Retrieved from <http://www.australianwellbeing.com.au/news/Pages/Whatmakesushappy.aspx>
- ⁶ Helliwell, J. F., & Barrington-Leigh, C. P. (2010). Viewpoint: Measuring and understanding subjective well-being. *Canadian Journal of Economics/Revue canadienne d'économique*. 43(3) 729 - 753. doi: 10.1111/j.1540-5982.2010.01592.x
- ⁷ Anderson, J. (2013, March 13). City of Santa Monica named as one of five winners in Bloomberg Philanthropies' Mayors Challenge. Retrieved from http://www.smgov.net/Main/News_Tab/City_of_Santa_Monica_Named_as_One_of_Five_Winners_in_Bloomberg_Philanthropies'_Mayors_Challenge.aspx
- ⁸ Marks, N. (Creator) (2013, March 20). Huffington Post (Poster). Happiness is a serious business. Retrieved from http://www.huffingtonpost.co.U.K./nic-marks/happiness-is-a-serious-business_b_2914174.html
- ⁹ Cummins, R. (2010). What makes us happy: Ten years of the Australian Unity Wellbeing Index. Retrieved from <http://www.australianwellbeing.com.au/news/Pages/Whatmakesushappy.aspx>
- ¹⁰ Deci, E. L., & Ryan, R. M. (2008). Hedonia, eudaimonia, and well-being: An introduction. *Journal of Happiness Studies*, 9(1), 1-11. Diener, E. (2009). Assessing well-being: The collected works of Ed Diener, *Social Indicators Research Series 39*. doi: 10.1007/978-90-48-2354-4_1.
- ¹¹ Aristotle. (1985). *Nicomachean ethics*. (T. Irwin, Trans.). Indianapolis, IN: Hackett. (Original work written fourth century B.C.E.).
- ¹² Waterman, A. S. (1993). Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of personality and social psychology*, 64(4), 678.
- ¹³ Prilleltensky, I. (2005). Promoting well-being: Time for a paradigm shift in health and human services. *Scandinavian Journal of Public Health*, 33(Suppl 66): 53 - 60.
- ¹⁴ IBID, p. 54.
- ¹⁵ IBID, p. 54.
- ¹⁶ Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22(6), 723.
- ¹⁷ Butler, J., & Kern, M. L. (2013). *The PERMA-Profilers: A brief multidimensional measure of flourishing*. Manuscript in preparation.
- ¹⁸ Stiglitz, J. E. (Creator). FORAtv (Poster). (2008, February 5). In conversation with Vishakha Desai, Asia Society, New York, NY. [Video]. Retrieved from <http://www.youtube.com/watch?v=QUaJMntW6GA&feature=fvw>
- ¹⁹ Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22(6), 723.
- ²⁰ Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In Lerner, R. M. and Damon, W. (Eds) *Handbook of child psychology* (6th ed., pp. 793-828). Hoboken, NJ: John Wiley & Sons.
- ²¹ Prilleltensky, I. (2005). Promoting well-being: Time for a paradigm shift in health and human services. *Scandinavian Journal of Public Health*, 33(Suppl 66): 53 - 60.
- ²² Bristol Workplace Wellbeing Charter Event Presentation. (2013). Retrieved from <http://www.bristol.gov.uk/page/business-bristol/workplace-wellbeing-charter>
- ²³ Greater New Haven Community Index. (2013). Retrieved from <http://www.ctdatahaven.org/communityindex>

-
- ²⁴ Dolan, P., Layard, R., & Metcalfe, R. (2011). Measuring subjective well-being for public policy. Special Paper No. 23, March.
- ²⁵ Eckersley, R. (2009). Population measures of subjective wellbeing: How useful are they? *Social Indicators Research*, 94(1), 1-12.
- ²⁶ Ura, K., Alkire, S., Zangmo, T., & Wangdi, K. (2012). *An extensive analysis of GNH Index, May 2012*. Thimphu, Bhatan: Centre for Bhutan Studies. ISBN 978-99936-14-67-8, p.7.
- ²⁷ Somerville, MA, *A Report on Wellbeing*. Retrieved from <http://www.somervillema.gov/departments/somerstat/report-on-well-being>
- ²⁸ Annear, Steve. (2013, June 5). Somerville will measure residents' happiness with a mobile app. Retrieved from <http://www.bostonmagazine.com/news/blog/2013/06/05/somerville-well-being-survey-happathon-app/>
- ²⁹ Retrieved from www.wvbp.org
- ³⁰ Kern, M. L., Eichstaedt, J. C., Schwartz, H. A., Park, G., Ungar, L. H., Stillwell, D. J., Kosinski, M., Dziurzynski, L., & Seligman, M. E. P. (2013, November 25). From "Sooo Excited!!!" to "So Proud": Using Language to Study Development. *Developmental Psychology*. Advance online publication. doi: 10.1037/a0035048
- ³¹ Layard, R. (2011). *Happiness: Lessons from a new science*. Penguin.
- ³² Legatum Institute. (2012b). Unique global inquiry into wealth and wellbeing: The 2012 Legatum Prosperity Index Brochure. Retrieved from www.prosperity.com
- ³³ McMahon, D. M. (2012). The pursuit of happiness in history. In S. David, I. Boniwell, & A. Conley Ayers (Eds), *Oxford Handbook of Happiness*, 3(19). Oxford: Oxford University Press.
- ³⁴ Stearns, P. N. (2012, January-February). The history of happiness. *Harvard Business Review*, 90(1/2), 104-108.
- ³⁵ Ura, K., Alkire, S., Zangmo, T., & Wangdi, K. (2012). *An extensive analysis of GNH Index, May 2012*. Thimphu, Bhatan: Centre for Bhutan Studies. ISBN 978-99936-14-67-8, p. 6.
- ³⁶ Wills, G. (1978). *Inventing America: Jefferson's Declaration of Independence*. New York: Houghton Mifflin Harcourt.
- ³⁷ Meacham, J. (2013, June 27). Free to be happy, *Time Magazine*, 182(2), 38-40.
- ³⁸ Bentham, J. (1781). *Introduction to the principles of utility*. Oxford: Clarendon Press.
- ³⁹ Stiglitz, J. E., Sen, A. & Fitoussi, J. P. (2009). *Social progress report: Report of the commission on the measurement of economic performance and social progress*. Paper presented at the first plenary meeting for the Commission on the Measurement of Economic Performance and Social Progress, Paris.
- ⁴⁰ Berridge, K. C., & Kringelbach, M. L. (2011). Building a neuroscience of pleasure and well-being. *Psychology of Well-Being: Theory, Research and Practice*, 1(3). doi:10.1186/2211-1522-1-3
- ⁴¹ Kern, M. L., Eichstaedt, J. C., Schwartz, H. A., Park, G., Ungar, L. H., Stillwell, D. J., Kosinski, M., Dziurzynski, L., & Seligman, M. E. P. (2013, November 25). From "Sooo Excited!!!" to "So Proud": Using Language to Study Development. *Developmental Psychology*. Advance online publication. doi: 10.1037/a0035048
- ⁴² Kahneman, D., Diener, E., & Schwarz, N. (2003). *Well-Being: The foundations of hedonic psychology*. New York: Russell Sage Foundation.
- ⁴³ Gilbert, D. (2012, January-February). The science behind the smile. *Harvard Business Review*, 90(1/2), 85-90.
- ⁴⁴ Ura, K., Alkire, S., Zangmo, T., & Wangdi, K. (2012). *An extensive analysis of GNH Index, May 2012*. Thimphu, Bhatan: Centre for Bhutan Studies. ISBN 978-99936-14-67-8, p. 4.
- ⁴⁵ Stiglitz, J. E., Sen, A. & Fitoussi, J. P. (2009). *Social progress report: Report of the commission on the measurement of economic performance and social progress*. Paper presented at the first plenary meeting for the Commission on the Measurement of Economic Performance and Social Progress, Paris.
- ⁴⁶ Office of National Statistics Well-Being Index (ONS Well-Being Index). (2013). Retrieved from <http://www.ons.gov.uk/ons/guide-method/user-guidance/well-being/index.html>, United Kingdom.
- ⁴⁷ Seligman, M. E. P. (2011). *Flourish: A new understanding of happiness and well-being and how to achieve them*. London: Nicholas Brealey.

-
- ⁴⁸ Helliwell, J. F., & Barrington-Leigh, C. P. (2010). Viewpoint: Measuring and understanding subjective well-being. *Canadian Journal of Economics/Revue canadienne d'économique*, 43(3) 729 - 753. doi: 10.1111/j.1540-5982.2010.01592.x
- ⁴⁹ Dolan, P., & Metcalfe, R. (2012). Measuring subjective wellbeing: recommendations on measures for use by national governments. *Journal of Social Policy*, 41(2), 409-427, p. 1.
- ⁵⁰ Huppert, F. A. (2009b). Psychological well-being: Evidence regarding its causes and consequences. *Applied Psychology: Health and Well-being*, 1, 137 - 164.
- ⁵¹ Steuer, N., & Marks, N. (2008). Local Wellbeing: Can We Measure It? Centre for Wellbeing at the new economics foundation (nef), with Young Foundation.
- ⁵² Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American psychologist*, 55(1), 34.
- ⁵³ Warner, B. (Creator). TEDx Jacksonville, Connecting Currents (Poster). (2013, October 26). Retrieved from <http://www.jcci.org/jcciblog/blogger/benwarner/statistic/tag/measuring-progress#!Community-Engagement-Matters/zoom/mainPage/image3a1>
- ⁵⁴ Kennedy, R. F. (1968, March 18). Address, University of Kansas, Lawrence, Kansas. Retrieved from <http://rfkcenter.org>, para. 1.
- ⁵⁵ The US used Gross National Product (GNP) as its basic economic metric until 1991, when it switched to GDP.
- ⁵⁶ The OECD has 34 member countries spanning the globe in North America, South America, Europe, and Asia-Pacific. The OECD is predominantly comprised of the world's most advanced countries, but also includes some developing countries (e.g., Mexico, Chile, Turkey).
- ⁵⁷ Gertner, J. (2010, May 13). The rise and fall of the G. D. P. *New York Times*. Retrieved from <http://www.nytimes.com/2010/05/16/magazine/16GDP-t.html?pagewanted=all>
- ⁵⁸ Stiglitz, J. E. (Creator). FORAtv (Poster). (2008, February 5). In conversation with Vishakha Desai, Asia Society, New York, NY. [Video]. Retrieved from <http://www.youtube.com/watch?v=QUaJMntW6GA&feature=fvw>
- ⁵⁹ Kuznets, S. (1934). "National Income, 1929-1932". 73rd U.S. Congress, 2d session, Senate document no. 124, page 7. Retrieved from <http://library.bea.gov/u?/SOD,888>
- ⁶⁰ Gertner, J. (2010, May 13). The rise and fall of the G. D. P. *New York Times*. Retrieved from <http://www.nytimes.com/2010/05/16/magazine/16GDP-t.html?pagewanted=all>
- ⁶¹ Stevenson, B., & Wolfers, J. (2008, August 25). *Economic growth and subjective well-being: reassessing the Easterlin paradox*. Paper presented at the 3rd annual conference on Empirical Legal Studies Papers, Cornell University Law School.
- ⁶² Easterlin, R. A. (1974). Does economic growth improve the human lot? Some empirical evidence. In P. A. David and M. W. Reder (Eds), *Nations and Households in Economic Growth: Essays in Honor of Moses Abramovitz* (pp. 89-125). New York: Academic Press.
- ⁶³ Kahneman, D., & Deaton, A. (2010). High income improves evaluation of life but not emotional well-being. *Proceedings of the National Academy of Sciences*, 107(38), 16489-16493.
- ⁶⁴ From a poll undertaken for the BBC by GfK NO P during October 2005. Results available at http://news.bbc.co.uk/nol/shared/bsp/hi/pdfs/29_03_06_happiness_gfcpoll.pdf
- ⁶⁵ Diener, E., & Chan, M. Y. (2011). Happy people live longer: subjective well-being contributes to health and longevity. *Applied Psychology: Health and Well-Being*, 3(1), 1-43.
- ⁶⁶ Howell, R. T., Kern, M. L., & Lyubomirsky, S. (2007). Health benefits: Meta-analytically determining the impact of well-being on objective health outcomes. *Health Psychology Review*, 1(1), 83-136.
- ⁶⁷ Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success?. *Psychological Bulletin*, 131(6), 803-855.
- ⁶⁸ Pressman, S. D., & Cohen, S. (2005). Does positive affect influence health?. *Psychological Bulletin*, 131(6), 925.
- ⁶⁹ Martens, U., & Stephenson, A. (2013). Encounter: The pursuit of happiness. *The Focus*, XIII(1). Retrieved July 7, 2013 from www.egonzehnder.com/files/50-53_kahneman_1.pdf

-
- ⁷⁰ Stratton, A. (2010, November 14). David Cameron aims to make happiness the new GDP. *The Guardian*. Retrieved from <http://www.guardian.co.uk/politics/2010/nov/14/david-cameron-wellbeing-inquiry>
- ⁷¹ Eckersley, R. (2009). Population measures of subjective wellbeing: How useful are they? *Social Indicators Research*, 94(1), 1-12.
- ⁷² Helliwell, J. F., & Barrington-Leigh, C. P. (2010). Viewpoint: Measuring and understanding subjective well-being. *Canadian Journal of Economics/Revue canadienne d'économique*. 43(3) 729 - 753. doi: 10.1111/j.1540-5982.2010.01592.x
- ⁷³ Mguni, N., & Caistor-Arendar, L. (2013, March 31). European framework for measuring progress: Report on conceptual framework to measure social progress at the local level and case studies. European Union under the 7th Research Framework Programme (Theme SSH-2011-3) Grant Agreement number 290520, Deliverable 9.1. Retrieved from www.eframeproject.eu?id=29-29k, section 2.3, para. 4, p. 9.
- ⁷⁴ IBID, section 2.3, para. 5, p. 9.
- ⁷⁵ Eckersley, R. (2009). Population measures of subjective wellbeing: How useful are they? *Social Indicators Research*, 94(1), 1-12.
- ⁷⁶ Mguni, N., & Caistor-Arendar, L. (2013, March 31). European framework for measuring progress: Report on conceptual framework to measure social progress at the local level and case studies. European Union under the 7th Research Framework Programme (Theme SSH-2011-3) Grant Agreement number 290520, Deliverable 9.1. Retrieved from www.eframeproject.eu?id=29-29k, section 2.2, paras. 1-4, p. 8
- ⁷⁷ The Lyons Inquiry into the Future of Local Government final report. (2007, March). Retrieved from <http://www.webarchive.org.uk/pan/15454/20070428/www>.
- ⁷⁸ Warner, B. (2013, September 9). JCCI: EngageJAX! Retrieved from jcci.org/jcciblog/entry/jcci-and-making-the-world-a-happier-place.
- ⁷⁹ Meadows, D. H. (1998). Indicators and information systems for sustainable development, Sustainability Institute, Hartland Four Corners VT.
- ⁸⁰ Phillips, R. (2005). *Community Indicators Measuring Systems*. Chapter 5. Burlington, VT: Ashgate Publishing Company.
- ⁸¹ Steuer, N., & Marks, N. (2008). *Local Wellbeing: Can We Measure It?* Centre for Wellbeing at the new economics foundation (nef), with Young Foundation, p. 24.
- ⁸² Stiglitz, J. E., Sen, A. & Fitoussi, J. P. (2009). *Social progress report: Report of the commission on the measurement of economic performance and social progress*. Paper presented at the first plenary meeting for the Commission on the Measurement of Economic Performance and Social Progress, Paris.
- ⁸³ J. Havens, personal communication, December 6, 2013.
- ⁸⁴ Abdallah, S., & Shah, S. (2012). Well-being patterns uncovered. *London: nef*.
- ⁸⁵ Abdallah, S., Mahony, S., Marks, N., Michaelson, J., Seaford, C., Stoll, L., & Thompson, S. (2011). Measuring our progress: The power of well-being. The New Economics Foundation (nef).
- ⁸⁶ Ura, K., Alkire, S., Zangmo, T., & Wangdi, K. (2012). *An extensive analysis of GNH Index, May 2012*. Thimphu, Bhatan: Centre for Bhutan Studies. ISBN 978-99936-14-67-8, p.
- ⁸⁷ Steuer, N., & Marks, N. (2008). *Local Wellbeing: Can We Measure It?* Centre for Wellbeing at the new economics foundation (nef), with Young Foundation, p. 14.
- ⁸⁸ A. Chandra, personal communication, October 1, 2013
- ⁸⁹ Warner, B. (2013, September 9). JCCI: EngageJAX! Retrieved from jcci.org/jcciblog/entry/jcci-and-making-the-world-a-happier-place.
- ⁹⁰ Whitehall Wellbeing Working Group. (2006, October). Strong and prosperous communities. Retrieved from <http://www.communities.gov.uk/publications/localgovernment/strongprosperous>
- ⁹¹ Gross National Happiness USA. Retrieved from <http://www.gnhusa.org>
- ⁹² Center for Bhutan Studies (CBS). (2011). *GNH indicators and thresholds of the 2010 GNH Index*. Retrieved from <http://www.grossnationalhappiness.com/articles/>

-
- ⁹³ Bristol Workplace Wellbeing Charter Event Presentation. (2013). Retrieved from <http://www.bristol.gov.uk/page/business-bristol/workplace-wellbeing-charter>
- ⁹⁴ Canadian Index of Wellbeing (CIW). (2013). Retrieved from <https://uwaterloo.ca/canadian-index-wellbeing/about-canadian-index-wellbeing>
- ⁹⁵ Greater New Haven Community Index. (2013). Retrieved from <http://www.ctdatahaven.org/communityindex>
- ⁹⁶ Gross National Happiness USA. Retrieved from <http://www.gnhusa.org>
- ⁹⁷ Steuer, N., & Marks, N. (2008). *Local Wellbeing: Can We Measure It?* Centre for Wellbeing at the new economics foundation (nef), with Young Foundation.
- ⁹⁸ JCCI: Engaging People for Community Change. Retrieved from <http://www.jcci.org/quality-of-life-report>
- ⁹⁹ Steuer, N., & Marks, N. (2008). *Local Wellbeing: Can We Measure It?* Centre for Wellbeing at the new economics foundation (nef), with Young Foundation.
- ¹⁰⁰ Mguni, N., & Caistor-Arendar, L. (2013, March 31). European framework for measuring progress: Report on conceptual framework to measure social progress at the local level and case studies. European Union under the 7th Research Framework Programme (Theme SSH-2011-3) Grant Agreement number 290520, Deliverable 9.1. Retrieved from www.eframeproject.eu?id=29-29k.
- ¹⁰¹ Santa Monica Local Wellbeing Index. (2013). Retrieved from <http://www.smgov.net/wellbeing/>
- ¹⁰² Somerville Report on Wellbeing. Retrieved from http://www.somervillema.gov/sites/default/files/documents/Somerville_Well_Being_Report.pdf
- ¹⁰³ Steuer, N., & Marks, N. (2008). *Local Wellbeing: Can We Measure It?* Centre for Wellbeing at the new economics foundation (nef), with Young Foundation.
- ¹⁰⁴ Sustainable Seattle. Retrieved from <http://sustainableseattle.org/home>
- ¹⁰⁵ Office of National Statistics Well-Being Index (ONS Well-Being Index). (2013). Retrieved from <http://www.ons.gov.uk/ons/guide-method/user-guidance/well-being/index.html>, United Kingdom.
- ¹⁰⁶ Adapted from Mguni, N., & Caistor-Arendar, L. (2013, March 31). European framework for measuring progress: Report on conceptual framework to measure social progress at the local level and case studies. European Union under the 7th Research Framework Programme (Theme SSH-2011-3) Grant Agreement number 290520, Deliverable 9.1. Retrieved from www.eframeproject.eu?id=29-29k, among other sources.
- ¹⁰⁷ Archimedes quote retrieved from <http://www.math.nyu.edu/~%20corcorres/Archimedes/contents.html>
- ¹⁰⁸ Adapted from Mguni, N., & Caistor-Arendar, L. (2013, March 31). European framework for measuring progress: Report on conceptual framework to measure social progress at the local level and case studies. European Union under the 7th Research Framework Programme (Theme SSH-2011-3) Grant Agreement number 290520, Deliverable 9.1. Retrieved from www.eframeproject.eu?id=29-29k, section 2.2, paras. 1-4, p. 8
- ¹⁰⁹ Havens, J. (2014). *Hacking happiness: Why your personal data counts and how tracking it can change the world*. New York: Tarcher.
- ¹¹⁰ Kennedy, R. F. (1968, March 18). Address, University of Kansas, Lawrence, Kansas. Retrieved from <http://rfkcenter.org>.