Arup's Social Value & Equity Theory of Change

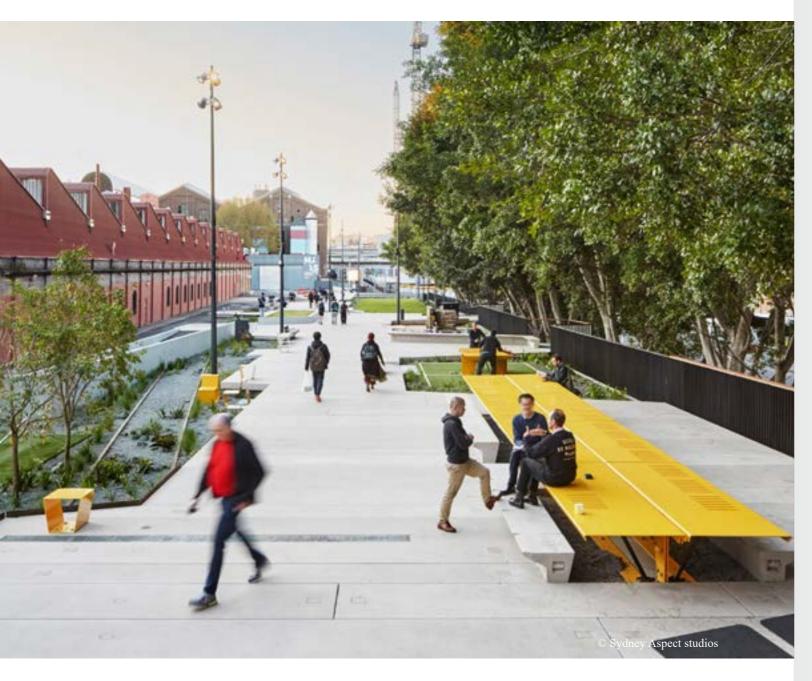
The built and natural environment as a force for social outcomes



Social value
& equity
interventions and
initiatives

Introduction

The built and natural environment as a force for social value & equity



Methods and tools for change

The design, construction, and operation of built and natural environment projects, as well as social initiatives and policies, shape the places, neighbourhoods, and cities that form the stage of people's everyday lives. As such, the built environment industry is central to driving social change across society.

Despite this, we seldom talk about the social outcomes we want to deliver or enhance through our work. This means we often miss significant opportunities to reap social benefits and redress the inequities between different community groups.

Practitioners, authorities, business leaders and investors across the industry increasingly acknowledge the role they have to play in creating more sustainable and inclusive environments. They are starting to take their responsibilities towards the local communities they work in far more seriously. Today, ESG (Environmental, Social and Governance) considerations are becoming a priority in the industry. Yet, questions around social value & equity have until recently taken a back seat to environmental concerns – which isn't surprising given the climate crisis. The focus has been on reducing the carbon footprint and environmental impact in our cities, but less attention has been placed on understanding and improving the social impact of the built environment industry on individuals and communities.

In light of this, Arup has examined the emergence of social value & equity as a concept that needs to be considered as the essential part of the built environment practice. We recognise that the meaning of social value & equity depends on historical, cultural, and social contexts, and therefore there cannot be a one-size-fits-all solution. The creation of social outcomes must be a dynamic and flexible process that adapts to the unique attributes of every place and community. This is why Arup's approach is expressed as a 'theory of change', a methodology that can be adapted to different type of projects and contexts.

This document presents our approach. It sets out how we can embed social value & equity into all our disciplines, and how we can use this approach in the way we work with clients, partners and communities to shape and deliver built and natural environment projects that create social outcomes. In sum, this theory of change can help ensure that, through our work, we become a positive force for social good.



Dr. Sara Candiracci
Associate Director | Cities, Planning and Design
Global Leader for Social Value & Equity

Social value & equity interventions and initiatives

Defining Social Value & Equity

Arup believes that social value & equity is the enduring, positive, and systemic change our projects can create for their end users and the wider communities where we work. Our aim focuses on outcomes: to improve people's quality of life and to shape a more inclusive, equitable and just environment and society.

Arup's definition of social value & equity was developed considering how the concepts of social value, social change, social equity, and social good have evolved through history, exploring different cultures' approaches and philosophies that relate to these concepts [1-9]. With a focus on the built environment industry, our definition is driven by Arup's aim to do socially useful work – a value that dates to the firm's founding over 75 years ago – and our commitment to the UN Sustainable Development Goals. It is embraced through our work with clients, partners, and communities.

More specifically, our definition has four dimensions:

EQUITY

Equity differs from equality. Whereas equality treats everybody in the same way regardless of their needs, equity treats people fairly and supportively by accounting for different histories, burdens, and abilities. Equitable environments actively bring people into a society where everyone can participate and thrive [10].

JUSTICE

Justice addresses historical harms and oppression. It recognises privilege and inherent biases in systems, and it seeks to redress them. Just environments ensure people who have historically been, and continue to be, disadvantaged are treated fairly — now and going forward [6].

INCLUSION

Inclusion means that everybody feels that they belong in a place. It begins with physical accessibility and the absence of barriers. It further involves actively supporting people's varied needs and creating opportunities for all. Inclusive environments also enhance quality of life [11-12].

QUALITY OF LIFE

Quality of life is a highly subjective concept that refers to the state of health, comfort, and happiness experienced by an individual or group. It is rooted in local values and needs. These in turn are shaped by social, cultural, economic, and historic factors as well as personal experiences and the conditions of an individual's environments [3, 8-9, 13-14].

INEQUALITY

Methods and tools

for change



EQUALITY



EQUITY & INCLUSION



JUSTICE & QUALITY OF LIFE



© Arup

Social value & equity interventions and initiatives

Our impact at local level

Understanding differences across geographies

Arup, as a global company, is powered by committed, dedicated, and values-driven individuals. The strength of our organization lies in the interconnectedness among our members worldwide, allowing us to infuse each project with distinctive international expertise. Yet, when tackling social value and equity, the concept of globalization faces challenges, as its interpretation and application depend on historical, cultural, and social contexts. In some cases, these challenges are further compounded by the enduring legacy of colonization experienced by many of the countries we operate in.

While there are regional variations in terms and practices, this document highlights shared perspectives on social value and equity worldwide. Arup has developed the ability to understand the global significance of this topic while navigating the complexities

rooted in the histories of the countries where we work. This understanding is crucial for delivering projects that can bring the welcome social good to our communities.

In North and South America, Arup is dedicated to navigating the diverse cultural, historical, and socio-economic contexts prevalent in these regions. Our teams are deploying distinct approaches to equity projects. These approaches prioritise empowering the communities we serve and establishing trust with local collaborators. The projects in these regions are deeply rooted in an understanding of local history and trauma, acknowledging how these issues persist in today's systemic challenges within our physical environment. Indigenous sovereignty is also an area of focus in North and South America where there are significant jurisdictional and community variations both locally and throughout the region. What equity and justice represents in built environment processes and outcomes is going to be unique to those groups and their relationship with their past and present.

In Europe and the United Kingdom, Arup understands the intricate cultural and historical nuances that shape the social landscape of each country. Our commitment to social value involves Methods and tools for change



tailoring projects to align with local needs, fostering inclusive practices, and respecting the diverse social structures present across the continent. Collaborating with local stakeholders and communities ensures that our initiatives contribute positively to societal well-being, addressing issues such as urban regeneration, community development, and equitable access to resources.

In Australia, Arup's approach to social value and equity acknowledges the diverse communities and Indigenous cultures. Our initiatives aim to foster inclusivity and address historical and contemporary inequalities. Arup actively engages with local stakeholders, acknowledging the importance of community input in shaping projects that align with the specific needs and aspirations of Australian communities.

In Asia our dedication to social value encompasses engaging with communities in culturally sensitive ways. Recognizing the diverse languages, traditions, and socio-economic conditions in the region, our projects aim to strike a balance between economic growth and social inclusivity. Sustainable solutions are designed to address the specific challenges posed by rapid urbanization and the preservation of cultural heritage.

In Africa, Arup acknowledges the unique socio-economic landscapes and developmental needs of the continent. Social value initiatives in Africa are context-specific, actively involving local communities and respecting indigenous knowledge. Our goal is to contribute to inclusive, sustainable development while recognizing the post-colonial legacy and promoting Africa's autonomy and self-determination.

Throughout these regions, Arup emphasises local engagement, understanding that effective solutions to social value and equity require a deep appreciation for the distinct challenges and opportunities present on a global scale. Furthermore, working with the most marginalised communities in these regions demands an approach that is shaped by their terms and progresses at their pace to be truly meaningful. Arup is committed to addressing power structures that have historically perpetuated systems of oppression. In this endeavor, we approach conversations around equity with humility, recognising our role as representatives of a large, global firm. This commitment is rooted in our belief in fostering meaningful, sustainable change and creating lasting positive impacts in communities worldwide.

Social value & equity interventions and initiatives

Theory of change

A value-based and outcomes led approach

Putting community needs and wants at its heart, Arup's Social Value & Equity 'theory of change' starts from the desired outcomes or large-scale aims that we seek to achieve though our work, which contribute to our ultimate aim: to create a better quality of life for people and a more inclusive, equitable and just environment and society. Working backwards, once the outcomes have been agreed, the **outputs** – or initiatives and interventions – that support the aims are devised.

The project outcomes and outputs must be identified in close collaboration with its end users and the local community affected by our work. Only this will base outputs on their needs and values, and within the specific contextual characteristics. The identification and delivery of outputs are supported by a set of **inputs** – methods and tools – that form the backbone of Arup's practice and services.

Our "theory of change" model includes:

6 OUTCOMES

Large-scale aims for what success looks like: the contribution we want our end impact to make. They are defined based on what social & equity value means in the specific context and the community where we work, and the aspects our project or programme focuses on. Each outcome leads to a set of outputs that indicate how to achieve them [3-4].

12 OUTPUTS

Spatial interventions as well as programmatic sociocultural, economic and governance initiatives that support the achievement of the agreed outcomes of our project. Outputs can be implemented by different project stakeholders (government authorities, developers, urban planners, civil society organisations, and communities) [15].

4 INPUTS

Methods and tools to identify and shape the desired outcomes and outputs, to support their implementation, and to measure the project impacts. In essence, they are the work we do and the services we provide.

Within a theory of change methodology, we continuously need to assess the change we aim to achieve and refine our outcomes and outputs accordingly. This ensures that we are in tune with local needs and values and that we adapt to contexts and communities. For this theory of change to be implemented, it must be grounded in, and delivered throughout, the **project lifecycle**'s stages and activities.

Methods and tools for change

05 Inputs



INPUTS



Engage
Engagement & communications



Assess
Data analysis & reporting



Design Inclusive design & activation



Measure
Measuring & reporting

8

Social value & equity interventions and initiatives

Methods and tools for change

Outcomes

Focusing on people's quality of life, and a more inclusive, equitable and just environment and society



We identified six major outcomes that contribute to our ultimate aim: enhancing people's quality of life, and creating a more inclusive, equitable and just environment and society. They can be used as areas of focus when engaging communities, clients, and other key project stakeholders. Engagement around these areas help to understand local needs and opportunities, and to set up priorities.

The outcomes outlined here are not definitive: they should be refined and adapted according to the needs and values of the individuals and communities affected, as well as in accordance with the scope of the project. Additional outcomes may also be identified through the engagement of local communities.

Not every project will be able to contribute to all these outcomes and beyond, but we should seek to contribute to as many as materially possible — and ensure we don't have negative impacts on any of them.

These outcomes are:

Standard of living

Includes satisfaction of the basic physiological and safety needs, and is a foundation for quality of life, and for an inclusive, just and equitable environment and society. Through our work, as we seek to improve the housing, food, energy, sanitation, and drinking water conditions of a target community, we need to ensure that social aspects such as gender equality, safety, justice, and a sense of control are duly considered [3, 6].

Wellbeing & life satisfaction

Is ultimately the feeling an individual or a community holds about their state of health, happiness and life accomplishment, as well as a collective sense of cohesion and stability. Through our work, we need to consider how to improve key socio-economic, cultural and physical factors, such physical and mental health [16].

Social connectivity & cultural identity

Includes the quality and density of individuals' and community's support networks, their sense of trust in neighbours and authorities, and their sense of safety, conviviality and cultural identity. By nature, humans are social creatures, and through our work we need to enable positive social connections, a sense of belonging and mutual support [17].

11

02 Theory of change

03 Outcomes

Focusing on

of life

people's quality

04 Outputs

Social value & equity interventions and initiatives 05 Inputs

06 Delivering a transformational change

07 Benefits

08 Case studies

Methods and tools for change

Prosperity & lifelong learning

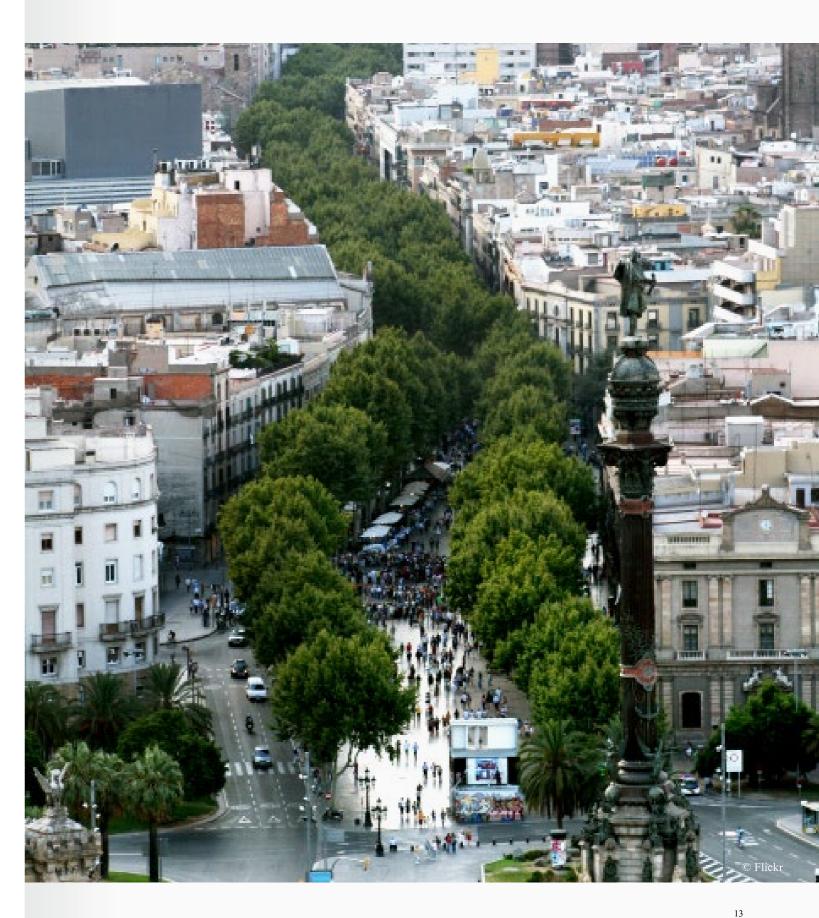
Includes access to equal job opportunities as well as to inclusive educational, professional and personal skills development. Through our work we need to enhance economic activities that lead to a comfortable life, and to enable individuals to expand their knowledge, perspectives and abilities, and empower them to make decisions.

Climate resilient & just transition

Is a requisite for a thriving environment and society. Through our work, we need to ensure that the transition to climate neutrality is delivered in a socially just manner that benefits all, starting with those most vulnerable. This includes supporting the socio-economic and green transformation required to address climate change and create social resilience.

Inclusive governance & self-determination

Is the extent to which people feel legally and culturally empowered to participate in civic and political life and decision-making. It includes the degree of support from, and trust in, institutions as well as freedom from discrimination. The sovereignty of Indigenous people and First Nations is an aspect of this. Through our work we need to ensure the active participation and self-determination of local communities — in particular the most excluded and vulnerable groups — and create better governance overall.



for change

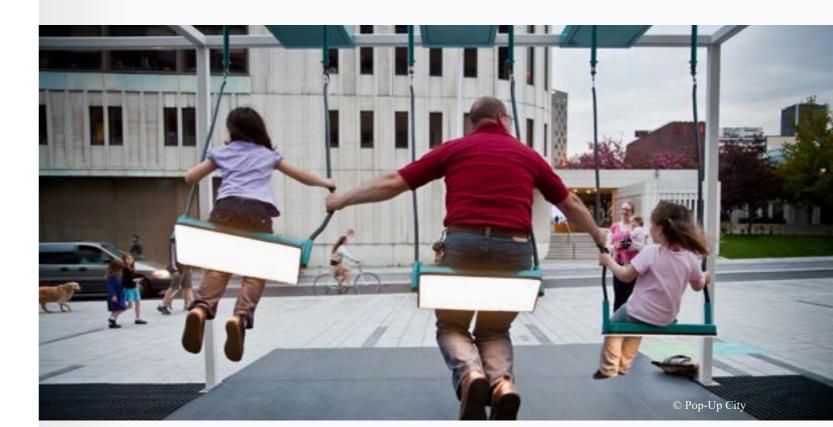
Focusing on people's quality of life

Social value & equity interventions and initiatives

Outputs

Social value & equity interventions and initiatives





We identified two types of outputs for each outcome that can be used to shape our project. They are spatial interventions and programmatic social, cultural, economic and governance initiatives. Spatial interventions are, for instance, the right kind of housing, mobility network and green space. Initiatives can be awareness creation, community empowerment, inclusive economic growth, and behavioural change.

Interventions and initiatives outlined here are merely indicative: they will vary, and be valued differently, from community to community, project to project. It is important to prioritise, refine and develop them with the communities involved, based on local needs and values, and the other project stakeholders. Not every project will be able to develop and implement all the outputs suggested in our approach, but project stakeholders should work together to deliver as many of them as possible.

When identifying and developing outputs, consideration must be given to how they can be maintained and run *in the long term*. For instance, short-term employment for the duration of a construction project is helpful, but an accompanying focus on skills development can deliver longer impacts. The creation of social value & equity is best when it lasts, so it ensures beneficial change long into the future.

Social value & equity interventions and initiatives



Methods and tools for change



O1 Standard of living

The following outputs are critical to improving standards of living:

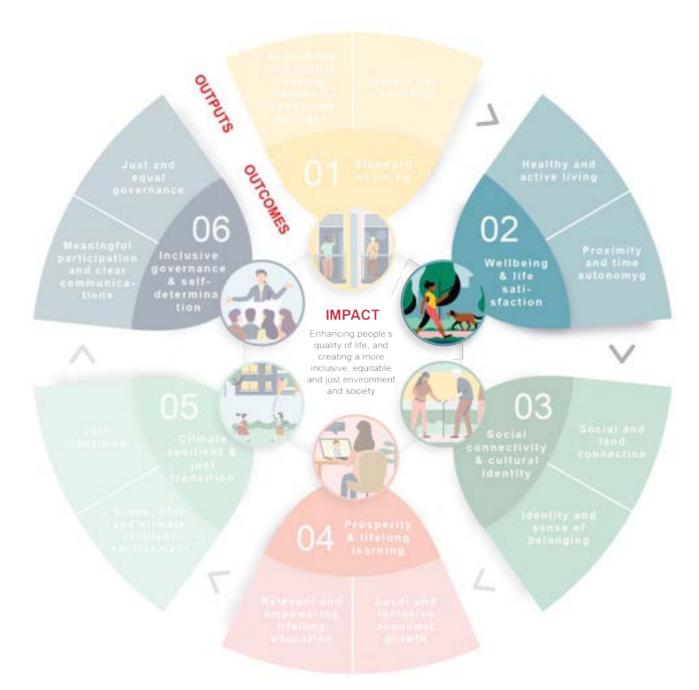
ACCESSIBLE AND QUALITY HOUSING, TRANSPORT, GOODS AND SERVICES

Guarantee that the design and delivery of services, such as electricity, clean water, and sewerage, which are essential to people's daily lives, is done considering the needs of different agegroups, gender identities, and socioeconomic conditions. The same applies to the provision of housing, public transportation, and digital solutions, which need to be affordable, accessible, and inclusive [6, 18-19].

SAFETY AND SECURITY

Create streets, public spaces and mobility experiences and interventions that are safer and more climate resilient, considering the needs of different age groups and genders (e.g., children, women, older people). Furthermore, advocate for violence prevention laws, and raise awareness and act to reduce harmful behaviours [20-21].

Social value & equity interventions and initiatives



Methods and tools for change



02 Wellbeing & life satisfaction

The following outputs are critical to improving wellbeing and life satisfaction:

HEALTHY AND ACTIVE LIVING

Provide high-quality healthcare, sanitation, and nutrition facilities, considering accessibility and inclusivity for different abilities, age groups, genders and socio-economic conditions. Inclusive public parks and gardens can also foster physical and mental health, strengthen social cohesion, and reduce exposure to air pollutants, noise, and excessive heat. Designing for play and nature is another way to enhance the physical and mental wellbeing of communities [16, 22-24].

PROXIMITY AND TIME AUTONOMY

Support people's ability to integrate work, care, leisure, family, friends, and community life, and foster a sense of accomplishment. Sustainable, well connected and people-oriented neighbourhoods enable residents of all ages, backgrounds, and abilities to meet their daily needs close to home, and to live a more enjoyable and sustainable life. The 15-minute city concept, for instance, maximises proximity to opportunity, as amenities, educational, work and transport hubs are closer and easier to get to [14, 25].

Social value & equity interventions and initiatives



Methods and tools for change



O3 Cultural identity & social connectivity

The following outputs are critical to improving cultural identity and social connectivity:

SOCIAL AND LAND CONNECTION

To encourage social interaction and foster a sense of neighbourliness, create mixed-use community gathering spaces for different age groups and activities. From pocket parks on the street corner to public squares: these spaces must enable people to feel connected to, engaged with and proud of their communities. They should not be 'over-designed' but co-created with communities according to their own specific needs. Also, be mindful and respectful of the sense of connection and belonging that many cultures have with their land [20, 26-28].

IDENTITY AND SENSE OF BELONGING

Value tangible and intangible cultural and natural heritage as they are critical to enhancing a feeling of belonging and identity, which is the psychological feeling of connectedness to a social, spatial or cultural community. This can influence the formation of social ties or individuals' participation in a community as well as foster a sense of responsibility and care. In striving to address historic and structural inequities, it is also important to value local traditions related to ethnicities, tribes and religions, and their everyday spaces and customs [11, 21, 29-30]

Social value & equity interventions and initiatives



Methods and tools for change



04 Prosperity & lifelong learning

The following outputs are critical to improving prosperity and lifelong learning:

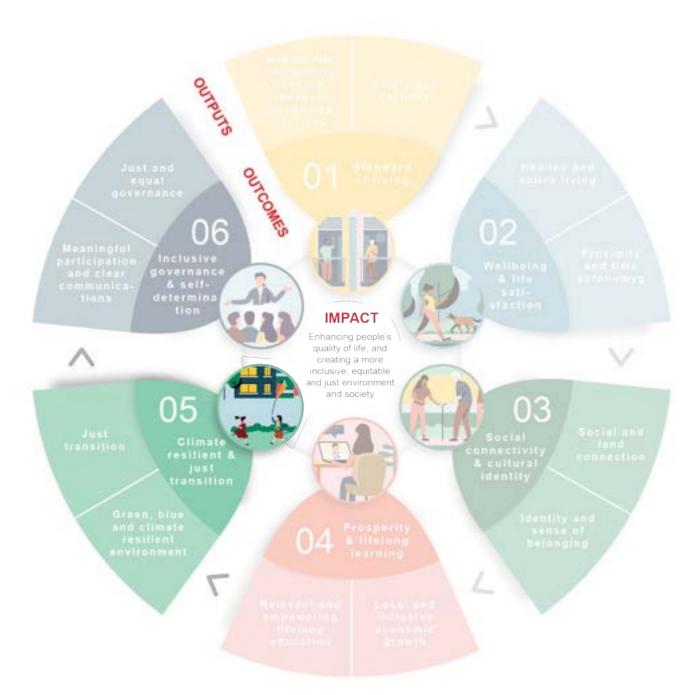
LOCAL AND INCLUSIVE ECONOMIC GROWTH

Create lasting employment opportunities for the local workforce and community members that long outlive the construction phase of a project – especially for large-scale ones. Projects should generate local growth and impact local neighbourhoods positively, supporting the prosperity of existing local businesses, skills, and talent. Prioritising local and sustainable supply chains is an opportunity to have high social and environmental benefits and to enhance place-identity and pridee [31-34].

RELEVANT AND EMPOWERING LIFELONG EDUCATION

Deploy capacity building and knowledge transfer initiatives to help people develop skills and acquire new abilities, which is critical for their long-term empowerment and prosperity. For instance, short-term employment for the duration of a construction project is helpful, but an accompanying focus on skills development through adult training can deliver longer impacts, if they are relevant to people's needs and ambition [35-37].

Social value & equity interventions and initiatives



Methods and tools for change

05 Inputs



Of Climate resilient & just transition

The following outputs are critical to ensuring a socially just and resilient transition:

GREEN, BLUE AND CLIMATE RESILIENT ENVIRONMENT

Promote biodiversity restoration and embed social considerations into the design and operation of nature-based solutions and infrastructure, as an integrative strategy to reduce climate risks, while providing social outcomes such as equity and health. For instance, transform bus stations into climate and social resilient hubs, using green roofs and playful benches. Also, create green spaces and opportunities for interaction with natural elements, as they strengthen people's wellbeing and empathy with nature, and benefit planetary health and environmental resilience [27, 38].

JUST TRANSITION

Ensure that the transition to climate neutrality is delivered in a socially just manner that benefits all, starting with those most vulnerable. To this end, we must see communities we work in as equal partners, leading with their expertise and experience, rather than just beneficiaries. With them, we can identify opportunities to address inequalities and the disproportionate impacts of climate change on people, and proactively promote the many systems that contribute to a community's prosperity and social resilience [39].

Social value & equity interventions and initiatives



Methods and tools for change

05 Inputs



Inclusive governance & self-determination

The following outputs are critical to achieving inclusive governance and self-determination:

MEANINGFUL PARTICIPATION AND CLEAR COMMUNICATION

Ensure the meaningful engagement and active participation of local communities and key stakeholders across the project, in order to consider people's conditions, needs and wants. This helps to develop contextually relevant interventions and initiatives, as communities can provide a wealth of information about existing challenges and opportunities. Cocreation and joint deliberation ensure the maximisation of interventions' social outcomes, build trust, and create a sense of ownership. All information about the project must be accurate and timely, and communicated in understandable ways to communities [40-43].

JUST AND EQUAL GOVERNANCE

Use gender and age-disaggregated data to inform decision-making and planning processes, and consider the inclusion of all social strata, different age and gender groups and abilities in community participation activities and design solutions. Work with government authorities at all levels to help mainstreaming gender and communityresponsive planning in national laws and policies, as well as in local legal frameworks and planning requirements. For instance, urban governance needs to regulate the need for civic engagement in decision-making and planning; contracts and transfers of stewardship need to account for the long-term [32].

for change

Methods and tools

Focusing on people's quality of life

Social value & equity interventions and initiatives

Inputs

Methods and tools for change



Inputs are the methods and tools for change: what we can do to ensure the right social value & equity outcomes and outputs are identified, delivered and measured together with local communities in every project.

These methods and tools are on a scale: some are 'bottom up' and participatory, co-delivered with the communities they impact, while others focus on developing and using existing powers and top-down influence to drive the desired change.

The inputs outlined here are not exhaustive. They are examples of the types of methods and tools that are available to create large-scale and long-lasting change for individuals and communities. The goal is to develop and refine them so that they integrate social value & equity creation into the DNA of projects.

The inputs are categorised into four groups:



EngageEngagement & communications



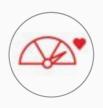
Assess

Data analysis & reporting



Design

Inclusive design & activation



Measure

Impact measurement & evaluation

29

05 Inputs

Methods and tools for change

31

Focusing on people's quality of life

Social value & equity interventions and initiatives



Engage

Engagement & communications

The involvement and engagement of different stakeholder groups (i.e., institutional, technical, private sector, academia) and the community we work in for the duration of a project is key to delivering social value & equity outcomes.

They can provide a wealth of information about local conditions and expertise, hence their deep engagement from the early phases of a project and throughout is critical to shaping contextually relevant solutions and ensuring that benefits are achieved in an inclusive way. We should avoid simply seeking reactions or post-hoc validations.

When developing a stakeholder and community engagement strategy, we need to consider the following three principles, including:

Grounded in the project lifecycle

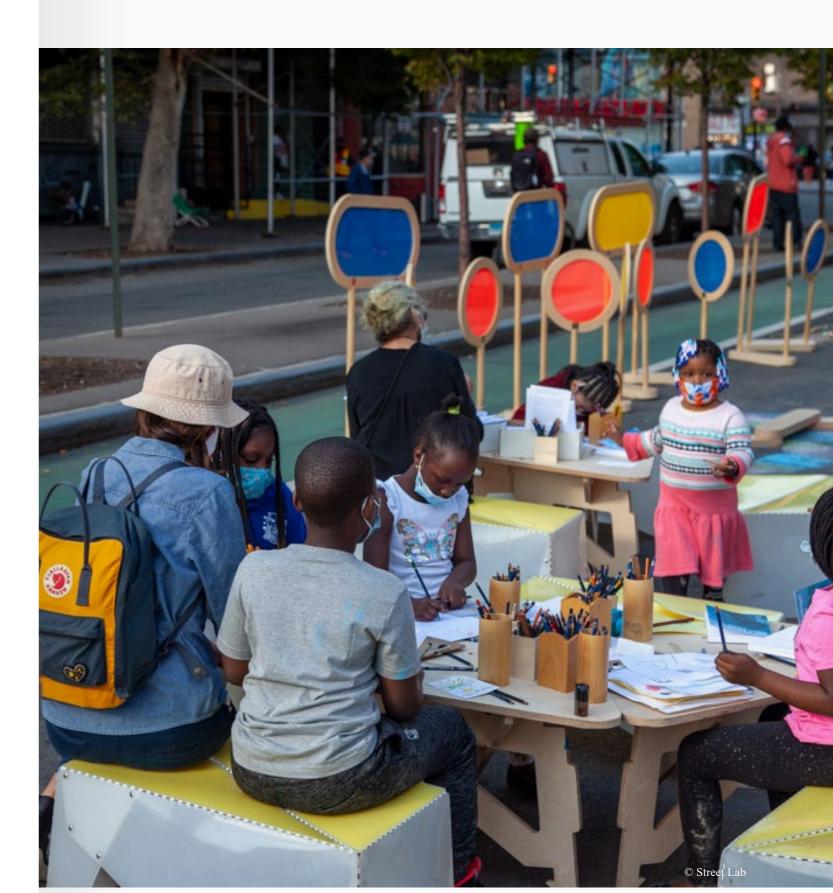
Stakeholder and community engagement activities are best when they are grounded in, and delivered throughout, the project. The level of engagement of each stakeholder group may change across the project lifecycle, depending on potential project impacts and stakeholder level of interest. The strategy used to manage and engage with different stakeholders should be updated periodically.

Moving at the speed of trust

The successful engagement of stakeholders and communities requires trust, and that is built over time. Rushing can seem like undue pressure. It will likely be more valuable in the long-term to discuss and agree with stakeholder groups the pace of engagement, and to account for this in project schedules and budget allocation [26,44].

Clear and inclusive communications

Trust and community buy-in depend on open and regular communications, and on a clarity of channels – for example, grievance processes. When people feel informed and listened to, levels of engagement are higher. The communications strategy for each project should reflect this and include clear, accurate and timely information about the project, its impacts and other aspects that could affect the local community [45].



for change

Focusing on people's quality of life

Social value & equity interventions and initiatives



Assess

Data analysis & reporting

It is crucial to consider what social value and equity means in the specific contexts we work in, and to assess objectively as well as subjectively existing social conditions, needs, wants and opportunities.

This understanding is critical to inform the vision and strategy for developing and delivering a project. To this end a set of indicators, or KPIs, can be used to establish a baseline and assess overtime whether people's lives have been positively impacted. It is essential to use gender- and age-disaggregated data, to provide visibility into how projects target, consider and impact different genders, age groups and abilities. Also, social conditions and change must be assessed with – and by – the people whose lives are impacted.

There are several methods and tools to promote social value & equity in the assessment process, including:

Scoping and baseline development

At the beginning of the project, it is critical to first establish your aims in consultation with the target community, as well as the goals that contribute towards achieving them. This can help guide your approach to understanding the target location and its relevant stakeholders. Also, creating a baseline of social value & equity indicators beforehand, and assessing them throughout a project, can provide us with clarity as to whether we are achieving the right kind of impact. Data quality is the starting point from which change can be measured.

Place-based analysis

Effective design that generates long-term social outcomes is rooted in the holistic understanding of the local context. It is critical to assess the needs and wants of different groups, including people with different socio-economic conditions, ages, genders, and abilities. Secondary data analysis, site visits and formal community consultation and engagement are obvious requirements. Other methods include developing user personas to understand their needs and consider how different people might use new facilities and spaces; working with community groups to audit what works and doesn't; and tapping into traditional, local ecological knowledge.

Documenting and knowledge sharing

Consolidating into a summary report insights and findings from the baseline assessment, site visit, and stakeholder engagement, to bring together all identified challenges and opportunities and consider which could be prioritised, combined, or if possible, addressed simultaneously. The report should be shared with relevant stakeholders to either continue receiving feedback, to generate awareness about your project, or to influence certain groups and find additional support and collaboration.

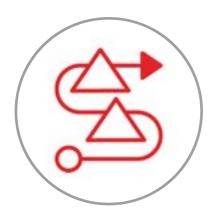


32

for change

Focusing on people's quality of life

Social value & equity interventions and initiatives



Design

Inclusive design & activation

There is no one-size-fits-all solution for creating social value and equity outcomes by design. Every community and context have different considerations and norms to be carefully weighed, alongside those of a safe, durable and sustainable design that maximises the social, environmental and economic return on investment.

Making design decisions based on a detailed understanding of your project context and community, being openminded and collaborative, and placing creativity at the centre of your approach is critical to effective and contextsensitive design that will generate a lasting positive change. There are several methods and tools that can be used, including:

Human- and nature-inclusive design

This means putting the interests and priorities of people and nature at the centre of urban planning and design. Embedding equity, gender and social inclusion principles and perspectives into design is vital for a socially and ethically sustainable project, where the diverse needs of all members of the community are catered for. At the same time, to ensure that social and environmental needs are considered together, we need to centre the needs of nature into our design paradigms [46-47].

Participatory planning and co-creation.

When engaging local communities in participatory planning and co-creation processes, it is critical to use methods that enable people with different knowledge, abilities, interests, and availability to feel comfortable and motivated to take part. Playful tools, for instance, avoid fatigue and are very engaging. Opportunities for participatory planning and co-creation should not only be about urban design solutions, but also about the sustainable operation and maintenance of the project, and the supporting policy requirements [47].

Place-making and meanwhile activation.

Place-making and the activation of meanwhile or permanent spaces can be used to transform a site, provide local amenity, increase positive environmental impacts and deliver social value & equity for the actors and communities involved. This can be done in collaboration with local artists and be maintained once the project is complete, resulting in longer term economic benefits for the area [48].



Social value & equity interventions and initiatives



Measure

Impact measurement & evaluation

Measurement is fundamental to social value & equity. The primary purpose is to ensure we are achieving the intended outcomes (and able to recognise unintended consequences). Measurement can also be a powerful tool for informing strategy, assisting decision making, informing investments, and communications. Qualifying and quantifying it alongside economic and environmental impacts gives teeth to commitments and strategies.

Measuring social change is complex. No set of indicators can truly capture what it means to improve an individual's life, a community's strength, and equity within society. However, it is essential that social change be assessed with – and by – the people whose lives are impacted. In some cases, social value & equity can be translated into monetary terms for the wider community, for example through measuring social return on investment (SROI) [49]. This enables it to be compared with costs in considering value-for-money and cost-benefit ratios.

However, social value cannot always be measured in financial terms — at least not directly or straightforwardly — and is thus often excluded from market processes.

Our theory of change model is designed to enable measurement to be incorporated from the outset. It is crucial to consider what social value means in the specific contexts we work in. This requires early clarity about which outcomes are relevant to the project, user groups and community. This informs the establishment of an evaluation framework, which should address:

The baseline conditions

The starting point from which change can be measured. How do people view their opportunities – not just 'needs' – at the start of a project?

Clarity on additionality

To enable the direct impact of projects to be distinguished from background changes. Are changes in participation in one town related to a specific project, or are they just reflections of broader societal changes?

Measurement approaches

To track the right metrics accurately. There exists a wide range of measurement approaches. *Depending on why and what we are measuring, which is the most appropriate approach and framework to use?* [49]

Methods and tools for change



Social value & equity interventions and initiatives

Delivering a transformational change

Six driving principles

Arup's Theory of Change model represents a transformative way of thinking and operating. It fundamentally changes the relationships between project stakeholders, enhances project processes, and focuses on outcomes rather than outputs. It is a journey that is guided by the following six principles:

Tailored, place- and needs-based approach.

Understanding the target context and local needs early by engaging with local communities, as well as thinking about the potential of the project, can unlock unexpected opportunities and potential benefits, turning the project narrative on its head and creating long-term social outcomes.

From consultation to co-production

If the dialogue with local communities, as well as stakeholders who will enable benefit to be delivered, starts early and continues consistently, they can play an active role in designing new places and infrastructure. Co-production empowers communities through inclusion, active engagement and self-determination, rather than simply offering reactive feedback on proposals developed elsewhere. Empowering communities also involves adequate resourcing and capacity building [50].

From measuring outputs to assessing outcomes

To be able to assess the real difference projects can make to people's lives — even after a project or initiative is completed — it is critical to work closely with the community and to take a long-term view of outcomes. This shifts the focus beyond what can be achieved in the short term. Considering first what outcomes are needed rather than rushing to import generic solutions from elsewhere, we can build an infrastructure of social value and equity that enables people's quality of life and a better society, building in long-term resilience and sustainability [51-52].

Methods and tools for change



Throughout the project lifecycle
Social value and equity is best achieved when it is considered and integrated at every stage of a project's lifecycle. This way, it becomes inherent and intrinsic to project aims and designs, and not

merely a superficial add-on.

By establishing governance arrangements early on between stakeholders (e.g. government authorities, developers, academia, civil society organisations), even in an informal way social

authorities, developers, academia, civil society organisations), even in an informal way, social value and equity becomes the shared responsibility of multiple parties and more likely to be delivered successfully. These arrangements help to establish steering groups, hold regular meetings, monitor and report protocols, and to assign clear roles and responsibilities. They can also help centre social value and equity when some groups are seen as rightsholders (rather than stakeholders), especially in the longer term.

Programmes and partnerships for change

There are specific programmes and partnerships that can ensure that the benefits of our projects reach local communities: educational, skills, employment and cultural programmes can offer a structured way for local people to learn new skills, improve their economic opportunities and to find work on the project as it progresses. Partnerships with local community groups and non-governmental organisations will be the most effective way to ensure community engagement and build longer-term capacity [53].

The potential benefits of this theory of change approach are significant for different stakeholders: starting with individuals and communities through to government and infrastructure authorities, urban planners and designers, developers and investors. The deeper an organisation goes in creating social value & equity, the greater the likely benefits.

Key stakeholders:



Government / policy makers



Built environment progessionals



Developers and investors



Community

Create innovative and contextually relevant ideas and interventions, addresses local needs and wants, and reduces the risks of biases and of having unforeseen, negative impacts. This demonstrates organisational thought leadership and is achieved by ensuring that the insights obtained by different stakeholders are incorporated into the project studies and solutions. In turn, our approach ensures the social interventions or outputs of a project will be valued by the community. They strengthen the community by addressing their specific needs. This will help create a lasting and meaningful impact on people's quality of life.











Build trust, public support, and a sense of confidence between communities, relevant government and/or infrastructure authorities, and urban practitioners, improves a sense of ownership and the agility of the project delivery. This trust helps to make future development both faster and more straightforward. Such trusted relationships also bring financial benefits. Creating strong support for a project reduces risks of delaying project delivery (e.g. through protests or community objection), which in return reduces the risk of making a loss on the project.











06 Delivering a transformational change

07 Benefits

08 Case studies

Methods and tools for change



Increase opportunities for new projects and attraction of businesses with parallel ethos and principles, willing to invest. There are also commercial benefits: creating diverse and vibrant places that people love to spend time in drives footfall and dwell time, and the environmental and social sustainability of a building can warrant a higher rental value.







Maximise the social, economic, and environmental benefits of the project, through community outreach, local supply chains, and local investments and spend. Our approach can also enhance coordination, knowledge sharing and learning across stakeholders, promoting a holistic and integrated approach.









Enhance corporate reputation demonstrating organisational thought leadership, improves staff engagement, retention, and performance. This can bring huge returns for infrastructure authorities, urban practitioners, developers, and investors. Also, it can support the government's planning powers and interface with real estate developers, by helping them to ensure that the challenges associated with the delivery of new developments are deftly balanced to create social, economic, and environmental benefits for neighbourhoods most in need.







05 Inputs

for change

Methods and tools

Focusing on people's quality of life

Social value & equity interventions and initiatives

Client: SBML Developments

Geography: United Kingdom, London

Background

The British Library is more than just a national knowledge and research institution: it sits at the heart of London's Knowledge Quarter, within proximity to major science and research institutions around St Pancras, and the new Crossrail HS2 development in Euston. Moreover, it is located adjacent to the diverse communities in the Somers Town area

Project scope

The client, SBML, along with stakeholders including Camden Council, TfL (Transport for London), and the British Library, were keen to leverage the extension as a force for achieving a development of international significance and far-reaching impact on education, commerce, and tourism. At the same time, they wanted to capture a clear image of the overall social impact that the extension would have on the people living in Somers Town and in the wider Borough of Camden.

They recognised the opportunity to build on the institution's legacy as a space for all, by integrating the library into its wider surroundings, and through the creation of high-quality and accessible public spaces, a new library, exhibition spaces, and commercial space for business and research.

What Arup did

Arup's Social Value & Equity team was part of a multi-disciplinary design

service provided to SMBL on the British Library Extension project. The team led a programme of engagement with the client, design team members and local cross-sector partners to capture existing social, economic, and environmental commitments and identify opportunities for additional delivery.

The team conducted an extensive local needs analysis to better understand the gaps and priorities in the project's impact area. The findings from these activities informed a comprehensive social value & equity strategy that met the community's socio-economic needs and could be delivered across the design, construction, and occupation of the new space. The strategy not only captured the various education activities, training, outreach, and human-centred design considerations that were being developed alongside the extension, but sought to quantify, and in some cases monetise, their outcomes.

Arup and SBML also created a new and innovative mechanism known as a Social Value Compact. This Compact sets out clear governance for co-delivering these social value activities by occupiers of the library's commercial spaces. Future occupiers are also expected to opt into the Compact and will be encouraged to actively deliver and support its objectives. This aims to embed social value for the long term.

Project Outcomes

Arup's work provided the client and stakeholders with a clear understanding of the social impact of the once-in-ageneration transformation. We identified £27.2m of social value generation during construction and first three years of occupation.

SBML Developments has since achieved outline planning permission for the library extension. This success can be attributed in no small part to the clear strategy and realistic delivery plan for social value that Arup and the Compact provided.

More info: click here



British Library Extension

Case Studies

12

Social value & equity interventions and initiatives

Client: Social Value Charter, Birmingham Commonwealth Games Geography: United Kingdom,

Background

Birmingham

Following a late withdrawal by the original hosts selected to hold the 2022 Commonwealth Games, Birmingham was successfully selected as a replacement in 2018. At a deficit of 2.5 years planning time compared to the normal 6.5-year preparatory allocation, the Birmingham City Council faced significant challenge to condense planning for the games into a 4-year window.

Project scope

The client was required to quickly unify and mobilise a range of teams, stakeholders, organisations, and disciplines, all coordinated under a common vision to deliver the most successful games yet and to put Birmingham on the map.

Already subject to a reduced delivery timeframe, the world was hit by the COVID-19 Pandemic which led to heavy measures of enforcement by the Government, altering the way in which the organising committee could deliver the games and adding challenge surrounding procurement constraints. The client's vision to overcome obstacles and deliver a successful game progressed, providing a key aspiration towards bringing communities together and building a relationship with the city.

Within the wider Arup's involvement in the Commonwealth Games, the

social value team was commissioned to lead the delivery and completion of 12 Commitments targeted to provide social value in Birmingham. Added efforts were tailored towards the delivery of social value through active collaboration within local communities in the city, fostering a collective effort to contribute and engage everyone.

What Arup did

Arup's social value contribution included:

- Supporting young people in the most deprived wards of Birmingham to deliver Careers Fairs, STEM talks, Apprenticeship talks, CV support and Interview support workshops for students.
- Providing work placement opportunities to school students and to university undergraduate students in the Arup Solihull Campus during the City Readiness contract period.
- Providing business support to local SME's and VCSE's.

Project Outcomes

Overall, the Birmingham City Council were able to deliver the most successful Commonwealth Games ever, both on time and under budget despite all the constraints faced which firmly put Birmingham on the map and enhanced the reputation of the Birmingham City Council with partners. From a Social value perspective, Arup delivered more than 600 hours of FTE time to generate £348k of social value to Birmingham through the delivery of the 12 key commitments; 20% more than was promised to the Birmingham City Council. A few key statistics have been

for change

Methods and tools

recorded below:

- £348k of social value delivered 20% more Social value than the original financial proxy of £288k agreed with the Birmingham City Council.
- 363 hours of school support was delivered to young people in Birmingham, 24% more than the agreed hours with the Birmingham City Council.
- 1 year long industrial placement student provided, 4 undergraduate students provided with 10-week work

placements and 35 school students provided with a 1-week work placement all advertised through the Birmingham City Councils Jobs and Skills team.

• 4 days of business support provided to local SME's and VCSE's via an Arup Hub in the Birmingham City Centre to discuss topics such as: creating meaningful legacies, challenges surrounding decarbonisation and resilience, and creating inclusive and thriving cities.

More info: click here



Birmingham

Case Studies

Commonwealth Games

for change

Focusing on people's quality of life

Social value & equity interventions and initiatives

Client: Resilient Cities Network **Geography:** Africa, South Africa

Background

Cape Town's unique environmental context makes it particularly vulnerable to certain natural risks, which are heightened by climate change. Over the next 30 years, the greatest climaterelated risks for Cape Town will be from: increased frequency of multi-year drought, increased wildfire incidents, heatwaves, flooding and gale-force winds.

The Resilient Cities Network's Urban Power Programme in Cape Town aimed to examine the city's power system context and challenges while concurrently developing energy projects geared towards enhancing electricity access for vulnerable communities.

Project scope

Arup was chosen by the Resilient Cities Network to lead the Urban Power Programme in collaboration with the City of Cape Town. The goal was to create energy projects that enhance electricity access for energy-poor and vulnerable communities, particularly 'backyarder' communities in Cape Town, while bringing multiple resilience benefits. The project centered around bringing together key decision-makers, financiers, and energy experts to address barriers to capacity expansion. It also involved testing green energy solutions with selected industries and city services.

What Arup did

Arup led the identification of key shocks and stresses impacting energy resilience, and case studies on energy resilience – including an innovative public lighting and maypole electrification project in informal settlements. We also orchestrated the entire design sprint process, guiding it from ideation to facilitation.

Project Outcomes

This collaborative effort brought together city offices, stakeholders, partners, and community members to gain a deeper understanding of the energy needs and demands of backyarders, leading to the development of innovative solutions. Subsequently, these solutions advanced to feasibility studies.

More info: click here



eliable





© Arup

46

Sprints

Urban Power Design

Case Studies

for change

Focusing on people's quality of life

Social value & equity interventions and initiatives

Client: Sabre Charitable Trust **Geography**: Africa, Ghana

Background

The light, airy and cool classrooms in Dwabor's kindergarten are perfect for a curriculum of activity-based learning. A world away from the village's rundown old kindergarten, the new building involved the community from the start. Its design uses sustainable local materials – including waste products like coconut husks – in inventive ways. It was built with the help of volunteers from Arup and Davis Langdon working alongside the community.

Project scope

Arup was commissioned the design a new kind of kindergarten in a remote district of Ghana to become a model for a rollout programme in the local area.

What Arup did

Arup provided engineering and design expertise to develop the prototype kindergarten in collaboration with Davis Langdon and the Sabre Charitable Trust, a small charity working to improve education provision in the KEEA district of Ghana in partnership with the Municipal Education Office.

The Dwabor kindergarten was developed as a modular, scalable design. It maximizes daylight and ventilation while minimizing heat and noise.

Sustainable materials were used wherever possible – demonstrating to the local community how bamboo, coconut husks and even soil can be transformed

into durable and cost-effective building materials.

The school's distinctive metal roof collects rainwater for reuse. Inside the roof, fibers from coconut husks deaden the noise from rain and prevent downpours from interrupting classes. When the sun shines, colorful slatted bamboo windows can pivot to let in light without any glare.

For the walls, soil stabilized blocks proved stronger during tests than concrete blocks. This reduced both cost and environmental impact.

Project Outcomes

Close collaboration with government and the local community ensured the kindergarten was a model of best practice in international development and helps Sabre to achieve its vision for kindergarten education. Children at the kindergarten also have the opportunity to learn from their environment: as well as flexible inside space that is perfect for activity-based learning and learning through play, the school has outdoor learning areas. Here the natural environment becomes a teaching aid as children explore the world around them.

More info: click here



Dwabor kindergarten Case Studies

40

for change

Focusing on people's quality of life

Social value & equity interventions and initiatives

Client: UK Foreign, Commonwealth and Development Office, with Istanbul Municipality and UN-Habitat

Geography: Europe, Turkiye

Background

Between 2019 and 2021, multidisciplinary teams at Arup, together with stakeholders, municipalities, and specialists, delivered five complex and extensive urban planning projects across three cities in Türkiye: Istanbul Participatory Planning Project; Istanbul Sustainable Urban Mobility Plan; Bursa Smart City Framework; Ankara Cycling Strategy and Masterplan; Çankaya Healthy Streets Project.

Project scope

Funded by the UK FCDO's Global Future Cities Programme Türkiye with strategic partners UN-Habitat, Arup was commissioned to develop a report exploring key findings collected from the rollout of five lighthouse urban planning projects in Ankara, Istanbul, and Bursa.

Achieving Gender Equality and Social Inclusion (GESI) were fundamental drivers of the outcomes and the way in which each of the five projects was delivered. GESI is an approach, process and a set of desired outcomes leading towards total inclusivity across all genders and social groups. It applies to the environments within which we live and work and the way these are governed and managed. Despite widely available best practice guidance, the application of GESI principles to everyday decision-making in transformative, city-shaping projects remains a challenge.

What Arup did

Driven by the pledge to Leave No One Behind, Arup developed a report highlighting key findings and recommendations from the 5 projects analysed.

Project Outcomes

The report proposes five inclusive design principles, lessons learned about the successful integration of GESI, and a twelve-step pathway that the projects embraced, to provide a replicable approach that can be used for holistic urban transformation.

Design principles:

- The needs and priorities of all citizens must be understood through participatory planning methods and articulated at the outset of the project.
- Communities and citizens must be involved in the development and testing of ideas and project outputs.
- Tools and mechanisms must be developed to facilitate more inclusive governance and service delivery by municipalities.
- The impact of change must be measured, monitored, and evaluated. Tools must be adaptable to reflect changing needs and dynamics.
- All proposed and actual activities must benefit gender equality & social inclusion (GESI).

A 12-step GESI pathway organized by key stages in a typical project lifecycle:

• Project mobilization – Setting up for success: from the project outset, engaging with the right people is imperative. GESI experts are needed in the early stages of discussions and underrepresented groups need to be identified as their input is crucial. Understanding

the context of the project, including the legal, policy and physical context, is essential to helping the project team understand the barriers and opportunities for the project.

- Project delivery Keeping GESI on the agenda: throughout the project delivery stage, several areas require GESI considerations. For example, ensuring that appropriate GESI data is being gathered, continuing to engage with stakeholders and ensuring that GESI approaches are continuously embedded in the design and delivery of the project.
- Project close Moving towards positive action and change: sharing methodologies, best practice examples

and experiences are a great way to embrace GESI practices in future projects. Providing training to stakeholders and sharing information can help to ensure long-term success and change inspired by the project initiative.

Lessons learned about the successful integration of GESI across all five urban planning and design projects:

- Identify user needs and priorities at project mobilization
- Understand and engage with stakeholders
- Engage with experts
- Collect the right data.

More info: click here



Programme Future Cities Case Studies [stanbu]

50

for change

Methods and tools

Focusing on people's quality of life

Social value & equity interventions and initiatives

Client: Confidential

Geography: Spain, Madrid

Background

Arup was asked to advise a global hi-tech company on the development of its first 200MW hyperscale data centre in Spain. Due to the location of the development, and its proximity to existing built environments, a Sustainable Social Strategy was implemented in order to ensure that the proposal respected the natural and cultural heritage of the communities in which it is carried out.

Project scope

When Arup was approached to develop one of the largest data centres in Europe, we knew that understanding local concerns would be essential. Incorporating social value in our projects through Community Engagement is positive both for the local communities as well as for the client – it strengthens the client's reputation and reduces the risk of the planning and approval processes. The project included a new 60-ha public park, and a Community Engagement process was launched in order to involve the locals in the design process of the park.

What Arup did

Arup established a Community
Engagement and Communication
Strategy, structured in a series of
collaborative and co-design workshops.
The objective of these sessions was to
listen, collect and attend to the needs and
suggestions of the locals concerning the

design of the park that will occupy this area.

Each workshop was organized into a series of activities to gradually define the needs and possible elements to be introduced in the park design. Below are the specific objectives of each workshop and the concrete activities carried out.

- Workshop 1: It had a dual objective of informing- understood as providing the participating public with objective and necessary information to understand the proposal and the foreseen development- and consulting the public. To achieve these two objectives, two group dynamics were conducted. First, members of Arup's technical team shared an informative presentation, followed by a round of questions and answers, going into greater detail on specific aspects to be addressed in the design of the park. The second group dynamic consisted of a physical site visit. This activity not only allowed Arup experts to share on-site technical information with the participants, but also helped local participants to share with the technical team the history and values of the community in that location.
- Workshop 2: It aimed to involve the public in the design of the future park through co-design activities.
- Workshop 3: It was organized as a thank you for the participation and goodwill of the participants, and to share and highlight all the proposals and initiatives that had been sent to the technical design team. To inform the public, the Arup team shared a presentation that recounted the process of the previous workshops and their main conclusions.

Follow-up workshops have been held

yearly since, in order to keep the public informed in the process of the park design and development

Project Outcomes

Throughout these collaborative sessions, approximately 100 ideas were gathered from the community. By establishing a forum for communication and dialogue, it was possible to learn first-hand about the community's concerns, needs and

suggestions, and thus incorporate their ideas into the design wherever feasible. The result was an enriched design that integrated expert knowledge with local knowledge.



52

Data Center Community Engagement

05 Inputs

for change

Methods and tools

Case Studies

Free to Be with Plan International Australia

Focusing on people's quality of life

Social value & equity interventions and initiatives

Client: Plan International
Geography: Australia, Sidney

Background

Free to Be is an online mapping tool that enables girls and young women to identify public spaces that make them feel safe and happy. By dropping a pin marker onto a location and sharing a story, it empowers young women to mark places they enjoy, or call out unsafe experiences and geographically identify spaces where change needs to occur.

It has been developed by Plan International, a global development and humanitarian organisation focused on girls' and children's rights, in collaboration with Crowdspot, Monash University's XYX Lab and, crucially, young women.

Project scope

Arup was engaged by Plan International to co-design improvements to the tool after the pilot project in Melbourne, and to help interpret the data collected in Sydney during a six-week campaign, into recommendations for change.

What Arup did

Arup hosted two workshops at the Sydney office, involving young women, the Free to Be team and participants from government, academia, the private and not-for-profit sectors.

After the first workshop, the tool was improved by enhancing the type and depth of information collected, and the method by which it was done. Following the Sydney Free to Be campaign, we

co-designed and facilitated a second 'Interventions Workshop' with Plan International. Bringing together the same participants, we explored ways in which the new insights and findings could inform improved policies and practices

Project Outcomes

With the lived experiences of young women and girls not often discussed in urban planning, design or policy, Arup's involvement marked an important shift, placing the perspectives of young women firmly at the centre.

A report was produced to outline the findings of the data and key themes including time of day, demographics, mobility, drug and alcohol-fuelled incidents, abuse and harassment, reporting, bystander intervention, infrastructure and services, consequences and the elements that contribute to a safe or unsafe place. The report also includes recommendations – across policy and legislation, services, infrastructure, and behaviour –designed to improve the experience of girls in Sydney to make it more welcoming, inclusive, and safe.

It is expected that these recommendations will help inform a similar approach to benefit girls and young women in many more cities across the world.

The improved tool was then used for the campaign in Sydney, and later Delhi, Kampala, Lima and Madrid.

More info: click here



for change

Focusing on people's quality of life

Social value & equity interventions and initiatives

Client: Planning Department, Hong Kong SAR Government

Geography: East Asia, Hong Kong

Background

Modern technology, while offering unprecedented daily convenience, has inadvertently reduced our physical activity. Apart from public promotions, planners, architects, and designers can play an important role in encouraging healthier lifestyles by implementing the 'active design' concepts in urban development.

The Hong Kong government's Planning Department commissioned Arup the development of the "Active Design Guidelines and Strategy" for the city's urban transformation, which was accompanied by an extensive stakeholder engagement process throughout 2020-2021.

Project scope

Drawing upon our global expertise, as well as engaging with local stakeholders, academics and the industry, Arup and the Hong Kong government's Planning Department delivered the first-of-its-kind strategy and design guidelines for Hong Kong's urban transformation. Our study, which incorporates comprehensive research, identifies the barriers and opportunities for various user groups and aims to shape an urban environment that makes it easier for all Hong Kong residents, regardless of age or fitness level, to choose more active daily lives.

What Arup did

Responding to the complexity of designing high-density urban environments, a challenging topography and introducing our global expertise of Cities, we formulated the Active Design Guidelines with themes, objectives, and design principles at the neighbourhood and the building scales.

At the neighbourhood scale, the Guidelines emphasise the creation of an active city through the provision of diverse and flexible active destinations that are accessible for all groups in the society, complemented by interesting and convenient pedestrian routings, providing people with the opportunity to engage in more physical activities in their daily life.

At the building scale, since buildings in the city are composed of multiple uses, the Guidelines focus on the strategic positioning of building functions, the creation of active spaces and facilities as well as the designing of active routes within and around the building, encouraging users' movement. Active building frontages support a vibrant and safe pedestrian realm, enhancing the walking experience.

Project Outcomes

The Active Design Guidelines not only serve as a valuable reference for the design practitioners to understand and incorporate active design considerations in development projects, but also provide a forward-looking and people-oriented approach to nurturing active design, ensuring healthy lives, and promoting well-being for all, at all ages. The report also includes a checklist, intended to be a

quick reference tool that helps designers, planners, and developers to ensure that guidelines relevant to their projects are considered.

More info: click here



Hong Kong Active Design Guidelines
Case Studies

= (

for change

Focusing on people's quality of life

Social value & equity interventions and initiatives

Client: Plan International with the support of the Nordic Climate Facility **Geography**: South Asia, Bangladesh

Background

Young people in informal settlements are some of the most vulnerable people living within such situations. They are often highly susceptible to the disruptive and destructive effects of climate change. However, young people can also act as protagonists for action, strongly shape behavioural change and bring about collective action in communities very effectively. Young people also have a lot of energy and creative capacity to lead on climate change adaptation and mitigation projects.

Project scope

Between 2016 and 2019, Arup was commissioned by Plan International to jointly develop and implement a youth-driven climate adaptation project aimed at strengthening the resilience and adaptive capacity of disadvantaged communities living in an informal settlement in Dhaka, Bangladesh.

What Arup did

Arup partnered with Plan International and the Social Economic and Enhancement Programme (SEEP) to run a youth-driven project to strengthen the resilience and adaptive capacity of disadvantaged communities living in an informal settlement in Dhaka.

We have worked with youth living in an informal settlement, and have provided urban planning and civil engineering

services, and social development support to strengthen the adaptive capacity and climate resilience of the broader community, in their ability to minimize, withstand and recover from negative physical, social, and environmental impacts of climate change, in particular flooding and waterlogging.

We have encouraged and supported youth in the community to become 'climate champions', and understand, document, and monitor the area's resilience dynamics. Together, we have identified, codesigned and tested effective and affordable climate adaptation solutions for climate proofing their settlement. These solutions were grouped under five themes: housing, solid waste, street upgrading and green spaces, drinking water and community engagement.

Project Outcomes

As part of this collaboration, we developed a card game with the aim to share the experience and knowledge gained though this project, to assist other organisations, urban practitioners and decision makers working in similar vulnerable contexts to prompt discussion with youth and community groups and gain useful inspiration for their own projects. helped develop this toolkit for supporting the design and implementation of climate adaptation interventions in informal settlements.

More info: click here



Youth driven approach to climate adaptation

Case Studies

for change

Focusing on people's quality of life

Social value & equity interventions and initiatives

Client: Authority for the Reconstruction with Changes (ARCC), Government of Peru

Geography: South America, Peru

Background

After the significant loss of lives and livelihoods during the El Niño climate cycle in 2017, the UK Department for International Trade entered into a government-to-government agreement with the Government of Peru in June 2020. The objective was to expedite the reconstruction of crucial infrastructure, including schools, health facilities, and flood protection measures. Arup, in partnership with Mace and Gleeds, was entrusted with the responsibility of executing this programme in close collaboration with the Government of Peru.

Project scope

Peru Reconstruction Programme

The UK Delivery Team (UKDT), comprised of experts from Arup, Mace, and Gleeds, has been collaborating with the Authority for Reconstruction with Changes to implement international best practices in delivering essential infrastructure and facilities. These initiatives aim to safeguard and enhance the lives of millions of people residing along the coastal regions of Peru. Recognizing the intricate nature of the program and the multitude of stakeholders and communities involved, Arup took the lead in formulating a comprehensive Stakeholder Engagement and Communications Strategy. Additionally, a Gender Equality and Social Inclusion (GESI) Strategy and Plan were developed by Arup to guide

the design and implementation of the programme.

What Arup did

Arup, in collaboration with Mace and Gleeds, is actively assisting the Peru Authority for Reconstruction with Change (ARCC) in enhancing the reconstruction and new construction efforts across 13 regions of the country. The comprehensive project involves conducting quantitative and qualitative assessments of climate and disaster risks, aiding in the design of 74 schools and 18 new health centers, and building the capacities of authorities, contractors, and communities to construct resilient infrastructure. The initiative also focuses on knowledge management for widespread replication beyond the project timeframe.

To fortify communities against future extreme weather events, the program is expediting the implementation of sustainable flood prevention measures, which include enhancing 17 river basins, 5 gullies, and 7 urban drainage systems across seven regions.

In addition, Arup has taken the lead in developing and executing a stakeholder and community engagement strategy and plan, a communications strategy, and a Gender Equality and Social Inclusion (GESI) strategy and plan.

Project Outcomes

To shape the design of over 100 construction projects, Arup spearheaded the development of a comprehensive Stakeholder Engagement and Communications Strategy, coupled with a Gender Equality and Social

Inclusion (GESI) Strategy and Plan. At the national level, we conducted a GESI and contextual analysis, scrutinizing key gender indicators such as education, employment, and domestic violence on both a national and regional scale. Recommendations were crafted for local contractors to prevent harm and ensure that all projects were contextsensitive, bringing positive impacts to local residents. Arup also played a key role in developing Pre-Qualification Questionnaire (PQQ) and Invitation to Tender (ITT) procurement documents, integrating GESI considerations into the work of contractors across regions where schools and health-posts were slated for construction or reconstruction.

Through a blend of on-the-job learning,

informal learning, and formal training, we contributed to capacity building among Peru's national and regional officials, contractors, and other industry professionals. This empowered them to independently and sustainably deliver critical infrastructure and public facilities. Over 10,000 training certificates have been issued through 800 workshops, 100 knowledge cafés, and Q&A sessions involving UKDT specialists. An online training platform featuring over 250 modules will continue to benefit Peruvian professionals long after the program concludes, leaving a lasting legacy of ongoing learning.

More info: click here



for change

Focusing on people's quality of life

Social value & equity interventions and initiatives

Client: FCDO – UK Pact Program

Geography: South America, Colombia
(Cali)

Background

The Cali metropolitan region, encompassing Jamundí, Palmira, Yumbo, and Candelaria, experiences a significant number of bicycle trips, primarily associated with daily work or study for economically vulnerable populations. Recognizing the bicycle as an affordable, efficient, healthy, and environmentally friendly mode of transport, various planning instruments at local and regional levels have proposed a potential bicycle infrastructure network connecting the metropolitan area.

Project scope

In line with the UK Pact's goal to promote sustainable and socially just cities, a concept study for a network of active mobility corridors was funded. Over 18 months, Arup collaborated with municipal technical teams, local stakeholders, cyclists, and the community to co-produce a regional network of cycle routes. This initiative aims to enhance active mobility and contribute to more sustainable and equitable urban environments.

What Arup did

Arup's multidisciplinary team defined a network of active mobility corridors to connect the Cali metropolitan region efficiently, safely, and inclusively, linking facilities and services with residential and work areas. Through the conceptual co-design of various typologies, the identification of associated services, inclusive design guidelines, and a roadmap for implementation, Arup delivered a solid proposal to the District of Cali to make active mobility a safe and sustainable activity for all, especially for children, women, elderly people and disabled.

Engaging in an ongoing co-design process with municipal technical teams and the community, Arup proposed three cycling infrastructure network scenarios, each addressing the region's challenges in distinct ways. The selection of the optimal alternative involved a comprehensive multi-criteria evaluation, considering factors such as levels of service, urban quality, and population served. This approach aimed to maximize the social, economic, and environmental impact of the project.

Once the regional network was defined, Arup adopted a needs-based approach to establish conceptual design guidelines for inclusive active mobility corridors. Additionally, a set of technical recommendations was provided to facilitate the implementation process and guide future decision-making.

Furthermore, Arup's delivery encompassed the formulation of a comprehensive communication strategy aimed at heightening awareness within the community and institutions. This strategy focused on elucidating the advantages of bicycle utilization in enhancing public health, quality of life, environmental sustainability, and economic well-being for families. Additionally, the project featured a 33-hour capacity-building module designed to foster knowledge sharing and empower the local community to spearhead active mobility initiatives. This initiative sought to facilitate urban processes imbued with social value.

Project Outcomes

Arup aimed to foster trust within the local community by actively engaging diverse stakeholders, including decision-makers, public officials, cyclists, and community members. Through the promotion of partnerships, clear governance structures, and the implementation of a communication strategy using a Gender Equality and Social Inclusion (GESI) approach, the

project successfully involved, sensitized, and educated citizens about the benefits of cycling.

The outcome was the establishment of a safe, comfortable, and environmentally friendly active mobility strategy developed from an inclusive perspective. Furthermore, the municipality enhanced its technical capacity, enabling the development of sustainable active mobility projects and the evaluation of long-term results.



interventions and initiatives

Social value

& equity

Methods and tools

for change

Careblock System Conceptual Master Plan of the

Client: C40 and Bogota District

Geography: South America, Colombia, Bogota

Background

Arup has been providing research and consultancy support to C40 Cities since 2009, engaging in over twenty projects in partnership. A recent collaboration culminated in the development of the Green & Thriving Neighbourhoods (GTN) guide, which showcases 'net zero' carbon neighbourhoods and the '15-minute city' concept. This

in partnership. A recent collaboration culminated in the development of the Green & Thriving Neighbourhoods (GTN) guide, which showcases 'net zero' carbon neighbourhoods and the '15-minute city' concept. This approach places emphasis on ensuring equitable access for residents of all ages to essential services within their neighbourhoods, thereby promoting community resilience and sustainable living. As part of this initiative, we collaborated with C40 and the City of Bogota to assist in developing an urban design for the Careblocks system using the GTN approach.

The Careblock project in Bogota is a recent endeavour with a focus on gender equity, aiming to support female caregivers by providing access to various services and personal development opportunities. This initiative addresses issues related to time poverty and social mobility. Through strategically integrating Careblocks into Bogota's urban landscape, the city seeks to enhance safety, promote local commerce, and improve overall quality of life, especially for marginalized communities. Arup's role in shaping the urban design and implementation of Careblocks underscores our commitment to social value and equity, empowering vulnerable populations and fostering inclusive, people-centred urban development.

Focusing on people's quality of life

Project scope

Arup was commissioned to develop the Conceptual Master Plan of the San Blas Careblock, collaboratively with C40 Cities, and the local administration of Bogota. The aim was to delineate short, medium, and long-term projects and actions to establish a comprehensive vision.

What Arup did

Arup supported the City of Bogotá in co-creating a long-term vision and crafting a conceptual master plan for the San Blas Careblock, projecting towards 2035. This plan serves as the foundation for strategically outlining a series of key projects and lines of action to intervene in the territory, marking the initial urban implementation of Bogotá's Careblock system.

The implementation of the plan unfolded in three stages. Initially, an integrated urban analysis was conducted to identify the main constraints and opportunities within the Careblock. Subsequently, the vision and guidelines were established for the development of a prosperous, green, and inclusive Careblock. Finally, an action plan was formulated, integrating a set of programs, projects, and actions within a short to long-term timeframe.

Project Outcomes

Arup developed the first comprehensive conceptual masterplan for Bogota's Careblock system, applying the GTN approaches, with a focus on social equity and gender inclusion. By

engaging stakeholders in collaborative sessions, Arup was able to incorporate diverse perspectives into the design. This initiative sets a precedent for future regional projects and promises significant results for urban planning efforts, particularly in integrating the principles of the 15-minute city and a gender perspective.

This initiative holds significant social value and equity, integrating principles of the 15-minute city model and a

gendered urban perspective through the GTN approach. It specifically focuses on the needs of caregivers and vulnerable groups in urban planning. Similarly, the strategic lines, urban design principles, and defined action plan are expected to guide the District of Bogota in implementing interventions for the consolidation and replicability of the District System of Care.



for change

Design (Proximity of Care Case Studies Focusing on people's quality of life

Social value & equity interventions and initiatives

Client: Van Leer Foundation Geography: Global

Background

The lives and development of most children are now shaped in cities, but these spaces are not designed with children and their families in mind. Neuroscience shows that a child's early experiences with family, caregivers and their environment provide the foundation for lifelong health, learning, behaviour, and wellbeing. For young children to make the most of their surrounding environment, places and the people in them need to cater to age-relevant developmental needs. This includes enabling and supporting caregivers to provide healthy and nurturing care. Spaces that consider the needs of children, their caregivers and pregnant women deliver social and environmental benefits for the whole community in which they live, as well as commercial return on investment.

Project scope

Arup and the Van Leer Foundation have partnered to combine their design expertise and knowledge of early childhood development with the aim to support professionals and decision makers working in urban contexts to make lasting positive change for young children, their caregivers, and pregnant women, with benefits for the whole community.

The Proximity of Care Design Guide builds on the Bernard van Leer Foundation's Urban95 initiative, which asks a bold question: "If you could experience the city from 95cm – the

height of a 3-year-old – what would you change?"

Considering the interlinks between city systems and their relationship and influence on early childhood development, the guide specifically to respond to the needs of three groups of people: children 0-5 years old, their caregivers, and pregnant women living in urban contexts. Although, when the guide is put into practice the whole community benefits.

What Arup did

The first version of the Proximity of Care Guide was launched in 2021. It was originally created primarily for vulnerable urban contexts such as informal and refugee settlements, home to hundreds of millions of children worldwide. Alongside the Van Leer Foundation, we partnered with four experienced organisations operating in these vulnerable contexts: Catalytic Action in El Mina, Lebanon; Civic in Azraq, Jordan; Kounkuey Design Initiative (KDI) in Kibera, Kenya; and Violence Prevention through Urban Upgrading (VPUU) in Khayelitsha, South Africa.

After several city authorities, private developers and urban practitioners expressed interest in applying the guide to a range of projects and initiatives, we decided to further develop the guide to benefit children, caregivers and pregnant women in any neighbourhood or city worldwide for a wider range of users. The new and current version of the guide has been developed in collaboration with partners from nice cities worldwide. They took part in a training programme that we developed

to apply the Proximity of Care approach to a particular challenge in each city and develop pilot solutions. The experience of using the guide for developing spatial interventions and implementation plans helped to form an expanded new version of the Guide. The partners are: Ciudad Emergente in Chile; Huasipichanga in Ecuador: Cidade Ativa and Estudio +1 in Brazil; arki lab in Denmark; IPOP in collaboration with Pazi!Park in Slovenia; Espacio Ludico in Uruguay; and city authorities in Waltham Forest, London; and Lima, Peru.

Project Outcomes

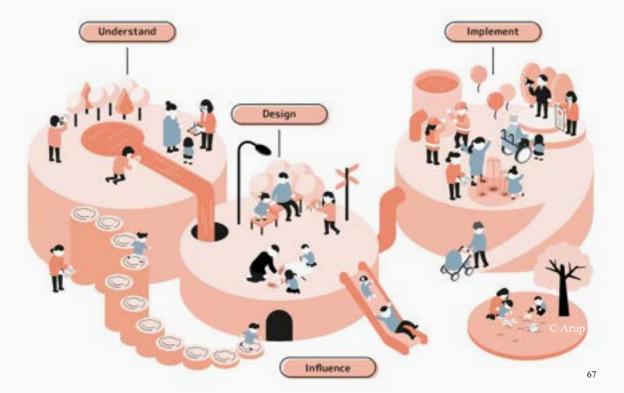
The Guide is a practical and free online tool that can be used to assess, design and build healthy, protective, stimulating and supportive spaces in a cost-effective way, and to advocate for child and family-friendly urban environments. It was developed through intensive research and piloting, and is structured

around four sections that represent the main stages in the life cycle of an urban project: Understand, Design, Implement and Influence.

It provides a compendium of guiding principles, working tools, best practice examples and recommendations, which can be used to assess, design, and build healthy, protective, stimulating, and supportive environments for young children's optimal development.

The Guide has been used in partnership with different organisations worldwide to inform the assessment, design, and delivery of child- and family friendly interventions. These include, among others, Urrunaga Neighbourhood in Chiclayo in Peru with Ocupa tu Calle and Peaton; Feel Free to Breastfeed in Brazil with Estudio +1; Sensing the City in Uruguay by Espacio Ludico; and Valvidia Neighbourhood of Care in Chile with Ciudad Emergente.

More info: click here



Methods and tools

for change

Focusing on people's quality of life

Social value & equity interventions and initiatives

Client: LEGO Foundation in partnership with Catalytic Action and PlacemakingX

Geography: Global

Background

Play is essential for children's well-being and happiness, as well as for their healthy physical and emotional growth. The built environment is a critical play and learning resource for children: in cities, there is constant opportunity to realise the potential of playful learning experiences. The city scape invites and nurtures children's innate curiosity during play, whilst providing the interactions necessary for children to practice the relational skills that enable our communities and society to be adaptable, sustainable and flourishing.

But to date there has been limited guidance on how to design neighbourhoods that encourage play beyond playgrounds, and that consider all of the environments in which children spend their time, including public spaces. By illustrating the forms that play may take in cities, this Guide provides practical and inspirational ideas to help urban practitioners and city authorities to imagine and embed small-scale play elements for children, youths, and adults in city design and planning.

Project scope

The Guide was developed considering three main questions:

Where can we add play in our cities, and what kinds of spatial elements can support playful experiences?

How can we design for play that is inclusive of different age groups, abilities, and identities?

How can play help us to develop a diverse range of skills, as well as to connect to our urban and natural environment?

What Arup did

Arup developed the Playful Cities
Design Guide as a tool for a broad
audience. It aims to inspire users from
different geographies, urban contexts,
and play cultures through the illustration
of fifteen urban spaces that collectively
create an imaginary city. The Guide
offers inspiration in the form of a very
large spectrum of possibilities for
making playful props part of the urban
realm.

The Guide complements the Playful Cities Toolkit, developed by Arup and the Lego foundation in 2021. It provides a framework for understanding the complexity and importance of play in cities, for guiding the design process for play-based interventions, and for measuring these interventions' impact.

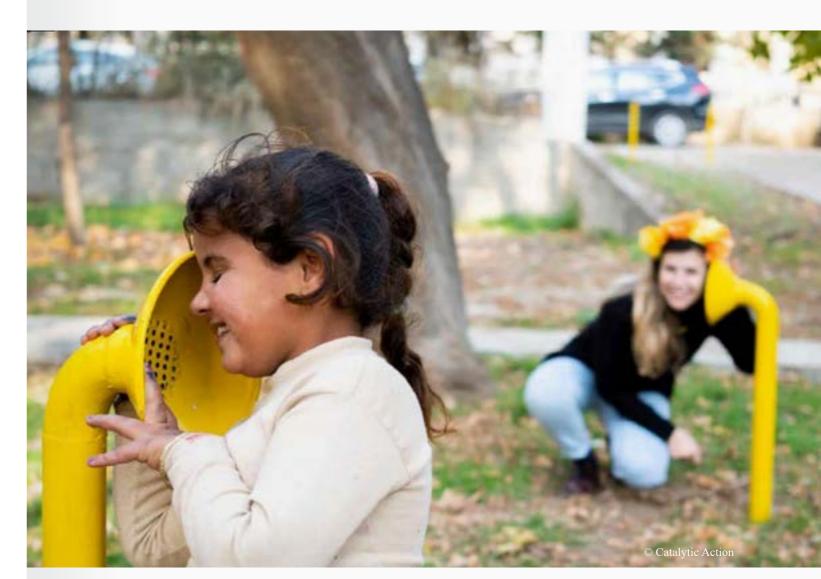
Project Outcomes

The Playful Cities Design Guide dives deeper into the spatial dimensions of play and explores how diverse urban spaces can enable play for everyone, anywhere. It provides a rich compendium of play elements and practical examples that can be adapted and used in different design processes and socio-cultural contexts to trigger and support play as a crucial element of our everyday life. These design elements have been associated with 15 urban places, but can also be integrated in other places and arrangements.

The Playful Cities Design Guide also includes a "Catalogue of Play Ideas", a summary of play props to inspire readers by illustrating the diversity of play elements that could be implemented in different places in our cities.

The Catalogue of Play Ideas can be cut out as a card set and used as a playful tool in participatory design activities. For example, if a project aims to address the lack of physical activity of elderly population in a neighbourhood, you could select cards that respond to 60+ age group, and that trigger physical skills. In a workshop, you could show the images of the possible intervention locations, and use this card selection to discuss ideas, and start creating..

More info: click here



Playful Cities Design Guide

60

Social value & equity interventions and initiatives

Client: Arup funded research in partnership with the United Nations Development Programme (UNDP) and the University of Liverpool

Geography: Global

Background

A gender-inclusive and responsive approach to urban planning and design is essential to the future of our cities, creating places where everyone can live, work and thrive. By designing urban areas that are responsive to the needs of all women - and increasing the participation of women in urban governance, planning, and design - our cities will become safer, healthier, fairer and more enriching spaces for all.

Project scope

Designing Cities that Work for Women, produced in partnership with the United Nations Development Programme (UNDP) and the University of Liverpool identifies four key areas of focus for improving women's lives in cities and outlines a new gender responsive approach to planning and design. It includes a wide range of case studies and supporting recommendations for city planners, developers, community groups and city authorities, globally.

What Arup did

Through a thorough literature review and analysis of case studies, interviews, surveys and workshops across 20 countries, spanning 6 continents, this report provides insights into women's lived experiences and sets out actions and recommendations for change.

A comprehensive literature review established the evidence base and helped define the project's scope. Case studies from different socio-economic and urban contexts identified best practices and served as inspiration. A global survey of 770 respondents, expert interviews, and co-creation workshops with diverse groups of women from 20 countries across six continents provided further insight into women's lived experience of cities.

Arup's experts from different regions and a Technical Review Committee, made up of senior representatives from Arup, UNDP, the University of Liverpool, and an independent collaborator, provided global perspectives and critical feedback.

The research team treated the ethical implications of the project with the utmost seriousness and respect and took all necessary steps to meet the highest standards of research ethics. A considerate and robust set of moral principles underpinned the primary research, given the sensitivity of this topic.

Project Outcomes

Drawing on the research findings, this report presents four key thematic areas that can be used to influence how cities are designed to be more inclusive and welcoming for women. These four areas are:

- 1. Safety and security
- 2. Justice and equity
- 3. Health and wellbeing
- 4. Enrichment and fulfilment

Methods and tools for change

> The report also includes a genderresponsive project roadmap to help respond to the four key areas and deliver these gender-responsive strategies. Arup aims to monitor and review the impact of our work after five years to get an idea of its success and the work that still needs to be done.

More info: click here



Designing Cities that Work for Women Case Studies

05 Inputs

for change

Methods and tools

Focusing on people's quality of life

Social value & equity interventions and initiatives

Client: Co-created and co-delivered with C40, with funding from Citi Foundation

Geography: Global

Background

If city responses to climate change do not acknowledge and respond to the social and economic barriers that feed inequities and are exacerbated by the climate crisis, Mayors may suffer politically, losing public support and therefore their power to deliver on their wider agenda. Cities must design and deliver climate actions in an inclusive and equitable way to serve all city communities and groups without compromising on economic prosperity.

Whilst each inclusive climate response is designed to answer communities' needs and must respond to local context, geography and culture, there is also a significant opportunity to share learning between cities on how to deliver inclusive and equitable climate action globally.

Project scope

The Inclusive Community Engagement Playbook has been developed as part of this need to share best practice in inclusive engagement. It is a working resource designed to provide cities with a practical guide to engage their communities in climate action, particularly those hard to reach and often excluded groups (e.g. women, minorities, children, elderly, informal workers, migrants).

What Arup did

We have collated and curated over 40 case studies and ready-to-use engagement methods for cities of differing capacities to inspire urban practitioners, citizens and city leaders around the world to drive forward the inclusive climate action agenda. The Playbook also sets out key principles, exercise sheets, and focus pages investigating innovative and emerging approaches to engagement, from using the arts to digital platforms.

Project Outcomes

This playbook is intended to provide practical support to develop a comprehensive and effective engagement strategy. It can be used by any official across city departments involved in the process of developing and implementing climate action to reduce emissions or adapting to the impacts from climate change. The principles contained within the playbook are however relevant for any type of engage your community.

This playbook aims to particularly support cities in reinvigorating the traditional cycles of engagement by presenting an innovative and diverse selection of tools. They are of varying complexity to cater to cities with different needs and capacity. This playbook can be used by cities in a range of scenarios when undertaking climate action planning: at the scoping stage, during planning, design, and implementation.

More info: click here



C40 Inclusive Community Engagement Case Studies

72

Social value & equity interventions and initiatives

References

- [1] Policy Note and Model available at www.gov.uk/government/publications/ procurement-policy-note-0620-takingaccount-of-social-value-in-the-award-ofcentral-government-contracts
- [2] www.arup.com/perspectives/publications/research/section/auckland-2050
- [3] https://hdr.undp.org/en/content/humandevelopment-index-hdi
- [4] https://www.oecd.org/wise/measuring-well-being-and-progress.htm
- [5] John Stuart Mill, Utilitarianism, 1863
- [6] John Rawls, A Theory of Justice, 1971
- [7] Angela Glover Blackwell, 'Equity is...' on *PolicyLink blog*, 5 October 2016
- [8] https://ec.europa.eu/eurostat/web/quality-of-life
- [9] https://www.oecd.org/wise/measuring-well-being-and-progress.htm#framework
- [10] http://www.usgbc.org/resources/equity-definitions
- [11] European Union, European Agenda for Culture, From social inclusion to social cohesion – the role of cultural policy, 2019
- [12] http://www.forbes.com/sites
- [13] Jason Edgerton et al, 'Education and Quality of Life', in K Land et al (eds), Handbook of Social Indicators and Quality of Life Research, Springer 2012
- [14] Michael Marmot, Status Syndrome: how your social standing directly affects your health, Bloomsbury 2004
- [15] https://www.thinknpc.org/resource-hub/ten-steps/
- [16] https://measure.whatworkswellbeing. org/measures-bank/who-5/

- [17] Sarah Carmichael, *The research is clear:* long hours backfire for people
- [18] Shivonne Gates et al, Transport and inequality: an evidence review for the Department for Transport, NatCen 2019
- [19] http://www.ohchr.org/en/what-arehuman-rights
- [20] https://ukhsa.blog.gov.uk/2018/02/28/ health-matters-community-centredapproaches-for-health-and-wellbeing
- [21] https://localtrust.org.uk/news-and-stories/blog/powerful-localcommunities-are-key-to-a-sustainable-future/
- [22] A Bowling, 'What things are important in people's lives? A survey of the public's judgements to inform scales of health related quality of life' in *Soc Sci Med.* 41(10), 1995
- [23] https://www.djsresearch.co.uk/
- [24] http://www.oecdbetterlifeindex.org/topics/life-satisfaction
- [25] Sarah Carmichael, 'The research is clear: long hours backfire for people and for companies' in *Harvard Business Review*, 19 August 2015
- [26] Danny Burns et al, *Making community* participation meaningful, Policy Press, 2004
- [27] Cabe Space, *The Value of Public Space*, 2003
- [28] http://www.sciencedirect.com/topics/psychology/social-connectedness
- [29] <u>https://www.sciencedirect.com/science/article/pii/S2665972720300787</u>
- [30] https://culturallearningalliance.org.uk/diverse-representation-deeper-engagement

Methods and tools for change

- [31] https://www.oecd.org/inclusivegrowth/#introduction
- [32] Ana Cárcaba et al, 'How does good governance relate to quality of life', in *Sustainability*, 2017, 9, 631
- [33] Joseph Stiglitz, 'GDP is the wrong tool for measuring what matters' in *Scientific American*, 1 August 2020
- [34] https://www.ilo.org/global/topics/decent-work/lang--en/index.htm
- [35] Jason Edgerton et al, 'Education and Quality of Life', in K Land et al (eds), Handbook of Social Indicators and Quality of Life Research, Springer 2012
- [36] International Centre for Research on Women, A second look at the role education plays in women's empowerment, 2005
- [37] See, for example, https://www.hs2.org.uk/educational-resources
- [38] Partha Dasgupta et al, The Economics of Biodiversity, HM Treasury 2021
- [39] Procurement Policy Note 06/20, Taking account of social value in the award of central government contracts, Cabinet Office, 2020
- [40] https://www.jrf.org.uk/report/
 povertyparticipation-and-power-how-build-all-communities
- [41] https://www.carnegieuktrust.org.uk/
 publications/empoweredcommunities-in-the-21st-century
- [42] https://worldhappiness.report/ed/2019/ happiness-and-voting- behavior/
- [43] http://www.healthypeople.gov/2020/ topics-objectives/topic/socialdeterminants-health/interventionsresources/civic-participation
- [44] Sherry Arnstein, 'A Ladder of Citizen

- Participation', in *Journal of the American Planning Association*, Vol. 35, No. 4, July 1969
- [45] Andy Pennington and Rhiannon Corcoran, *How does community involvement in decision-making impact on wellbeing?*, What Works Centre for Wellbeing, 2018
- [46] European Commission, *The Human-Centred City*, 2019
- [47] Claire Harding and Nikita Quarshie, Public planning – a manifesto for London, Centre for London 2021
- [48] Arup, Development without displacement, June 2019
- [49] https://socialvalueuk.org/resource/ a-guide-to-social-return-oninvestment-2012
- [50] Veronica Devenin, *Collaborative* community development: a guide for managers, Network for Business Sustainability, 2017
- [51] Thi Lan Phuong QUYEN, et. Al. 'Developing a Monitoring and Evaluation System for Urban Planning', Urban and Regional Planning Review, 2018, vol. 5, pp. 88-110
- [52] Jody, Z, K & Ray, C, R.. Ten Steps to a Results-Based Monitoring and Evaluation System. A Handbook for Development Practitioners, The World Bank Washington D.C., 2004
- [53] Local Government Association, *Culture-led regeneration: achieving inclusive and sustainable growth*, 2019

75

ARUP

Contact:

Sara Candiracci

Global and Europe Leader

e: sara.candiracci@arup.com

Corso Italia 1, 20122 Milan, Italy

Anne Parkes

UKIMEA Leader

e: anne.parkes@arup.com 6th Floor 3 Piccadilly Place.

M1 3BN Manchester, UK

Megan Gee

Americas Leader

e: megan.gee@arup.com

560 Mission Street, 94105 San Francisco, USA

Callum Hooper

Australasia Leader

e: cal.hooper@arup.com

699 Collins Street, 3008 Docklands, Australia