Being able to imagine radically new futures is not the job of one person or profession, but can be achieved through the collective effort of many. In May 2019, we ran an interactive exhibition called The Next 100 Years as part of our Bartlett 100 celebrations. Over two weeks, we asked visitors to the exhibition and our followers on social media to tell us what they thought were the big questions facing the built environment over the next 100 years. We asked them to consider where it's succeeding, where it's failing, and how it could be better.

From the hundreds of responses we received, we found 12 core themes. These are the building blocks from which we have created our commitment to change.

Overleaf, we introduce each theme with some of the ways in which we're already engaging with these issues at The Bartlett – and some of the questions you've posed for the built-environment for the next 100 years.

We are committed to making these changes happen. In October 2019, The Bartlett School of Architecture declared a climate and ecological emergency, committing to making a vital contribution towards building an ethical, equitable, healthy, biodiverse, fair and globally prosperous future. The Bartlett Promise, which we launched the same month, is a first step: a long-term project to attract students from a broader range of backgrounds to tackle the lack of diversity in the sector.

We can't do this alone. We want this commitment to act as a call-to-action for academics, alumni and practitioners to share with us their ideas, projects and research, so that together, we can build a better future.

ucl.ac.uk/bartlett/build-a-better-future
HOW DO WE BUILD A BETTER FUTURE?

[1] **Climate Change:** we urgently need to figure out how we decarbonise as a society, but we must accept that this alone will not be enough to tackle climate change.

[2] **Resilience:** we will need to adapt our built environment if we are to be resilient to threats such as sea-level rise.

[3] **Equality:** we want to see civic trust restored, the voiceless protected and social and cultural divides bridged on the path to achieving equality.

[4] **Recycling & Reuse:** we need to acknowledge that we waste too much and that the construction industry must recycle and reuse building stocks, and build new with sustainable materials.

[5] **Housing:** we need to understand why affordable housing isn’t being built in cities at anywhere near the volume we need it to be and how can we change it.

[6] **Public Goods:** We want to see real-estate investment prioritise public goods, such as public space.

[7] **Design Education:** we want to see more politics, ethics and social issues being part of design education.

[8] **Inclusivity:** we should be designing for all, not for an affluent minority.

[9] **Planning Policy:** we want to see better policy and regulation in planning and real estate to drive up quality standards and beat corruption and cronyism.

[10] **Nature:** we need to make nature part of the city.

[11] **Data & Technology:** we need to integrate data into the city openly and fairly.

[12] **Health & Wellbeing:** and while it’s all very well having smarter, more efficient data-driven cities, we need to design for health and wellbeing too.
Our UK TIMES model underpins government plans to transition the UK to a low-carbon future. Our data is helping the global shipping industry achieve ambitious greenhouse gas emissions reduction targets. We’ve helped set the standard for safer, cheaper, more energy-efficient street lights and we’re building a community to radically rethink the construction industry.

Your questions for the next 100 years:

How can the built environment professions help to reduce the impact of climate change?

Why do we see economic development as more important than climate change, health and social poverty, when they have such dire implications?

Do we need to find an alternative to capitalism before our environment and our societies become uninhabitable?

Is preserving our built heritage more important than keeping the planet alive? How do we balance the two?

Shouldn’t we be focusing more on climate change and the circular economy, and less on developing highly conceptual and technical work?

Cities are inherently more efficient than other urban, suburban and rural living places. So, how do we build more successful and sustainable cities?

We’ve contributed to creating a paradigm shift in how people in the heritage sector understand the risks of climate change to cultural heritage. By applying epidemiology to energy, we are changing how energy consumption data is gathered and analysed, and we’re investigating how the blockchain could pave the way to a sustainable energy economy.

Your questions for the next 100 years:

How do we rapidly move towards well-insulated, low-carbon heated homes and buildings?

How can we achieve collaborative planning and design that is successful in ensuring sustainable and resilient cities?

Can renewable energy alone be enough to meet the world’s energy demands?

What does the future of research and development look like in the design and construction industry to ensure urban resiliency and sustainability?

How do we make cities ready for sea-level rise?

We are home to UCL’s first Vice-Dean for Equality, Diversity and Inclusion. Our alumni have founded organisations aimed at democratising investing in property and fostering participatory design. Our projects, such as The Prosperity Index for London and the RELIEF Centre, are working with communities to rethink how we can build prosperous and inclusive futures.

Your questions for the next 100 years:

How can we design and manage the built environment to reduce social inequalities?

Will resource and land distribution continue to increase global economic and social disparities? And if so, how do we address it?

Will the built environment in the future still be as white-male dominated as it is today?

To be able to create socially just spaces, we need buy-in from those who benefit – materially, socially, politically – from the unequal use and ownership of space. How do we do that?

How will the kids feel the same satisfaction we did, if they can’t fly to Spain?
Our Circular Cities Hub is testing how models of the resource-conscious city might work in practice. We’ve shown that social housing refurbishment is often better than demolition when considering social, environmental and energy factors. And we’re working with a UCL-wide multidisciplinary team in an effort to design out plastic waste from our systems of production, using a combination of science, infrastructure and policy.

**Your questions for the next 100 years:**

What if we didn’t build anything new for the next three generations and instead converted existing buildings and learnt to devise new materials from waste?

How do we learn to reuse more and demolish less?

How do we help cities transition into a plastic-free era?

Should we build new cities to last or should we think of new cities as recyclable entities?

How do we use materials and energy without producing so much waste?

How do we make sure that cities don’t come to be seen as resource burdens?

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Our research has challenged policy-makers to rethink their approach to the housing affordability crisis to address the drivers of speculative demand, as well as focusing on supply-side issues. We’re looking at the role of self-build to achieve housing targets and foster community and quality of life, and we continue to drive an ambitious agenda for design quality through the Place Alliance.

**Your questions for the next 100 years:**

How can we plan, fund and build enough affordable housing to meet the needs of a rapidly urbanising global population?

How can we combat NIMBYism?

Buildings, like humans, have a life expectancy. Most of the blocks of flats built in the 20th century will not last until the 22nd century. Are we ready to respond to a potentially massive rise in demand for houses?

How can we make housing more affordable?

How do we address the rapid expansion of slums and housing needs in Africa?

How can we balance the need for housing provision with sustainable development principles that minimise unnecessary destruction to the natural environment?

How do we build housing that cultivates peaceful communities?

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Our researchers are reshaping our understanding of high streets with award-winning projects in the UK, and developing analytical tools to make the case for walking in transport planning. Our economists have established the terms for a state investment bank for Scotland to support policies of social inclusion, the transition to a low-carbon economy and the challenge of an ageing population.

**Your questions for the next 100 years:**

What do we do with a defunct high street?

What do we do about disappearing public conveniences?

How do we ensure that real-estate investment enhances the quality of life in residential communities and public spaces?

How does society flourish with de-growth over the next century?

How do we make public spaces free and democratic?

How do we make sure we have the civil and political structures in place to adapt cities quickly and fairly to unfolding changes in society, the economy and the environment?

Should all the built-environment professionals sign up to a code of ethics that puts public good above the client?
We’ve opened new cutting-edge facilities in East London and launched new courses responding to the impact of biotechnology, computation and climate change on the built environment. This includes our integrated Engineering and Architectural Design MEng for undergraduates – a pioneering collaboration with UCL’s Department of Civil, Environmental and Geomatic Engineering.

**Your questions for the next 100 years:**

- Making buildings is a science. Should it be taught as such?
- Is technology going to take the place of architects designing the built environment?
- How can we rethink architectural education to include more politics and ethics?
- How do Western schools collaborate with organisations in the developing world to forge a more sustainable method of urban infrastructure that decouples from the developing world’s history and past economy?
- How do designers design with every aspect of society in mind?
- What will architecture be like for off-world, low-gravity environments?

The dropped curb was invented in 1963 by our alumnus Selwyn Goldsmith, who was also highly influential in establishing the idea of inclusive public space. Today, we are exploring the possibility of a Foundation course in architecture for the visually impaired. We have published influential research on the future of LGBTQ+ night-time spaces. Our researchers are using participatory design to create infrastructure that benefits residents and refugees, such as in Lebanon.

**Your questions for the next 100 years:**

- How do we promote social and physical connection in an increasingly digital world, particularly for the elderly?
- How do we adapt the built environment to new life styles and new kinds of demand, such as for ageing populations?
- How can we use new technologies and new media to create a participatory culture in the making of the built environment?
- How do we overcome emerging cultural divides between those who live in cities and those who don’t?
- How can we achieve the first city in the West post-1960 to re-prioritise its kerbside in the interests of the pedestrian majority, rather than for parking cars?

Through the Sierra Leone Urban Research Centre, we have helped get informal settlements recognised in national land policy and development plans. In Lima, Peru, our researchers have used drones, community mapping and 3D printers to influence local and national policy for the urban poor. In Europe, we’ve shown how tram-based systems can connect cities and regions to improve prosperity via the €26.8m Sintropher project.

**Your questions for the next 100 years:**

- What are the social, technical and policy developments needed to ensure homes that maximise human wellbeing and happiness?
- How do you remove the profit motive from the built environment and what do you replace it with?
- Road transport is the single biggest cause of CO₂ emissions in the UK. What viable alternative solution can we offer people who rely on their car for their livelihood?
- What does a truly pedestrian city look like and how do we achieve it?
- How do we ensure that local planning authorities are free from corruption or influence by vested interests, so that what they choose to allow is genuinely what the community wants?
- Should we explore polycentricity within cities as well as rurbanisation?
Our researchers are experimenting with bio-integrated architecture, where hydrophilic conditions are embedded in building and material design, and the impact of biophilic interior design on health and wellbeing. Our real-estate practitioners are looking at the relationship between real estate investment trends could mean for green infrastructure in cities.

Your questions for the next 100 years:

Will there be more plants in the city of the future?

How do we create wealth without compromising our natural resources?

How do we make buildings and cities that enable people and nature to survive?

Why have The Bartlett and many other leading UK schools of architecture paid so little attention to real environmental impacts of the built environment over the past 30 years?

Is growing food one way to integrate nature into the city, such as via vertical farming?

Our researchers are behind online platform Colouring London, which collects, collates and visualises statistical data about every building in London, and are modelling energy data on London’s building stock within the M25. We ran one of the earliest projects to address the internet of things and are striving to create a stronger base of data and evidence for regional policy-making.

Your questions for the next 100 years:

How will the built environment promote civic trust and engagement in an increasingly disenfranchised and digitised world?

How can we create an environment which connects history, art, nature and AI?

How do we design, construct and operate smart buildings that use big and small data to support creative, comfortable, healthy lifestyles?

How do we confront surveillance capitalism?

Where is our future common ground?

Is it digital platforms?

We need to think harder about what we want the ‘smart’ in ‘smart cities’ to mean. How do we get over our current obsession with tech?

We’ve helped demonstrate the link between planetary health and human health. We’re part of a four-year project investigating the systems that connect urban development and health and in 2019, we launched a Master’s programme to create a new generation of socially sensitive urban health practitioners. And we are going beyond the decibel scale, to try to measure noise in terms of human wellbeing.

Your questions for the next 100 years:

How do we remove barriers to people getting about in healthy ways, without restricting or excluding others from enjoying the space that we are travelling through?

Access to lovely green spaces could lead to significant savings on the cost of treating mental illnesses. So, how do we persuade public and private funders to genuinely join up and invest in high-quality social housing?

How do we make sure that spaces for remote working or self-build spaces are efficient, sustainable and good for people?

How do we make sure that we consider the effect of our public and private spaces on society’s health and wellbeing?

Questions have been edited for clarity and in some cases multiple suggestions have been combined to avoid duplication.
LET’S BUILD A BETTER FUTURE TOGETHER

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