<u>Wellbeing</u> in the Built Environment

Report from the
Supply Chain Sustainability School
Wellbeing Special Interest Group

Contents

Foreword

The Supply Chain Sustainability School (the School) convened its special interest group on wellbeing (WSIG) in 2019. Little did we know that by 2020 we would be looking at a vastly different world. Since the outbreak of coronavirus, we have been forced to re-evaluate how we prioritise wellbeing. Set against this altered context, the work of the WSIG has become especially pertinent.

As individuals, we tend to care greatly about our own wellbeing and that of our friends and families; however this is not always manifest in a corporate context. The further along the supply chain we go, the more distant our connection becomes to the people underpinning it. Manufacturers of building fabrics, construction workers, office-based workers, residents and communities are part of one system, though we know the playing field is far from equal. Taking a wide-angle view of wellbeing is a first step towards designing empathy back into the built environment industry, and the growing rate of wellbeing interventions should inspire some hope in this regard.

We find wellbeing at the forefront of public consciousness now because we can all personally identify with the impacts arising from loss of health, jobs and freedoms. Unlike other crises, this one has forced a collective reckoning that the built environment industry is fundamental to our transition to a just, equitable, climate-resilient future. Human health cannot be decoupled from planetary health and, from our vantage point at the School, a sharpened understanding of the link between wellbeing and sustainable development is emerging across the value chain.

Tough times lie ahead as we navigate a changed world. Now is the time to roll up our sleeves and prioritise action over rhetoric. At the School, we are fortunate to work alongside Partners and members who keep the spirit of collaboration and curiosity alive, and thought leaders such as the WGBC and the UKGBC whose research helps us stay ahead of the curve.

Claire Bradbury

In his book Happy City, Charles Montgomery poses a series of questions about what a city should accomplish after it meets our basic needs of food, shelter, and security.

As an industry, we should be asking, does our built environment:

...maximise joy and minimise hardship?

...lead us towards health rather than sickness?

...Offer us real freedom to live, move and build our lives as we wish?

...Build resilience against economic or environmental shocks?

....Fairly apportion space, services, mobility, joys, hardships and costs?

...Enable us to build and strengthen the bonds between friends, families and strangers that give life meaning?

...Acknowledge and celebrate our common fate, and opens doors to empathy and cooperation, to help us tackle the great challenges of this century.'

(MONTGOMERY, 2015)

Executive summary

To address the need for a cross-sector view of the built environment's current response to wellbeing, the Supply Chain Sustainability School (the School) formed a subject-matter special interest group. The participants were made up from the School's Partner base of approximately 100 organisations ranging from Fortune 500 companies to small and medium enterprises (SMEs). The group's perspectives cover the entire built environment, including facilities management, home builders, and infrastructure and construction industries.

Given the significant impact that our environments have on our health, productivity and self-actualisation, the Wellbeing Special Interest Group (WSIG) reviewed the business case for wellbeing, along with current and emerging good practice in the industry. The findings of the group showed that a holistic understanding of wellbeing in the built environment industry is emergent, but not yet mainstream. As such, there is considerable variation in how wellbeing is addressed at organisation, project and site levels. Organisations with higher levels of maturity on wellbeing are focused on developing a wellbeing strategy, vertically integrating action across the business, collecting data and measuring the impact of interventions. For those with emerging maturity, action on wellbeing tends to be more campaign-led, with less emphasis on data collection or evaluation of the impact of activities.

The WSIG drew upon the What Works Centre for Wellbeing's framework that identifies five networked themes: Health, Environment, Purpose, Security and Relationships. The group considered this framework broadly applicable across the industry, though it was accepted that this structure may evolve as maturity on wellbeing increases. Against the five themes, the group reflected on how they are currently prioritised and addressed, and where there are principle opportunities for action. This report is accompanied by a visualisation of the interrelationship between wellbeing and the built environment. The visualisation takes a macro view of wellbeing in the built environment, reflecting that the industry is a powerful determinant of the prosperity of individuals, communities and businesses.

HEALTH   ENVIRONMENT   PURPOSE   SECURITY   RELATIONSHIPS

By highlighting where wellbeing is impacted at different points in the value chain, we hope to highlight the importance of empathy in planning and design, material sourcing and manufacture, construction and building management. It is only by understanding and responding to wellbeing challenges across the value chain, that we will stand a fighting chance of transitioning to a just, equitable, climate-resilient future.

Ultimately, the WSIG's findings revealed that action on wellbeing does not need to be complex or expensive; effective interventions can be simple and proportionate and are therefore accessible to businesses of all scales. As with so many of our intractable challenges, attempts to address wellbeing at scale will be made more effective by cross-sector partnerships and knowledge-sharing.

Introduction

'Cities are where the battle for sustainable development will be won — or lost if we fail. In 2050, around 70 per cent of the world's population will live in urban areas. Cities are where economic, social, cultural and environmental aspects of human activity come together in a dynamic way.'

Jan Eliasson, former Deputy UN Secretary General, 2015

Contextualising wellbeing

The built environment sits at the heart of public health and wellbeing. We spend some two thirds of our lives in urban environments, and approximately 90% of our lives indoors (United Nations, 2018; World Health Organisation, 2013). It is well-documented that continuous and rapid urbanisation will increase the exposure of urban populations to health and wellbeing risks. The UN 2030 Agenda on Sustainable Development demonstrates the intersection of the built environment with health and wellbeing. This crossover occurs across the development lifecycle, and some or all of the SDGs will be relevant at each stage.

1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING
6 CLEAN WATER AND SANITATION	7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH
11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE ACTION
16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS	

4 QUALITY EDUCATION	5 GENDER EQUALITY
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES
14 LIFE BELOW WATER	15 LIFE ON LAND

The 2030 SDGs are a blueprint for our common future and they should underpin how the built environment industry frames and responds to the universal challenge of wellbeing. The increasing magnitude of our global sustainability challenges reflect the interdependencies between public and ecosystem health, and economic resilience. As we traverse through the latest crisis, the coronavirus pandemic, our collective path of adaptation and learning has been accelerated. Our reaction to this crisis is distinct from others in recent history insofar as the health and wellbeing of individuals – in addition to the planet – has been brought to the fore. The pandemic should serve as a sharp reminder of the need to take a systems approach to managing our sustainability risks, and to recognise the links between the health of the built environment, and human and planetary health.

The Wellbeing Special Interest Group

This report and accompanying visualisation contribute to growing evidence of the interrelationship between wellbeing and the built environment industry. The WSIG has contributed qualitative data on the current levels of wellbeing activity across the sector, identified trends and priorities, and shared lessons and challenges. It should be noted at the outset that best practice on wellbeing in the built environment is emergent. This report is intended to provide high-level guidance of the drivers underpinning wellbeing and corporate interventions. Practical case studies provided by Partners at different stages of maturity on wellbeing.

Although the WSIG's work began prior to the outbreak of the coronavirus, it is essential now to reflect on the increased social, environmental and economic imperatives for improving wellbeing. The built environment sector faces challenges as it is forced to pivot amid financial uncertainty and supply chain disruption. Underpinning this, should be a renewed and empathetic focus on the importance of our people to the future of the sector

Findings

1. Embedding wellbeing as a core business value makes good business sense and recognises the imperative to create functional, resilient built environments for the long term.

2. The outcomes that can result from wellbeing interventions include enhanced happiness, resilience, health, performance and productivity.

3. A holistic understanding of wellbeing in the built environment sector is emergent, but not yet mainstream. Agile organisations are developing strategies to support long-term behaviour change, understand how the wellbeing of employees, suppliers and communities intersects with their business, and take targeted action based on data. For organisations without a wellbeing strategy, action on wellbeing is largely ad hoc, reactive and campaign-led; therefore, the potential to create sustained behaviour change is limited.

4. Empathy in design, manufacture and construction is critical to a wellbeing-enhancing built environment. There is considerable inequity in the consideration of the wellbeing of manufacturers and constructors of the built environment, versus the users of the built environment.

5. Enhanced communication, shared ambition, and application of budget between different points of the value chain could release more opportunities for wellbeing within the existing built environment. At present, there is limited use of whole life cost, and a gap between project and operational budgets.

6. Action on wellbeing does not need to be complex or expensive; effective interventions can be simple and proportionate and are therefore accessible to businesses of all scales.

7. While wellbeing strategies can be centrally administered, a one-size-fits-all approach will not be able to address the wellbeing of all stakeholders. Organisations should be prepared to flex their approach depending on the priorities of different projects and sites.

8. Scaling action on wellbeing across the industry will be enhanced by sharing knowledge and lessons learned; celebrating short-term successes; setting out mid to long-term horizons for interventions; and a committing to make meaningful investments to track and evaluate progress.

Defining wellbeing

To understand the macroeconomic drivers and implications of wellbeing, the WSIG selected several definitions. Taken together, these definitions demonstrate the local and international, and public and private perspectives on wellbeing.

World Health Organisation (WHO): The WHO's definition of health is 'a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity' (1946). When we describe wellbeing, we are describing the conditions that we need to flourish and prosper as individuals and communities.

Organisation for Economic Cooperation and Development (OECD): The **OECD** distinguishes between current material living conditions and quality of life, and the conditions required to ensure their sustainability over time (OECD:2011). Material living conditions include: i) income and wealth; ii) jobs and earnings; and iii) housing; while quality of life includes: i) health status; ii) work and life balance; iii) education and skills; iv) civic engagement and governance; v) social Connections; vi) environmental quality; vii) personal security; and viii) subjective wellbeing.

'The sustainability of the socio-economic and natural systems where people live and work is critical for wellbeing to last over time. Sustainability depends on how current human activities impact on the stocks of different types of capital (natural, economic, human and social) that underpin wellbeing' (OECD, 2013).

Office of National Statistics, United Kingdom: 'wellbeing includes both subjective and objective measures. It includes feelings of happiness and other aspects of subjective well-being, such as feeling that one's activities are worthwhile, or being satisfied with family relationships. It also includes aspects of wellbeing which can be measured by more objective approaches...'(ONS, 2011).

The 'What Works' Centre for Wellbeing': "Wellbeing, put simply, is about 'how we are doing' as individuals, communities and as a nation and how sustainable this is for the future. [Wellbeing has] 10 broad dimensions which have been shown to matter most to people in the UK as identified through a national debate. The dimensions are: the natural environment, personal wellbeing, our relationships, health, what we do, where we live, personal finance, the economy, education and skills and governance" (What Works Centre for Wellbeing)

Summary of WSIG activities

Scope

The WSIG arose from a need, identified by School Partners, to understand the business case for addressing wellbeing. The WSIG convened representatives from a wide network of Partners, whose combined industry perspectives included infrastructure, construction, homes and facilities management. The objectives of the WSIG were to: demonstrate the business case for investing in wellbeing; communicate the key trends and implications driving the wellbeing agenda; gather evidence of the impacts of wellbeing investments, where available; and develop School materials that reflect best practice on wellbeing in the built environment value chain.

The WSIG elected to examine wellbeing in a holistic way. As considerable resources are already allocated to mental health in the industry, the group focused instead on proactive interventions that promote resilience, happiness and positive mental health. The WSIG acknowledges the admirable and necessary work of Partners, members and other organisations across the UK to listen and respond to alleviate and champion the importance of mental health. The intention is that this guidance is taken as complimentary to this.

Key activities

The WSIG's key activities included:
- Establishing a baseline of the industry's understanding of wellbeing;
- Engaging with stakeholders to collect qualitative data on wellbeing risks and opportunities;
- Building consensus on the main drivers of wellbeing in the sector;
- Mapping wellbeing risk hotspots within the sector;
- Synthesising tools and measurement practices; and
- Producing guidance on current and emerging good practice to drive maturity on wellbeing through the supply chain.

The WSIG reached consensus on five wellbeing principles – Health, Environment, Security, Relationships and Purpose (What works centre for wellbeing, 2018). The group considered that these principles support the themes, priorities and experiences of wellbeing in the built environment industry. In a series of collaborative workshops, the WSIG conducted a heat mapping exercise where each participant was able to grade the importance of each driver. There was considerable convergence around the priorities, demonstrating the shared experience of wellbeing and the possibility that different sectors, whether within or beyond the built environment, can learn from one another. The common denominator is that wellbeing is about the human experience and, although there may be variation in what each individual needs to thrive day-to-day, the fundamental components are universal.

To support and expand the WSIG's macro understanding of the drivers and priorities underpinning wellbeing, several external experts were invited to share their experience of securing internal buy-in on wellbeing interventions, expanding wellbeing investments out to the supply chain, framing the mid/long- term value of wellbeing, and methods and tools for measuring the outcomes of these activities. The final activity of the group was to collect a sample of case studies to reflect the different levels of activity within the group. The collection of these coincided with the height of disruption due to covid-19. We envisage that the case study library will continue to evolve as our Partners come back online and keep reporting their experiences.

Raw findings

The baseline of the WSIG's members revealed that some interventions were underway and at different stages of maturity. Interventions by organisations less mature in their approach to wellbeing (i.e. without a wellbeing strategy) could typically be classified as low-input and low-capex investments, campaign-led, and with limited understanding of the outcomes. However, several Partners were able to cite anecdotal evidence that their interventions were appreciated by colleagues and the supply chain, and were having a positive impact. Organisations with a maturing approach to wellbeing demonstrated some evidence of vertical integration of wellbeing across their business, a corporate strategy, and an understanding of the importance of data collection.

Overall, the fragmented nature of investments in wellbeing suggested that there is a considerable gap to be addressed by the built environment sector. This will require work to mainstream strategic understanding of wellbeing; the positive business implications of taking proactive action to create the enabling conditions for wellbeing; and the importance of creating a dataset to appropriately scope and rationalise wellbeing activity.

The discussion benchmarked current wellbeing activity in School Partner organisations and their supply chains, and examined opportunities for the School to support future work in this area.

| **What?** | Partners are engaged in a variety of internal initiatives to address the wellbeing of their workers. E.g. mental health first aiders, gym discounts and other health benefits, sports teams, walking meetings, on-site mobility training, training on positive lifestyle behaviours, engagement surveys, etc. |

| **Why?** | Partners identified the following common reasons for embedding wellbeing (although robust case studies to substantiate this had not been identified at this stage): retention, cost saving from absenteeism and presenteeism, competitive advantage, productivity, attracting talent, attracting tenants and adhering to investment demands. |

Who? Partners identified their primary stakeholders as employees, suppliers and sub-contractors. Upstream stakeholders (i.e. those who manufacture building materials) and building users (i.e. office-workers, residents and communities) were given limited emphasis.

How? Wellbeing data collection is not currently prioritised or standardised. Where it is measured, data is primarily drawn from: HR data on absenteeism, sickness, usage reports of employee assistance programmes (EAP) and uptake of rewards schemes. To a lesser extent, Partners collected data from interactions with mental health champions and employee engagement surveys. There were a few examples of Partners collecting data from air quality monitors, real time feedback and wellbeing KPIs. Responses on how wellbeing is reported were variable and ranged from no reporting through to inclusion in Board and sustainability reports, and monthly HR updates. There were a few examples of financial reports including cost savings data from wellbeing programmes. A wide range of external charities and service providers have been engaged by Partners, including charities to support volunteering initiatives, employee assistance programme providers, and training providers. Partners tend to focus their efforts on campaign-led activities, which are advertised via internal communications and wellbeing champions.

The evidence for wellbeing

Business performance

Organisational leadership and culture that embeds wellbeing as a core value can positively influence the emotional experience an individual has within the workplace, translating to business benefits and increased happiness. On the flip side, Barsade and Ozcelik have noted that social isolation at work — which manifests as disconnection from others, feeling undervalued and disempowered — will not only result in employees performing at a lower rate, but can also negatively influence the performance of colleagues (2018). Although there are attempts to distinguish between workplace and personal wellbeing, this is somewhat artificial as the determinants of health and happiness straddle a range of contexts. How we feel in our personal lives will inevitably carry through to the work environment; likewise how we feel at work will be reflected in the quality of our home life. With this in mind, the WSIG noted that wellbeing is an individual and collective responsibility.

Notwithstanding, as we spend nearly a third to a quarter of our lives in the workplace (Lord Richard Layard, 2019), employers have an enormous opportunity to increase the wellbeing of their employees and their business output simultaneously. Evidence of a direct correlation between employee satisfaction and increased business performance is now well established. For instance, a study by Alex Edmans of London Business School tracked performance of the 100 best

places to work in the US over 28 years. The results showed that companies with high employee satisfaction outperform their peers by 89% to 184% cumulatively and Edmans reflected that employee satisfaction causes good performance and not vice versa (2016). Recognition of the causal link between wellbeing and business performance is filtering into the sentiment of the built environment industry, with the Urban Land Institute noting that employees require optimum environments for optimum performance. Consequently, attracting and retaining talent has become a key driver for changes to wellbeing in the built environment context (2019).

Public services and community resilience

The built environment has critical role to play in designing our public and private spaces in ways that enhance rather than erode wellbeing. The World Health Organisation (WHO) found in 2011 that untreated mental health problems account for 13% of the total global burden of disease. WHO projections indicate that by 2030, mental health problems (particularly depression) will be the leading cause of mortality and morbidity globally. In the UK, the OECD calculated that mental ill-health costs the UK more than £94bn every year. Half of these costs - £42bn — are indirect costs relating to lower employment and productivity (OECD, 2018). For people living in urban environments, the statistics behind poor mental health are stark; city dwellers have an almost 40% higher risk of depression and a 20% higher risk of anxiety than those living in rural areas (British Land, 2018).

The opportunity for the built environment sector to improve these figures is significant. Research by British Land and WPI Economics calculated that designing for wellbeing could result in a £3.6bn saving for Government on health and welfare spend by 2050 – often at little extra cost. The economy could see a productivity increase of around £5.4bn, and UK businesses could save £6.3bn's worth of output otherwise lost through employee absence (British Land, 2018).

Design and co-benefits

Wellbeing is integral to our pursuit of a sustainable future. It speaks to our societal resilience as we weather the pressures of the climate emergency, growing urban centres, digitalisation and public health threats. It is no coincidence that what is good for planetary health, is also good for us. While good indoor air quality, temperatures, energy efficiency and other building-level design features are very important, the design of the wider community and outdoor space also plays a critical role.

Outdoor space and, crucially, the natural environment, needs to be front and centre of built environment design. Nature supports good mental health by reducing stress anxiety and depressive symptoms, improving general mood, enabling better cognitive functioning and improving mindfulness and creativity (Kallay, 2020). Outdoor amenities, walkable neighbourhoods and active travel support positive lifestyle behaviours and civic participation. They do so by creating opportunities for physical activity, local economies, urban food production and social networking. Healthy natural habitats that support endemic biodiversity and improve air, soil and water quality are fundamental to climate resilience and risk mitigation.

When it comes to design, we need to reframe our test for the economics of healthy buildings. Dr Joseph Allen of Harvard's Healthy Buildings Programme, speaking at the launch of the WGBC's Framework on Health and Wellbeing, noted that the question is not: "are healthy buildings are expensive?"; the correct question is, "are unhealthy buildings expensive?" The answer to this is yes. Healthy buildings pay dividends in orders of magnitude greater than their costs. In the context of the current pandemic, the holistic role of the built environment in fighting and preventing disease has been thrown into sharp relief. We know, for example, that basic interventions to improve air quality, filter internal air supply and ventilate buildings can help to break the chain of transmission. Beyond designing for disease avoidance, we need to design to promote health in the face of changing demands on our built environment. Although individual organisations or developments cannot necessarily 'guarantee' or 'provide' wellbeing, the built environment can certainly create the enabling conditions for people and places to thrive.

Valuing wellbeing

Attempts to quantify and value wellbeing in the built environment sector are increasing, though the approach to doing so is still nascent. Some of the ways momentum on wellbeing valuation is building include:

- **Legislation:** the *Social Value (Public Services) Act 2012* refers to environmental, social and economic wellbeing and the *Well-being of Future Generations Act (Wales) 2015* requires public bodies in Wales to consider the 'long-term impact of their decisions, to work better with people, communities and each other, and to prevent persistent problems such as poverty, health inequalities and climate change'.
- **National statistics:** the UK ONS has collected data on the UK's happiness since 2011;
- **Social value tools:** Tools such as the HACT Social Value Bank use Wellbeing Valuation theory in their models;

As the focus on social value sharpens, and the mechanisms for measuring outcomes become more established, organisations in the built environment industry will be under increasing pressure to evidence how they improve the wellbeing of workers, building users and communities. The demand for this is emerging across the value chain, from investors and local authorities through to tenants and communities. Importantly, the WGBC Health and Wellbeing Framework, launched in November 2020, enshrines a comprehensive set of socio-economic and environmental determinants of health for all people connected to the lifecycle of buildings and infrastructure. This is an inflection point for the built environment industry and should herald approaches to wellbeing that align with the Sustainable Development Agenda.

A framework for wellbeing

The WSIG adopted a simple framework for wellbeing, applying the What Works Centre for Wellbeing's five themes. These themes are a useful foundation for organisations to understand wellbeing, develop targeted interventions and prioritise action. The WSIG envisages that as maturity on wellbeing evolves, the themes can be adapted or expanded.

Health

Health includes physiological and mental health. The health of the built environment underpins human health, which in turn underpins business health. In the workplace context, interventions are shifting beyond occupational health and safety, towards an approach that recognises that the health of individuals can be impacted by a range of variables. These include lifestyle behaviours, living and working conditions, and personal and professional stressors. The built environment sector can facilitate good health by actively supporting positive lifestyle behaviours that have multiple benefits, such as mitigating and protecting against mental health disorders and the onset of non-communicable diseases. Taking movement and physical activity as an example, the built environment can contribute in a variety for ways. For example, planning for active travel, designing inclusive green space, providing quiet spaces for contemplation and mindfulness.

WSIG OBSERVATIONS

The WSIG observed that construction workers (including direct employees, contractors and sub-contractors) are particularly vulnerable to poor mental and physiological health due to poor job security; lack of access to nutrient-rich food options (for site and desk based workers, but particularly problematic at site level); unwelcoming welfare facilities; and fatigue due to irregular working hours, allocation to projects away from home, and tight completion deadlines. The startling statistics behind suicide in the construction sector should continue to prompt meaningful investment in addressing wellbeing holistically.

Environment

'Good design contributes to physical and mental health, to a sense of identity and wellbeing, to good social relationships, reduced crime, and higher productivity. Bad design...has the opposite effect.'

(Pearce, 2003).

The physical environment in which we work, live or visit can have direct and indirect impacts on wellbeing. Relevant factors include air quality, noise, light, thermal comfort, and access to and quality of natural environments. The role

of design in facilitating higher wellbeing is generally well understood though not necessarily applied consistently across the built environment sector. Bryan Lawson, drawing on his work in the healthcare industry, sets out the evidence for designing our spaces to give people privacy, dignity and company; views out of buildings that are appropriate to the building use (i.e. calming or stimulating); give occupants contact with nature; provide comfort and the ability for building users to control this; create places that have spatial legibility; and design interiors that people actively want to spend time in (Lawson, 2013).

WSIG OBSERVATIONS

When discussing the practicality of interventions such as living walls or green roofs the group pointed to lack of client mandate, limited involvement in the design process and the cost implications of maintaining these in the building management stage. Importantly, these are not the only way of introducing nature into our built environment and optimal interventions can be proportionate and thoughtful. Labour and cost intensive green walls can be substituted for low level planting of shrubs and hedges, alone or in combination with appropriate trees which clean the air, support biodiversity and provide co-benefits of improved amenity and environmental quality, both of which are critical for human and planetary health.

The group noted that site-based construction workers tend to work long hours on site with poor air quality and without access to natural spaces, with rest and recreation undertaken in artificially lit, often uncomfortable indoor site accommodation. For offices and residential buildings, provision is increasingly made for biophilic elements and monitoring of internal air quality. There is evidence of increased prioritisation of access to outdoor areas but this needs greater emphasis to make contact with nature desirable, practical and accessible for people; as well as ecologically meaningful by supporting endemic species.

Security

Security refers to the extent to which people feel resilient and able to recover from disruption. It includes personal resilience, financial and job security; and professional welfare. Financial concerns are a significant contributor to chronic stress; concerns about money can promote or exacerbate poor mental health, and poor mental health can prevent us from managing money responsibly and make us more vulnerable to negative spending behaviours. According to the Money Advice and Pension Service (UK), money worries are the biggest cause of stress for UK employees. In the workplace, financial concerns can manifest in lower productivity, higher absenteeism, and low feelings of value and purpose. The personal and professional welfare risks associated with the built environment sector relate to workplace culture, equality and diversity, fair remuneration, and human rights. The relevance of the fairness, inclusion and respect agenda will be covered under 'Relationships'.

WSIG OBSERVATIONS

Workers in the built environment sector are particularly vulnerable to market volatility, with the construction sector often the first into and last out of a recession. The implications of poor job security are particularly grievous for smaller contractors and sub-contractors, many of whom are self-employed and lack access to the benefits of Employee Assistance Programs, human resources and whistleblowing functions. Maintaining a high sense of wellbeing can be difficult when moving from one contract to another, as well as having limited visibility of long-term work. This extends to basic financial literacy including understanding pensions and personal budgeting. Security also includes the fairness, inclusion and respect agenda, and this was deemed particularly relevant to those working on sites, as inclusive workplace cultures do not necessarily carry through from one site to another, or from one supplier to another.

Relationships

Loneliness and social isolation have been the subject of increasing attention in recent years. It is now commonly recognised that poor social connectivity can have a direct and indirect bearing on physical and mental health. Positive social relationships, including with friends, family and colleagues, can act as a buffer against the effects of psychosocial stresses such as workplace stress, which can compromise health (Pfeffer, 2018). In the absence of these relationships, personal and professional resilience becomes harder to maintain; feelings of self-value and happiness decline, as does productivity. The built environment can support or erode social structures not only through bricks-and-mortar design but also by offering working environments that enable workers to build and sustain positive relationships. This should include relationships with managers, colleagues and customers encountered day-to-day and should also recognise that nurturing personal relationships with friends and family often depends on job security, routine and working hours.

WSIG OBSERVATIONS

The WSIG concluded that the promotion of positive relationships is more readily observed in office-based employees, although anecdotal evidence demonstrated the value of supportive working relationships at site and project level. The group discussed at length the absence of terms such as 'happiness' and 'empathy' in wellbeing activity and there was a shared sentiment that these principles need to be given far greater recognition, particularly in the construction sector. The group felt that greater emphasis is placed on the experience of downstream stakeholders, such as through smart building technology and post occupancy, than on those stakeholders who build the built environment.

Purpose

Purpose refers to feelings of autonomy, fulfilment and the capacity to work towards a stated goal. Having a sense of purpose to life can promote self-motivation, cognitive stimulation and emotional resilience. In the employment context, one of the principal means of increasing wellbeing is through job control - the level of discretion that employees have to choose what they do and how they do it (Pfeffer, 2018). It has been observed that the more discretion employees have within their role, the higher their sense of wellbeing. Conversely, lower levels of job control have been linked to chronic stress and poor mental health. While employment is a critical foundation for many, it is not the only way in which people measure self-actualisation. Purpose is also found through participation in family and civic life, social connectivity, learning and creativity; all of which can be promoted or inhibited by our homes, neighbourhood infrastructure and the wider built environment. Having a sense of purpose for our lives is associated with 'greater longevity, more years of healthy life, higher income and net worth, less use of health services, better engagement with preventative healthcare and better mental health' (Department of Health, 2011). This network of benefits will pay dividends to society and businesses in productivity terms.

WSIG OBSERVATIONS

The WSIG agreed that although the workplaces can foster a shared sense of community, this does not necessarily translate through to the supply chain, and there is often a discrepancy in how this is addressed with office- versus site-based workers. Employee engagement was generally reported as easier for those working in corporate headquarters, often due to proximity to centralised structures, visible checks and balances and greater resource. On-site, there is significant disparity in the quality of welfare facilities, which is observable at a company, project, and site level. The group reflected on the potential for considerable variability in the approach of site managers to wellbeing. While there are regulatory requirements for the provision of welfare facilities, these may not go far enough to ensure that the workers using them feel valued. Anecdotal evidence suggests that where there is less oversight by principle contractors, for example, welfare facilities may fall short in their provision for secure storage, warm and sheltered accommodation and recreational spaces that support healthy behaviours and positive social interaction.

Until these basic welfare needs are met as standard, there will be a gap in progressing wellbeing across the supply chain. To address this, we need to look beyond the minimum welfare requirements. As a first step, the WSIG recommends that value-add wellbeing activity at client or principle contractor level is extended to project level. Contractors and sub-contractors should be included in engagement and wellbeing surveys so that this data can be baselined and clients and principle contractors build awareness of the wellbeing hotspots at project level. For those companies committed to generating social value, the WSIG recommends that plans to monitor, measure and monetise social value also take account of the wellbeing of site workers.

Wellbeing in action: Good practice

Key activities

Developing and implementing a wellbeing strategy

01 Understand key drivers of wellbeing and their application to the business

02 Establish internal policy on wellbeing

03 Identify the stakeholder groups whose wellbeing may be materially impacted by business activities e.g. site or office-based workers, downstream users, building fabric manufacturers.

04 Establish a data baseline e.g. through engagement or wellbeing surveys, employee assistance programme data

05 Work with stakeholders to heatmap and prioritise wellbeing stressors and motivators

06 Agree a set of wellbeing outcomes and identify interventions to support progress against these outcomes

07 Develop an action plan and assign responsibility for actions centrally and/or at project or site level

08 Agree method for monitoring and measuring progress

09 Measure outcomes through both objective and subjective data

10 Evaluate efficacy of interventions and review with stakeholders

12 Apply flexibility and proportionality to respond to variable needs across projects

13 Share wellbeing lessons learned, collaborate with peers within and beyond the built environment sector

Developing maturity on wellbeing

The sample wellbeing maturity pyramid set out below is taken from the People Matter Charter. Organisational maturity on wellbeing is highly variable across the built environment. It can be concluded from the work of the WSIG, however, that the sector is currently operating at the lower levels of the matrix. There are considerable opportunities for the sector to improve and streamline its approach to wellbeing.

Wellbeing: Organisational maturity

Level 1   Organisation has a wellbeing policy. Wellbeing is generally considered to be the responsibility of one function with little joined up action throughout the organisation. No engagement with the supply chain. Employee assistance programme offered to direct employees. Limited data collection.

Level 2   As Level 1 - Wellbeing has clear ownership in the organisation. Low level investments are being made to address personal wellbeing (e.g. ergonomics, nutrition, hydration, physical activity, rest and sleep, financial literacy) in addition to occupational health. Awareness raising within the organisation and supply chain is taking place (e.g. awareness of good behaviours e.g. diet, drugs, alcohol, physical activity, sleep). Activity is primarily campaign-led. Data on wellbeing inputs is collected.

Level 3   As Level 2 - Action on wellbeing is visible across multiple departments (e.g. HR + sustainability teams) and organisational levels (e.g. sponsor at management level + employee ambassadors or similar at operations/projects level). A wellbeing strategy is in place and reviewed on a regular basis. The supply chain is engaged (e.g. the organisation ensures supply chain is included in wellbeing initiatives and benchmarking activities). Organisation shares wellbeing resources with supply chain (e.g. education, training sessions and workshops, access to employee assistance programme). A baseline for wellbeing has been established (e.g. with reference to evaluative tools) and a regular process of assessing wellbeing at a corporate and project level is underway. Objective and subjective data is collected.

Level 4   As Level 3 - Wellbeing is actively sponsored by the Board and support for wellbeing is evidenced within the organisation (e.g. reflected through surveys). Reporting on wellbeing is underway (e.g. contained within annual reports and accounts, sustainability report, internal reports). Reputable tools to support measurement of wellbeing are being utilised with the results feeding into the corporate strategy. Decisions about suppliers are made with reference to supplier commitment to wellbeing. Interventions on wellbeing address the key drivers of health, environment, security, relationships and purpose. Learnings are shared with the supply chain. Organisational understanding and response to differing wellbeing needs between stakeholder groups, projects or sites e.g. depending on management, local conditions such as climate, season of work, project timescales, proximity to nature). Objective and subjective wellbeing data is collected across a range of stakeholder groups including employees, contractors and building occupants.

Level 5   As Level 4 - Organisation demonstrates mature approach to wellbeing with a culture of trust, empowerment and autonomy within the organisation. Activities are based on embedding sustained behaviour change and the strategy is long-term. The link between wellbeing and sustainable development is well understood. The supply chain subscribes or aspires to the same principles e.g. via a charter. The organisation demonstrates innovation e.g. by trialling or scaling up alternative job models such as flexible working, job-share, shorter shift patters; implementing solutions that deliver co-benefits e.g. higher wellbeing promoted through access to nature, which also supports biodiversity net gain and climate mitigation; or investing in value-add improvements to amenities available to employees, the supply chain and/or the wider community. Improvement in wellbeing amongst stakeholders is demonstrated. Data collection is robust and measured against internal benchmarks.

Training

The employment context is an optimal forum to provide education and training on wellbeing. The wellbeing framework adopted by the WSIG shows considerable synergies between the various drivers. As a result, training on wellbeing is complementary to many existing and popular areas of organisational training, such as equality, diversity and inclusion, leadership and workplace culture, and so on. While wellbeing principles have broad applicability, the emphasis on training should be flexed depending on the context. As the WSIG found, there is considerable variability between sites, projects, offices and companies.

As valuable as mental health training is, the WSIG discussed that this training is often not supported by a holistic understanding of the causes of poor wellbeing. Training is often viewed as an easy solution to addressing organisational

challenges, but it can only be affective if the outputs from the training are translated into practice. It was noted that while the quality of training can be high, such as through the Mental Health First Aid programme, the outcomes are not necessarily captured in the mid- to long-term. Employees and representatives left to deploy the lessons may not be given appropriate support on an ongoing basis.

The WSIG agreed that training provided at client or principle contractor level should also be made available to suppliers. This could be done so virtually, such as through the Supply Chain Sustainability School portal, or in person. It should be borne in mind that resource may be required to enable workers to implement the lessons from this training. This may include providing a hospitable, private space on, or proximate to, sites for contemplation time or mediation practice; or it may mean making alterations to catering provision, such as developing incentives for adoption of healthy meal choices during the working day.

Data collection

> 'We've got to get away from happiness being thought to be a fluffy concept, or slightly frivolous, or a curiosity, to taking it seriously. This is what people want for their lives. Let us measure it.'
>
> *Lord Richard Layard, 2019*

Robust data collection is critical to a meaningful and targeted wellbeing strategy. The WSIG observed that wellbeing data is currently given variable priority in built environment organisations and the impact of wellbeing interventions is often not tracked. Organisations with a more mature wellbeing strategy recognise the value of establishing a data baseline and regularly tracking the impact of their interventions on this baseline. Tracking progress enables organisations to evidence the link between wellbeing and business outcomes such as productivity, presenteeism and retention, and to develop targeted key performance indicators at organisation or project level.

Where data is being collected the emphasis tends to be on objective data, such as building performance, rather than subjective data, such as work relationships or social context. This is perhaps because objective data points can be measured more passively, such as through wearable technology or air quality monitors. Subjective data depends on a certain level of active engagement, reflection and qualitative analysis. Ultimately, both objective and subjective data are needed to inform targeted action to improve wellbeing. The most common way of collecting subjective data is through employee engagement or wellbeing surveys. These can also be extended to the supply chain.

Indicative list of wellbeing data points

Measuring wellbeing

Absenteeism
Presenteeism

Measuring wellbeing

Staff retention

Health costs

Healthcare requirements

Participation in civic life e.g. through volunteering or community service organisations

Job design

Working hours

Satisfaction

Sense of purpose

Sentiment analysis

Thermal comfort

Privacy

Biometric data

Employee Assistance Programme usage

Building performance e.g. space utilisation, air quality, temperature control

Lifestyle and behavioural habits e.g. exercise and physical activity, nutrition, sleep, alcohol, gambling

Post occupant satisfaction

Community satisfaction

Use of neighbourhood amenities

Work relationships

Exposure to and causes of stress

Understanding of job role

Intention to leave the business

Good days at work

Access to resources

Workload

Sense of place

Communications

Communication is essential to building support and recognition of a wellbeing strategy. Organisational communication on wellbeing can be leveraged to increase awareness and engagement across all levels of the organisation, signpost to learning opportunities and wellbeing activities, and pave the way for sustained cultural and behavioural change. Many WSIG participants use a 'Wellbeing Calendar' of events, which includes campaigns to raise awareness of various mental and physical health risks. It was observed that a regular programme of activity is preferable to standalone campaigns as this helps to keep wellbeing high on the internal agenda. It also provides wellbeing ambassadors with collateral,

which is used to encourage dialogue and action on wellbeing across the business. Crucially, communications are also a tool to share lessons learned and celebrate success. The WSIG agreed that the built environment sector should be more vocal about its ambitious endeavours, particularly as the opportunities for knowledge exchange and collaboration are considerable.

Standards

Building and design standards offer tools to plan and structure wellbeing interventions, and support data measurement and reporting. The WSIG's discussions revealed that while some organisations are adopting these frameworks in isolation, others are borrowing from and adapting principles from a range of frameworks.

WELL Building Standard: a performance-based system for measuring and certifying features of buildings that impact human health and wellbeing, through air, water, nourishment, light, fitness, comfort and mind. It marries best practices in design and construction with evidence-based medical and scientific research – harnessing buildings and communities as a vehicle to support human wellbeing (BREEAM, 2018)

BREEAM: a sustainability rating scheme for the built environment which helps clients to measure and reduce the impacts of their buildings and create higher value, lower risk assets that are better for people and the environment. BRE and the International WELL Building Institute have collaborated to promote health and wellbeing in the design, construction and operation of buildings and fit-outs. BREEAM credits can be used to demonstrate compliance with WELL features, and *vice versa* (BREEAM, 2018)

Fitwel: a commercial building rating system that provides guidelines on designing, constructing and operating healthy buildings. Fitwel's seven health categories cover: community health, reduction in morbidity and absenteeism, social equity for vulnerable populations, feelings of well-being, access to healthy foods, occupant safety and physical activity (Fitwel, 2020).

RESET: a data quality standard designed for continuous monitoring sensors in the built environment. The RESET Standard aspires to elevate the role of continuous monitoring, increasing its use and credibility on a global scale (RESET, 2020).

Living Building Challenge: an international sustainable building certification program created by the International Living Future Institute. It can be applied to development at all scales, including buildings and infrastructure, landscapes, neighbourhoods, and communities.

Secured by Design: the official police security initiative that works to improve the security of buildings and their immediate surroundings to provide safe places to live, work, shop and visit.

Collaboration and knowledge-sharing

Best practice on wellbeing is not yet mainstream in the built environment sector but examples of good practice are emerging at various points across the value chain. As an outcome of the WSIG, participants have begun sharing case studies that document their wellbeing interventions, signpost to relevant third sector-partnerships, and offer insight and reflection on outcomes, methods and lessons learned (Appendix I). We intend that this library of shared experience continues to grow and the invitation to submit these case studies remains open. The School library available at: https://www.supplychainschool.co.uk/ contains a growing repository of open source information and learning resources to assist organisations to adopt a systems-approach to addressing wellbeing.

Conclusion

The Partner perspectives brought to the WSIG revealed the extent to which wellbeing challenges are shared across the built environment industry. While there are positive examples of wellbeing interventions in many organisations, the focus tends to be on the immediate workplace rather than the supply chain or communities impacted by the built environment. Interventions can largely be characterised as reactive, input-driven and fragmented, although there is evidence that some organisations are shifting towards efforts that foster sustained behaviour change. Establishing priorities and outcomes that are informed by objective and subjective data will be essential to this shift. Certification standards are growing in their application to the pursuit of wellbeing outcomes, and these can assist in measuring progress provided they are applied dynamically rather than as a check-box exercise.

If organisations adopt a strategic understanding of wellbeing, they can unlock benefits that result from happy, healthy people, better business performance, reduced burden on public services and resilient communities. Ultimately, to scale-up action on health and wellbeing in the built environment industry, we need to widen our lens. The conversations need to move beyond just workers, or just building occupants to include the full value chain – from the planning and design stage through to the after- use of buildings and their materials.

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Credits

Appendices

BAM: Building Design

BAM have compared their current building offerings with the health and environment requirements of BREEAM health and wellbeing and WELL credits, to understand the potential additional offerings they could provide in the building design at little to no extra cost to the client or themselves. They aim to deliver 'WELL-ready' buildings that provide the foundations for clients to go further and achieve formal WELL certification.

BAM aim to incorporate healthy building principles into the design of its projects where possible and agreed, by integrating BREAAM and/or WELL health and environment requirements into building designs to deliver 'WELL-ready' buildings. This intervention focuses on addressing the health and environment elements of wellbeing, with the key stakeholder being BAM's clients - typically private developers or public bodies such as the Education Funding Authority.

As an internal exercise, BAM aim to look for synergy between the standard building design they already provide, including the BREAAM health and wellbeing (HW) credits usually attained, and the salient WELL Standard credits that are congruent with BREEAM HW issues. They aim to incorporate those requirements that can be relatively easily implemented at little cost or extra resource to BAM or the client. 'WELL-ready' buildings will ensure the basic WELL pre-condition credits have been, or are ready to be, implemented in the base-building design. This will allow the stakeholder to progress with WELL certification if desired, in the knowledge that they have a healthy building. The stakeholder will be able to add to the basic WELL requirements easily, or should they wish not to achieve formal WELL certification, they would feel comfortable in the knowledge that their building has many health and environmental features.

To establish the healthy building requirements that could potentially be achieved, a comparison was made between BAM's building construction standard offering, the BREEAM 2014 technical guidance and the WELL Standard v1.

BAM found several offerings that can be implemented for the client at little or no extra cost or resource. It was found that there are several WELL pre-condition scoring credits that have little synergy with BREEAM and rely instead on the management procedures and policies of the building occupiers, which falls outsidethe remit of the building contractor.

Further comparison will be made to establish additional offerings that could be achieved. The comparison will also be extended to include the new BREEAM Standard 2018 and WELL Standard v2.
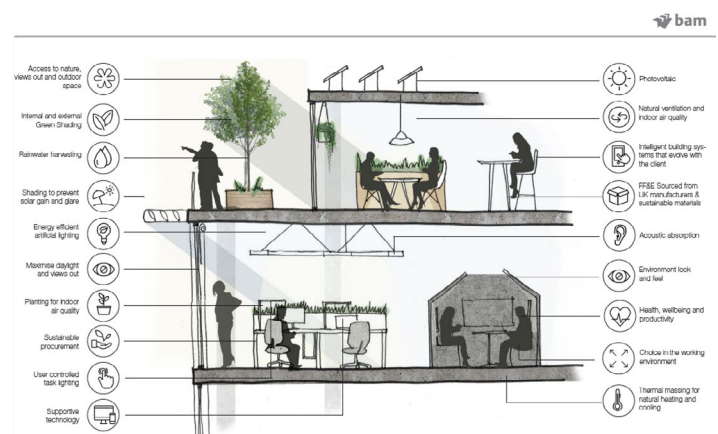

Figure: BAM's example building design inputs to achieve health and wellbeing benefits

Highways England:
Home Safe and Well Campaign

Highways England have built upon their 2015 Health and Safety Five Year Plan to develop the Home Safe and Well approach, launched in July 2019. The approach focuses on improving the health and purpose of colleagues, suppliers and customers. By achieving personal and emotional buy-in to the approach, Highways England has seen improvements in accident rates and the uptake of employee wellbeing provisions.

Highways England have built on their 2015 Health and Safety Five Year Plan and developed their Home Safe and Well approach, launched in July 2019. Their vision is that by 2040, no-one is harmed when travelling or working on the strategic road network (SRN). Highways England's initaitive focuses on improving the health and purpose of its colleagues, suppliers and customers.

The approach is underpinned by the idea that all should get home for the people they love, for the things that they love doing and that all are responsible for making the change happen. The strategy outlines how together, all will:

- Build a positive health, safety and wellbeing culture;
- Promote greater ownership;
- Embrace innovation;
- Place more importance on health and wellbeing.

To make the approach a success, Highways England achieved personal and emotional buy-in to their approach from colleagues. Before the launch, colleagues were asked to provide images of what home safe and well meant to them. The approach itself was launched internally through all colleague face-to-face team briefings, supported by video, and in company inductions for all new starters. The branding is visible throughout all aspects of the company. In addition, each directorate has their own Home Safe and Well plan, which are less prescriptive and more collaborative ways of working. All plans are owned by Highways England's Executive Team and overseen by their Board. This approach encourages all areas of the business, including supply chain partners and all individuals, to define and own their own commitment to getting everyone home safe and well.

The 2015 Health and Safety Five Year Plan had many successes, including reducing the frequency of customers being injured from 11.45 to 9.37 casualties per 100 million vehicle miles, as well as improving their safety culture maturity by one level form 'reactive' to 'calculative'. In addition, reportable accidents among their suppliers reduce by two thirds and more than halved the reportable accident rate of their traffic officers.

Since the launch of the Home Safe and Well approach, Highways England has seen their longest period without a RIDDOR since 2015 to be 365 days, 80% of which was achieved after the approach launched. The use of the Employee Assistance Programme (EAP) has increased, with more than one in four colleagues using the programme from early intervention to crisis support. This is the result of the continuous promotion of the service online, along with a network of 200 Mental Health First Aiders. Finally, Highways England's focus on destigmatising mental health has seen a 13% increase in colleagues reporting mental health issues.

As a result of the Home Safe and Well launch, the occupational health and wellbeing team and budget has been moved from their Directorate of HR and Organisational Change into the health and safety team. This has created a centralised 'health, safety and wellbeing' team to create a centre of expertise in their Directorate of Safety Engineering and Standards.

Highways England has now set a goal to have achieved excellence in the Workplace Wellbeing Charter by January 2023.

SUPPLY CHAIN SUSTAINABILITY
SCHOOL

Willmott Dixon: Designing for Health, Wellbeing and Productivity

Willmott Dixon provide a process approach for any business that wishes to make workplace improvments by designing for health, wellbeing and productivity. The four-stage approach details the steps that should be taken by employers throughout the design, by first identifying what needs to change, then developing the proposals and approval, implementing the design and finally measuring the success of the outcomes.

Figure: A process approach

1	**Plan:** What needs to change
2	**Develop:** Proposals and Approval
3	**Deliver:** Implementing your design
4	**Outcomes:** Measure and Success

Wilmott Dixon provide a basic introduction to a process approach for designing for health, wellbeing and productivity, for any business that wishes to make workplace improvements. This is important as employers are increasingly recognising that the workplace environment can affect the mental and physical health of their employees, with knock-on business impacts such as decreased staff productivity and engagement.

Health, wellbeing and productivity proposals are typically integrated into the scope of much broader office improvement plans, such as refurbishments. They are however quick, easy and cost effective to undertake individually, without the need for significant re-design or investment. The approach will depend on the need for change, which differs with every project. This process can be used with any approach to help understand guide the decision-making process.

The approach is split into four stages: Plan; Develop; Deliver and Outcomes.

Stage 1 – Plan: What needs to change

This requires employers to determine what needs to change. They should first understand the specific needs of the business and its employees, typically achieved through company surveys, informal consultations, questionnaires and data on employee absenteeism.

Part 1: Understanding your business
Employers need to understand their baseline, start to identify areas for improvement and get to know the working environment in detail – what works and what does not. This should also include an understanding of what good could look like:

- Information on how the office operates: including data from the building management system (BMS), and the existing condition of installed assets such as plant and office equipment / furniture – are they fit for purpose etc.
- Human resources data: including absenteeism data, employee surveys, informal consultations and questionnaires – look for trends and underlying causes.
- Know what good looks like: A simple internet search will reveal countless examples of health and wellbeing executed successfully in the office.

Part 2: Understanding the needs of your employees

Employers need to understand that the needs of employees are not simply about drawing up a wish-list of perks and benefits. Instead, focus should be directed on understanding what prevents them from doing their job effectively, or what might help to improve other important business functions, such as meetings or teamwork. Solving these issues can go a long way to improving employee wellbeing by removing frustrations, as well as providing business benefits too.

Listening to employees will help to diagnose specific issues, as well plan the most effective improvements. Suggested themes to seek feedback on include:

1. **What works:** understand what employees value – e.g. quiet spaces for concentration, social spaces, the 'look and feel' of the office, team collaboration, or decent coffee.

2. **What does not work:** understand what frustrates employees – e.g. availability of meeting rooms, noise in the office, thermal comfort, or the broken dishwasher.

3. **What prevents employees from doing their job effectively:** e.g. a lack of flexible workspace, poorly equipped stationary, desks are too small, limited storage etc.

4. **What will help employees to perform at their best:** e.g. decent IT equipment and internet, increasing flexible workspaces, increasing desk sizes etc.

5. **What will improve employee's health and wellbeing:** e.g. fresh fruit, thermal comfort, acoustics, natural features (aesthetics), social time, natural light etc.

Keep an accurate record of feedback and observations. Start to understand the critical issues and begin to list the possible improvement opportunities. Make sure expectations are managed at the same time – it is not possible to please everyone or solve every problem.

Stage 2 – Develop: Proposals and Approval

This stage requires employers to develop their proposal and seek business approval. Developing the design or suite of options is a critical exercise and should not be rushed, as late changes to the design can be costly and disruptive once improvement works have begun.

This involves:

- Setting out a vision and objectives: Use research from Stage 1 to develop the key priorities the design or options need to address.

- Management buy-in: If there is the time and budget, produce concept plans and proposed layouts. Alternatively, present images and case studies from the research. Be prepared to change plans upon receiving feedback.

- Develop a budget, resource requirements and identify responsibilities and expectations: Identify who needs to be consulted or kept informed

- Document the agreed proposals in the form of a project brief: ensure each design option under the agreed scope is documented and is easy to interpret

- Determine the key metrics: Understand how success will be measured and demonstrated: Consider post-occupancy evaluations and feedback once completed

Stage 3 – Deliver: Implementing the design

To implement the design delivery stage, this element of the project should be delivered like any other traditional construction or fitout project. Delivery is ultimately about ensuring the original design intention remains intact, from start to finish, avoiding too many variations or changes to the original plan.

Stage 4 – Outcomes: Measure and Success

Improvements to health, wellbeing and productivity are complicated to assess, and remain an ever-evolving science. However, there are some established methods that can be used to help gage success, such as close-out reviews, post occupancy evaluations, or the re-evaluation of data from HR departments (such as sickness and absenteeism).

Measuring health, wellbeing and productivity may simply be about understanding people's happiness, however this is often an emotional response, such as a subjective opinion. Continue to seek feedback from employees, similar to Stage 1, and if feasible, be prepared to make minor modifications to help improve the outcome.

Finally, consider communicating the process outcomes and rationale. Remind people of why the changes were made, what benefits they intend to provide, and thank people for their input and contributions.

A healthy and productive working environment can help to attract new talent, maintain staff happiness as well as support improved teamwork and collaboration.

Further reading:

Health, wellbeing & Productivity in Offices – World Green Building Council

Building Better Partnerships – responsible fit out toolkit offices

Workplace Archives – Work in Mind

Healthy workplaces: improving employee mental and physical health and wellbeing

WSP Healthy Building Toolkit

Wellbeing in Interiors – Philosophy Design and Value in Practice

Willmott Dixon: Fit Out

Through the four-stage process approach for designing for health, wellbeing and productivity, Willmott Dixon Interiors successfully completed the refurbishment of their London headquarters in March 2020. Five floors of office space were renovated and since the fit-out, employees are more aware of how a healthy and flexible working environment impacts their wellbeing and productivity, and take more pride in their work.

————————

Willmott Dixon Interiors completed the refurbishment of its London headquarters in March 2020, by following the four-stage process approach for designing for health, wellbeing and productivity. The objective of the project was to improve the health, happiness and productivity of its employees and to support the company's culture of completing everything with pride. This initiative covers a combination of wellbeing aspects, including health, environment, purpose and security.

The project was undertaken in order to increase staff satisfaction and happiness, whilst enhancing the image of the company to external parties, including prospective employees, customers and supply chain partners. Five floors of office space and a ground floor meeting room suite were redesigned and refitted over a period of 12 months. Where practicable, the changes were made to solve the everyday frustrations and inefficiencies expressed by employees.

Surveys and team consultations with employees were undertaken and based on the feedback, the themes for improvement were determined to be: increasing productivity and efficiency; improving health and wellbeing; reducing frustration at work and improving collaboration and teamwork. Next, focus areas were established and finally interventions were established. For example, for the theme 'increasing productivity and efficiency' it was established that natural lighting can play a crucial role in workplace wellbeing. Therefore, circadian lighting was the appropriate intervention within this project.

In addition, collaborative team working spaces were introduced in all office areas to help boost collaboration, as well as alleviating the burden on the meeting booking room system. Solitary and quiet spaces were provided to allow employees to work flexibly around the office and avoid noisy periods. The look and feel of the office was improved by introducing new colour schemes, textures and artwork. Biophilic enhancements were introduced, such as natural colours, textures and plants to help employees connect with nature and boost motivation. Lighting designs were improved by utilising circadian rhythms and natural colour temperatures, mimicking the changes in ultraviolet light received from the sun. The capital plant was upgraded to improve thermal comfort (heating and cooling) and the amount of social space was increased in the office by extending the canteen area and introducing soft furniture and kitchenettes on each floor. Stand-up desks and flexible seating arrangements were provided in team spaces, to offer better office mobility. In addition, air quality was improved by moving printers away from desks and high-occupancy areas and the fresh air intake was increased to each floor. Finally, all AV equipment was enhanced by the introduction of wireless presentation connectivity and video-conferencing equipment in all meeting rooms.

As a result of this project, Wilmott Dixon have noticed a shift in employee attitudes and behaviours. They are more aware of how a healthy and flexible working environment impacts their wellbeing and productivity. They take more care and pride in the

work they do and treat the office with more respect. Wilmott Dixon learnt the importance of listening to feedback from colleagues, as they understand the working environment better than anyone. They successfully used feedback to help diagnose specific improvements, whilst managing expectations. Also, by spending a good amount of time working on the design and continually seeking feedback on proposals, they were able to involve people in the decision-making process effectively. They ensured their decisions were firmly rooted in their cultural ambitions by taking note of how their employees work effectively and focused on items that provided the greatest impact – not falling for the latest health and wellbeing fads and gimmicks. Furthermore, Wilmott Dixon set up a Task Team to help maintain interest and research on the latest trends, acknowledging that improving the health, wellbeing and productivity of their employees is not a one-off investment decision.

Some of Wilmott Dixon's employees needed to be encouraged to adopt new ways of working. Providing physical infrastructure such as flexible workspaces, quiet zones and social spaces helped their employees to form new habits and adjust. By establishing a proactive communications approach, where they took the time to explain the benefits, gave employees the confidence to embrace the changes.

Grosvenor's Wellbeing Innovations at London HQ

Grosvenor trialled new technologies at its headquarters in London, focusing on improving the health and environment of its employees. Indoor air quality improved through the introduction of a large living wall and pollution-neutralising paint and the introduction of a consolidation scheme for deliveries will have improved outdoor air quality. Employee satisfaction improved and as a result, the new technologies are now being rolled out across Grosvenor's wider estate.

Grosvenor Britain & Ireland focused on improving the health and environment of its employees by introducing a range of new technologies and initiatives at its London head office, testing their potential for rollout across its wider estate. Situated in Mayfair, 70 Grosvenor Street is Grosvenor's largest global office, with 4,650m² of prime office space over six floors and a basement and is home to around 450 employees. Grosvenor's Living Cities approach has guided and inspired its property activities for over a decade; it aims to improve and manage places in a way that is commercially successful and is of benefit to society.

The initiative aimed to improve air quality, both indoors and outdoors, and to reduce the number of vehicle deliveries to headquarters, reducing congestion and pollution. A variety of new technologies were introduced, including a range of living walls, pollution-neutralising paint and a delivery consolidation programme. In addition, other technologies were tested including smart lighting and a maternity room.

Air quality
A 36m² living wall was installed that reached from the ground floor restaurant up through the main reception, with natural daylight through the ceiling. An additional 80m² of living wall was also applied to structural columns throughout the building, creating a total of 116m² of greened surface in the property. Plant species include Spider Plants, Peace Lilies and Chinese Evergreens. The impact of the living wall on

air quality in the reception is monitored by a Foobot sensor, which tracks particulate matter, temperature, chemical pollutants and humidity. Additionally, Airlite paint was used in the refurbishment of meeting rooms. This is a VOC-free paint that neutralises pollutants such as NOx up to 88.8%, eliminating bacteria up to 99.9% and inhibiting mould and preventing odours. The paint also attracts water molecules in the air to create an invisible, protective film that blocks dust and dirt from attaching.

Delivery Consolidation
Research showed that there were more than 20 deliveries arriving at the office each day to meet the personal and e-commerce needs of the 450 employees. As such, Grosvenor partnered with Anglo Office Group and Gnewt Cargo to establish a scheme where all personal and business deliveries are consolidated at centralised facilities in south London and then brough into the West End in a single daily delivery, using an electric vehicle. The scheme was piloted for three months before full adoption. Grosvenor and its partners are now engaging with local partners and occupiers to roll the system out across Grosvenor's wider estate.

Since the trial of the new technologies, Grosvenor has seen improved colleague satisfaction, a reduced employee absence and greater employee retention. The office environment is registered in employee pulse surveys and feedback indicates that most enjoy the benefits of a biophilic approach to the workplace. Air quality in the office has significantly improved,

as measured by the Foobot sensor, and successful trial of Airlite paint has resulted in its rollout on interiors across the estate. As a direct result, projects across the estate that use Airlite have registered a 50%+ reduction in levels of NOx. The successful use of the delivery consolidation has reduced the number of deliveries arriving at the office each day by approximately 95% and has saved 1200 journey and 3600 diesel van miles over the three-month pilot period. After the full adoption, an 18-month period saw more than 7000 parcels delivered to the building through the consolidation scheme, but via only one electric delivery per day.

Figure: Grosvenor's use of plants within their London office has seen indoor air quality improvements

Telford Homes: Building a Living Legacy

Through their Building a Living Legacy strategy, Telford Homes in a joint venture with Notting Hill Genesis, completed a high-quality project at New Garden Quarter that focused on creating a new community in a safe, secure and natural environment. Set amongst the urban and built environment of Stratford, commercial and residential space was delivered alongside a central park environment, with a pond and surrounding biodiverse habitat.

In 2019, Telford Homes completed a high-quality project at New Garden Quarter (NGQ), Stratford, delivering 10,000 sq. ft. of commercial space and a mansion block of 471 new homes, clustered around a new 2-acre park. Telford Homes focused on providing a combination of health, environment, purpose and security improvements to their clients, by delivering good urban planning and high-quality green infrastructure to help counter the often negative health implications of city living. Telford Homes have a Building a Living Legacy strategy and a commitment to home building and placemaking.

Telford Homes, in a joint venture with Notting Hill Genesis, acquired NGQ, a brownfield site, from London and Continental Railways (LCR). The site is bounded on two sides by train lines, HS1 to the south and Network Rail to the west and is within walking distance of Stratford town centre and International station. The task with PTE Architects was to create a new community in a safe, secure and natural environment in an urban location with significant local infrastructure.

Commercial and residential space was delivered, with 46% of the new homes for families across a mix of tenures; including affordable homes for Notting Hill Genesis, Build to Rent dwellings for the Institutional Investor Folio London and open-market homes that are being sold by Telford Homes. The park is set within a central square, providing opportunities for visitors, residents and neighbours to get to know one another and to build a new community. The park consists of a high-quality landscape including green and blue infrastructure, with a substantial pond and surrounding biodiverse habitat. A range of play activities for all ages, complement the calm spaces designed for peaceful repose.

Telford Homes forecast a social return on investment of £1m gross value-added output per year to be generated by commercial Full Time Equivalent (FTE) jobs and £6m annual household expenditure post completion supporting 35 FTE jobs. Since the project completion, 98% of NGQ purchasers would recommend Telford Homes to a friend, established by customer surveys undertaken by In-House Research.

Figure: Telford Homes completed New Garden Quarter in Stratford in 2019, developing a new community in a safe, secure and natural environment

NG Bailey: E-learning

NG Bailey have developed an e-learning module for its employees that addresses empowerment and ownership of wellbeing. The e-learning answers a variety of wellbeing questions, from 'what is wellbeing?' to 'How can I support someone else's wellbeing?' and is mandated across certain divisions. It signposts the learner to additional resources and information and helps employees to better manage their own wellbeing needs.

NG Bailey developed a comprehensive in-house e-learning module to help their employees manage their own wellbeing, as well as supporting others. The aim of the e-learning is for employees to have a sense of purpose and to empower them to understand and manage their own wellbeing needs better. Whilst this e-learning module is aimed only at internal employees currently, the concept could be cascaded down the supply chain, should more generic and less organisation-specific signposting be utilised.

A desired outcome of the initiative was to enable employees to engage more readily with other wellbeing work streams across the group, for example by promoting national health campaigns led by the business in office and on sites.

The objectives of the e-learning are for employees to understand:

- What wellbeing is and the importance of maintaining wellbeing;
- What factors can impact our wellbeing;
- How we can manage and improve our own wellbeing;
- How we can support others' wellbeing;
- What resources and information are available.

A variety of stakeholders were engaged in the development of the e-learning module, including: HR, internal occupational health specialists, pensions and rewards reams, Responsibility/Sustainability team, Learning and Development teams, and known mental health and wellbeing advocates in the business. As a result, the e-learning answers a variety of questions, including: 'What is wellbeing?', 'How can I improve mental wellbeing', 'How can I improve my physical wellbeing?', and 'How can I support someone else's wellbeing?'.

Since the launch of the e-learning module, NG Bailey have found engagement with the module has been slow. To overcome this, they will share and promote the module again via their intranet and manager messaging. In addition, they will roll out the module as mandatory training in certain divisions. For those divisions where it is not mandatory training, they will continue to promote it to ensure employees are aware of its existence. Furthermore, NG Bailey will continue to promote the module at all national health and wellbeing events within the business and will highlight the importance of the module in creating an organisational wellbeing culture within the launch of upcoming wellbeing surveys. NG Bailey may potentially work with the Supply Chain Sustainability School to create further resources: a generic wellbeing module that would be hosted by the School.
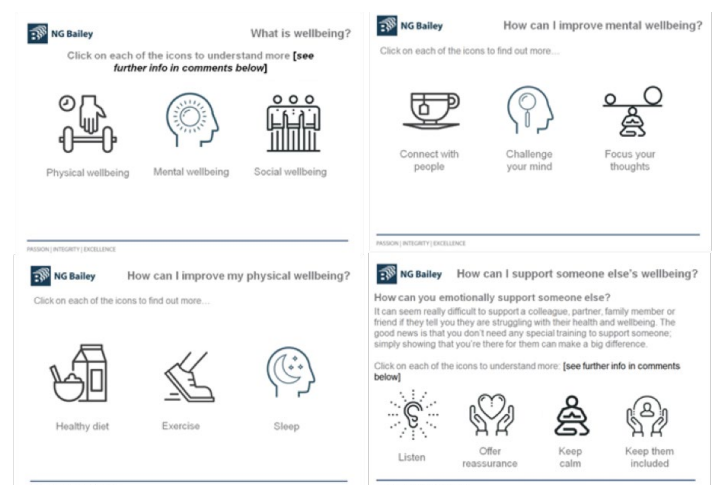

Figure: NG Bailey's e-learning module addresses empowerment and ownership of own wellbeing

NG Bailey: Wellbeing on site workshop

NG Bailey developed and delivered a 45-minute health and purpose wellbeing workshop for site operatives in the North of England, with a focus on 'Being in Your Colleague's Corner'. The workshop identified resources and conversation tools for use onsite and a worked example exercise to help site operatives to think about the support they need. By interacting directly with the site operatives, it is more likely that they will be receptive to future initiatives.

NG Bailey delivered a pilot workshop for almost 200 site operatives in North England as part of their annual 'Safety Stand Down Day' with a focus on 'Being in Your Colleague's Corner'. The focus of this initiative was to improve site operative wellbeing by delivering health and purpose training. Whilst this workshop was aimed only at internal site operatives, the concept could be rolled out to other employees and down the supply chain, should more generic and less organisation-specific signposting be utilised.

The workshop aim was to engage with site operatives by raising awareness of current wellbeing support and resources available, developing listening and communication skills as well as raising awareness on how to support colleagues. In addition, one of the requirements of the workshop was for site operatives to help identify new ways to support one another.

The 45-minute workshop involved interactive activities and conversation tools, for developing observational and listening skills to help employees understand when a colleague may need support. The concept of wellbeing was linked with safety on site using the Supply Chain Sustainability School's FIR Wellbeing Toolbox Talk video. Finally, a worked example exercise enabled employees to think about the support they might need in roles such as lone or shift operatives. This ensures NG Bailey could collate further ideas for wellbeing workstreams that were provided directly by the site operatives, increasing the likelihood that they would be more receptive to the workstreams once implemented. A variety of stakeholders were engaged in the development of the workshop, including: HR, internal occupational health specialists, pensions and rewards reams, Responsibility/Sustainability team, Learning and

Development teams, and known mental health and wellbeing advocates in the business.

By engaging directly with the site operatives, it helped to identify current gaps in support for site staff, allowing NG Bailey to better target training for managers and providing the appropriate support. Excellent feedback was reported from the wellbeing workshop. Site operatives engaged well with the activities and seemed to resonate well with the messaging and supportive culture NG Bailey are trying to develop.

When running this workshop again, NG Bailey are able to target the workshop even more directly towards a site operative audience, by adapting some activities to be even more specific to their role. In addition, there is a planned rollout of this wellbeing workshop to other key sites and site operatives across the country, to ensure the key staff are reached who may not engage with traditional email and intranet communications. Finally, the scheduled launch of the upcoming wellbeing surveys across all employees will be able to highlight how useful this workshop is in creating a wellbeing culture in the organisation.

Figure: A worked example exercise aimed at site operatives, used within NG Bailey's wellbeing workshop

SUPPLY CHAIN SUSTAINABILITY
SCHOOL

Skanska: Physical Health (Obesity)

Skanksa launched the successful 'Do Your Ends Meet?' campaign in 2019 to tackle the rise in obesity across their workforce, supply chain and joint venture partners. Pre-measured pieces of string were used to see if their 'ends met' around their waste and if they were in a healthy weight range. Engagement with charities, the use of toolbox talks and resource toolkits have made this a successful campaign that is continuing on into future years.

Skanska launched the 'Do Your Ends Meet?' campaign in 2019 to tackle the rise in obesity across their workforce in a fun, informative way that delivered the sensitive message that weighing too much will affect long-term health.

There is plenty of evidence to show that an increased waist measurement above the ideal (gender specific) is likely to increase the risk of heart disease, Musculo-skeletal disorders, cancers and diabetes. Therefore, this health campaign worked with the British Heart Foundation, Diabetes UK, Macmillan Cancer Support and the Stroke Association to deliver the message to all Skanska employees. However, all supply chain teams were also welcomed to join the activities and toolbox talks deployed.

The campaign was launched with pre-measured pieces of string for people to see if their 'ends met' around their waste to indicate if they were likely to be in a healthy weight range. This removed the need to weigh people and instead enabled them to think about their health in a different way, and with others. Along with pieces of string, a briefing toolbox talk and a toolkit of resources is provided on Skanska's occupational health and wellbeing pages. This campaign is also deployed by internal wellbeing networks to their respective divisions within the business.

The topic was appropriate for Skanska's aim to support a fit and well workforce. Through Diabetes UK's in-person assessments, many employees undertook the test and 39 people were identified as pre-diabetic, out of approximately 100 attendees. Macmillan Cancer Support's webinar on bowel cancer was received by 80+ employees, supply chain and joint venture partners.

There was a nervousness around raising the topic of weight as it is seen as a personal issue and the topic was received initially as conflicting with body image and mental health messages. Additionally, some key stakeholders did not initially understand the relationship between obesity and musculoskeletal health and how this campaign can contribute to less trips, falls and other related injuries. Skanska overcame this by utilising British Heart Foundation material to demonstrate the relevance of the campaign, and shared social media stories to show how other organisations delivered similar campaigns.

As a result of the successful campaign, Skanska have planned to deliver 6 focussed campaigns in 2020 to continue to build people's knowledge about healthy lifestyles and long-term health. They plan to ask people to share their stories as to how they reduced their waist measurement as a result of the 'Do Your Ends Meet?' campaign.

Figure: Skanska's 'Do Your Ends Meet?' campaign branding