

The Future of Cities Post Covid

4 June 2020



DIGITAL

DISRUPTION

— @BREI —



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Introduction

DigitalDisruption@BREI is a unique consortium of Academics, Real Estate Asset Managers, Developers, Property Services Firms, Funding Institutions, Lawyers and other Professionals and Representative Trade bodies, which will drive adoption of both inventive and innovative 'deep tech' in the Global Real Estate market. Please click [here](#) if you would like further information about the consortium.

The focus of the consortium is the development and deployment of research that relates to the current and future world of Real Estate. PropTech, Real Estate FinTech and PropRegTech are all fast moving sectors which are having a radical impact on what has historically been a slow moving, traditional and conservative industry.

Accurate, critical and verified data is essential as an enabler in Real Estate for data analytics, climate change and sustainability, valuations and transactions using blockchain and AI techniques. We are launching the consortium with a series of virtual events which are being held over the summer.

The Future of Cities Post Covid is an invite-only event led by two of our founding sponsors, Nuveen and Greystar. We are delighted to announce that Arup have also joined as a founding sponsor of the consortium, other organisations who we have been coordinating with over the recent months include UCL Estates, RICS, British Property Federation, Leeds and Newcastle City Councils and other UK and international participants.

The second event is a workshop on the use of data throughout the development process to improve the design, build and operation of High Rise Residential Buildings (HRRB) following the Hackitt Report on building safety. This will take place at the end of June.

The final event is a workshop on IoT data for smart cities/sustainability and our proposal for a data marketplace in mid-July.

The consortium is a joint venture between the Bartlett Real Estate Institute and Resilience Partners Limited, and with Professor Andrew Edkins and me acting as joint chairs. We are especially grateful to the time, support and encouragement from Professor Philip Treleaven (UCL Computing), Kyle McFadden of Greystar and Jack Sibley of Nuveen for our current progress during these challenging times.

Jeremy Barnett

*Founder, RPL and Honorary Professor of Algorithmic Regulation
The Bartlett Real Estate Institute, UCL*

Welcome

The covid-19 pandemic has generated a profound shockwave to our way of life that society has not experienced in a generation. The pandemic is first and foremost a human tragedy and our thoughts are with those affected.

The world is still in the process of reacting to the pandemic and managing a transition back to a 'new normal'. This will remain the primary objective for the foreseeable future. However, it is also important to consider the longer term impacts of covid-19, particularly for cities and dense urban environments that have been hardest hit by the crisis.

Cities indelibly drive the way we live, work and play. Since 1950, the world's urban population has risen six-fold, the number of cities with over 1 million inhabitants increased from 83 to 548¹, and cities have become largely regarded as the dominant driver of growth and human prosperity².

Cities face many challenges in a post-covid world. Yet this is also a unique opportunity for cities to tackle some of the negative environmental and socio-economic consequences that their growth has created, from carbon emissions and air pollution, to affordability and inequality, to congestion and sprawl.

What trends will be accelerated or decelerated as the world emerges from the pandemic? How can cities become more resilient, sustainable and socially inclusive? What role will technology play in enabling the city of the future? What will our cities look like five or ten years from now?

To begin to answer these questions, it is crucial to look across industries and areas of expertise. We have assembled a panel of experts from academia, urban planning, technology, government and real estate to explore how these questions will shape the future of the built environment. No one has all the answers, but we hope that this event's speakers can provide some insight on where the world and its cities are heading.

This is an opportunity for cities and its stakeholders to collectively create a more resilient world and a better future. We hope that this discussion is interesting, provides new perspectives and helps us to consider new possibilities.

Kyle McFadden

Director

Greystar

Jack Sibley

Innovation & Technology Strategies

Nuveen Real Estate

¹ United Nations, 2018

² World Bank, 2013

Agenda

Opening remarks

- Professor Andrew Edkins, UCL

Panel – How will cities have to change coming out of covid-19?

- Moderators: Michaela Hancock, Managing Director, Greystar & Kyle McFadden, Director, Greystar
- Mark Allnutt, Senior Managing Director, Greystar
- Professor Mike Batty, UCL
- Richard Boyd, Arup
- Nick Robb, Department for Business, Energy and Industrial Strategy, UK Government
- Josh Artus, Centric Lab
- Dr. Tuomo Kuosa, Futures Platform

Roundtable Discussion

Break

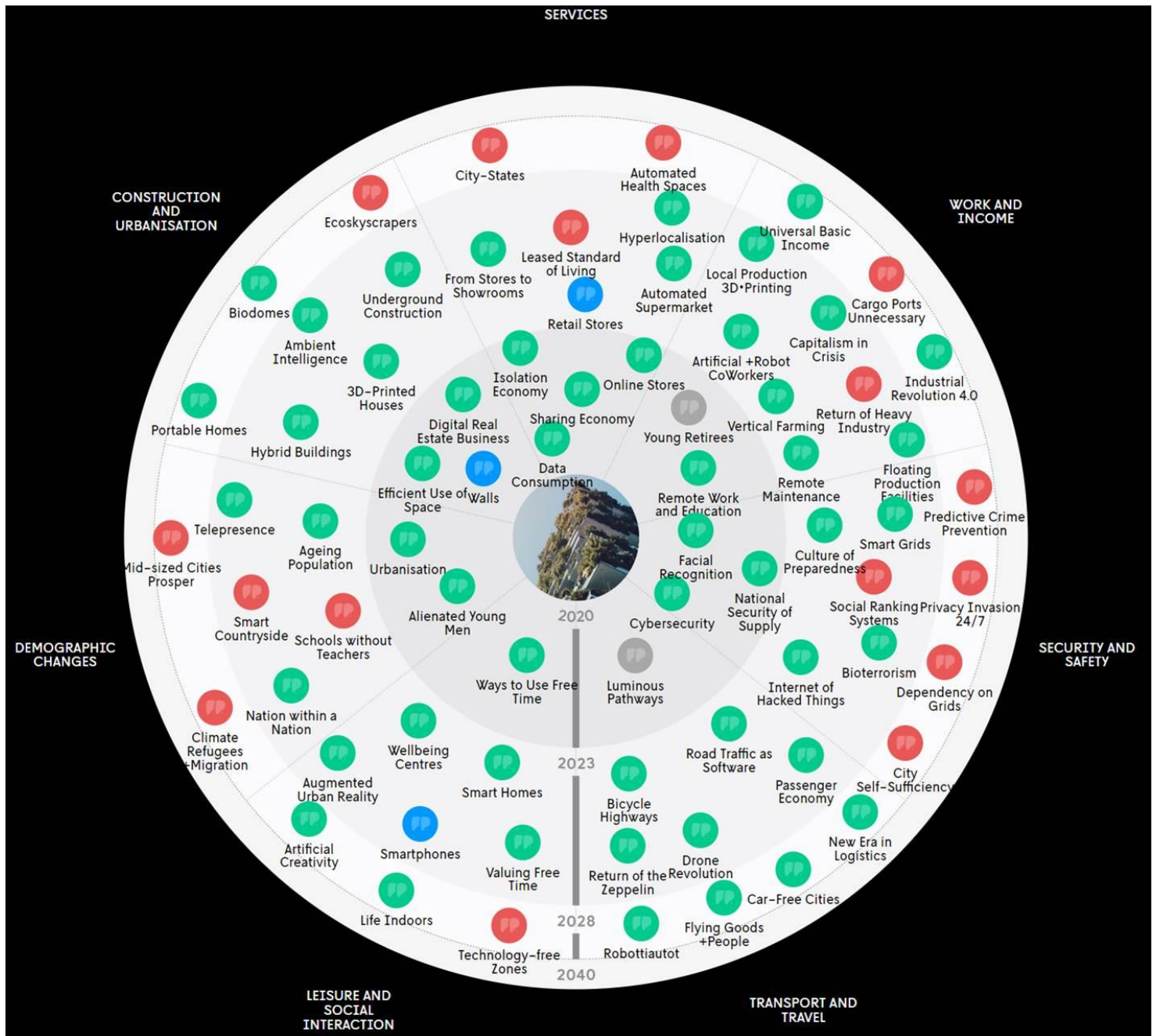
Panel – How will covid-19 change what the city of the future looks like?

- Moderator: Abigail Dean, Global Head of Sustainability, Nuveen Real Estate
- Alice Breheny, Global Head of Research, Nuveen Real Estate
- David Rudlin, URBED
- Andrew Curry, School of International Futures
- Roelof Opperman, Fifth Wall
- Sarah O'Carroll, Ellen MacArthur Foundation
- Dror Poleg, Rethinking Real Estate

Roundtable Discussion

Further detail on all panellists is provided in the Participant Profiles section

Cities Future Trends Radar Futures Platform



Please visit <https://go2.futuresplatform.com/fp-radar-visit/e6606913-5926-4055-b089-2f3e1c5603a2> for an interactive version including further information on all the trends contained within the radar. This page will expire shortly after the event.

For the attendees and participants of this event, Futures Platform is also offering exclusively a free 30-day trial of the digital foresight solution, by going to <https://foresight.futuresplatform.com> and using code FUTURECITIES20

Participant Profiles



Andrew Edkins

University College
London

Andrew Edkins is a Professor at the Bartlett, UCL's faculty of the built environment. Following a degree in economics, his career started in major construction but he shifted to academe at UCL with an interest in the management of projects. Research into PFI led to an opportunity to move back into the private sector working for a PFI/PPP provider where he stayed for five years before returning to UCL to set up a new MSc. Since being back at UCL he has been a Vice Dean, and Director of two parts of the Bartlett, most recently being the inaugural Director of the Bartlett Real Estate Institute. With degrees that span economics and management and a career that has involved being both a practitioner and an academic, Andrew is a strong believer in the need for interdisciplinary working within and across sectors.



Michael Batty

University College
London

Michael Batty is Bartlett Professor of Planning at University College London where he is Chair of the Centre for Advanced Spatial Analysis (CASA). He has worked on computer models of cities and their visualisation since the 1970s and his recent publications are *Cities and Complexity* (2005) *The New Science of Cities* (2013) and *Inventing Future Cities* (2018), all published by The MIT Press. He was Professor of City Planning and Dean of the School of Environmental Design at the University of Wales at Cardiff from 1979 to 1990 and then Director of the National Center for Geographic Information and Analysis at the State University of New York at Buffalo from 1990 to 1995. He is a Fellow of the British Academy (FBA), the Royal Society (FRS), and was awarded the CBE in the Birthday Honours List in 2004. He received the Gold Medal of the Royal Geographical Society (2015) and the Gold Medal of the Royal Town Planning Institute. He is the editor of *Environment and Planning B*.



Alice Breheny

Nuveen Real Estate

Alice is Global Head of Research for Nuveen Real Estate. She manages a team of analysts, for Nuveen Real Estate, devoted to researching the direct property market in Europe, the United States and Asia. She is also a member of the Global Executive Leadership Team.

Alice jointly runs the research and development (R&D) function, which ensures that our research is applied and remains at the forefront of product development. The R&D team identifies global, structural trends and finds appropriate opportunities for real estate investors. Alice is a member of the investment committee and the global product committee, ensuring that the research feeds into every stage of the investment process and product development.



Abigail Dean
Nuveen Real Estate

Alice is Head of Sustainability for Nuveen Real Estate. Abigail oversees the sustainability strategy, which positions Nuveen Real Estate as a global leader on environmental, social and governance issues, and ensures the business is well placed to pursue growth opportunities, whilst minimising the risk of accelerated depreciation and early obsolescence within Nuveen Real Estate's portfolio of assets. She is also a member of the Global Executive Leadership Team.

Abigail joined the firm in 2016. Abigail previously worked at JLL, where she led on sustainability for the property and asset management business, embedding it into core processes and deliverables. She began working in the real estate industry in 2008.



Mark Allnutt
Greystar

Mark Allnutt is senior managing director and business leader for Greystar in Europe, and is tasked with growing Greystar across the region into the dominant rental housing business. He joined Greystar in 2014 to start the company's multifamily efforts in London, and under his leadership, the UK business has grown to include a pipeline of over 3,800 units with £4.6bn of assets under management.

Prior to joining Greystar, Mark was group executive commercial director of Thames Valley Housing (TVH), where he was responsible for originating and managing TVH joint venture vehicles. Mark was a founding director of Fizzy Living, the multifamily subsidiary of TVH backed by a sovereign wealth fund. He has a wealth of experience in the management of multidisciplinary teams to structure, deliver and manage residential ventures.



Michela Hancock
Greystar

Michela Hancock is a managing director for Greystar in the UK, where she is responsible for driving the company's fully integrated development process. Michela oversees all project financing, amenity and unit planning, design, entitlements, construction, and lease-up efforts on high-density multifamily developments. She is also targeting a pipeline of Greystar projects for London, and helping educate the market and local government about the benefits of multifamily housing. Prior to joining Greystar in 2015, she served as development director for Grainger PLC in the UK and development manager for Bozzuto Development Company in the US. Michela holds a master's degree in real estate development from Johns Hopkins University. She is currently vice chairman of the Urban Land Institute's UK Residential Council, an active member of the British Property Federation Build to Rent Committee, and a board member of the United Kingdom Apartment Association.



David Rudlin

URBED

David is a director of URBED, past Chair of the Academy of Urbanism and Honorary Professor at Manchester University. In 2014 he was the winner of the Wolfson Economics Prize and has recently published his third book *Climax City* written with Shruti Hemani through RIBA Publishing. He also writes a monthly column for *BD Magazine*. A planner by training, he joined URBED in 1990 having worked for Manchester City Council on the redevelopment of Hulme. At URBED he has worked on major projects across the UK including the award winning New England Quarter in Brighton and Trent Basin in Nottingham as well as the Greater Manchester Spatial Framework. His previous book *'Building the 21st Century Home'* was published in 2009 by Routledge. He has also co-authored with Rob Thompson and Sarah Jarvis *Urbanism* (2016) for the Academy of Urbanism also with Routledge.



Roelof Opperman

Fifth Wall

Roelof Opperman is a Managing Director on the Real Estate Technology Investment team at Fifth Wall, where he focuses on technology and innovations within the multifamily, office, and hospitality real estate asset classes. Roelof has led Fifth Wall's investments in Lyric, Eden, Appear Here, Hippo, Industrious, Loggi, Recharge, Lime, and Aurora Solar. He is Co-Chair of the ULI Europe Technology and Real Estate Product Council and a member of the ULI UK Executive Committee.

Previously, Roelof worked at Norwest Venture Partners, Evercore Partners, Goldman Sachs, and Bridgewater Associates. Roelof is originally from Johannesburg, South Africa, and graduated Phi Beta Kappa, magna cum laude, from Emory University. He is also a Chartered Financial Analyst.



Dror Poleg

Rethinking Real Estate

Dror Poleg is the author of *Rethinking Real Estate* and the Co-Chair of the Urban Land Institute's Technology and Innovation Council in New York. His insights on the future of cities and buildings have been featured in publications including the *Wall Street Journal*, *Bloomberg*, *NBC*, *Forbes*, *The Globe and Mail*, and *Business Insider*. Dror briefs and advises senior executives from multibillion dollar companies such as AvalonBay Communities, British Land, Liberty Mutual, Dubai Holding, and Cushman & Wakefield.

Previously, Dror served as Vice President of Kardan Land, where he oversaw the expansion of a \$3b property portfolio in partnership with investors such as Blackrock MGPA and Frasers Properties; as CEO of Otherz.com, an app development company; and as Head of Digital at Standards Group, a creative agency that served clients such as IKEA, Scandinavian Airlines, and Shangri La Hotels. He holds a Masters in Economic History from the London School of Economics.



Sarah O'Carroll

Ellen MacArthur
Foundation

Sarah joined the Ellen MacArthur Foundation in 2019 as the Government and Cities Network Manager. Sarah facilitates networking and knowledge sharing amongst a community of cities around the world. Sarah supports these cities to accelerate the circular economy within their cities and works with them to build collaborations with each other as well as with the Foundation's broader network of businesses and learning institutions. Before joining the Foundation, Sarah worked for a green economy NPO in Cape Town, South Africa working on various circular economy and green economy initiatives.



Nick Robb

Department for Business,
Energy and Industrial
Strategy, UK Government

As Senior Policy Adviser Construction Finance for BEIS, Nick has worked with British Banks, Treasury, and the House of Lords on the rationale for replacing EBRD with a UK National Infrastructure Bank. He has also been involved in advising the Construction Leadership Council on transitioning the construction sector business model through Fintech and MMC volumetric construction of 3D primary Structural Systems.

Nick was previously a Partner at Central Europe Trust London (AIG Fund Managers), specialising in Emerging European Markets Advisory Energy & Telecoms.



Josh Artus

Centric

Josh is co-founder of Centric, an independent research lab working at the intersection of health x climate change x cities. Their purpose is to reduce urban health inequities by creating practical tools, frameworks and policies based on scientific research and analysis. Recent data led studies have demonstrated the urban environment as a biological catalyst to mental and metabolic disorders. Establishing this knowledge base helps private, public and third sector organisations build human resilience in the face of further challenges brought by climate change. Clients have included Lendlease, Guys & St. Thomas's and Ford Motors. Josh's background includes working in the creative, tech and real estate sectors and now spends his days working with neuroscientists.



Dr Tuomo Kuosa
Futures Platform

Tuomo leads the foresight content delivery team at Futures Platform. He is a futurist specialising in strategic foresight, futures research methodology, and anticipating societal transformation. Author of the book 'The Evolution of Strategic Foresight'. Tuomo has extensive experience of customer needs with regards to strategic foresight, having worked in Finland and Singapore advising organizations in future focused planning processes.

He has a PhD in Future Studies and is the author of 'The Evolution of Strategic Foresight' and multiple other books.



Andrew Curry
School of International
Futures

Andrew Curry is a Director of The Futures Company in London, where he leads on futures practice and is Managing Editor of the company's thought leadership series, Future Perspectives.

He is a leading member of the UK's futurist community. As a consultant he has worked on dozens of scenarios and scanning projects for clients in the private, public and third sector, using a wide variety of techniques. His clients have included the UK government's Foresight Programme (for example, Intelligent Infrastructure Systems, or Powering Our Lives) and the UK Environment Agency, where a set of 50-year scenarios informed the Agency's 50 year water strategy. He was also the lead author of the UK Cabinet Office report, Understanding Best Practice In Strategic Futures. Other scenarios projects include ones on economic development, regulation, and sustainability.

His Futures Company report 'The 21st Century Business' (co-authored with Jules Peck), won the 2015 WPP Atticus thought leadership award in the Strategy Category.



Richard Boyd
Arup

Richard works to make construction projects and organisations ready for a carbon-constrained future. His knowledge and experience cover the design, construction and operational stages of projects. He is inspired by circular economy principles and responsible business strategies to help keep assets at their highest possible value for as long as possible.

He manages Arup's relationship with the Ellen MacArthur Foundation, delivering a significant programme of research into the implementation of circular economy principles to real estate. He was co-project manager on the project From Principles to Practices, the first Europe-wide study to clearly articulate the business case for adopting circular economy principles into real estate business models. He is actively seeking market leaders interested in incorporating these approaches into their projects.



Kyle McFadden

Greystar

Kyle McFadden is Director of Business Operations for Greystar Europe. One of his current areas of focus is how the digitization of real estate is affecting the operating platform. Kyle started with Greystar US in 2011 before transferring to the UK in 2014 to help build out Greystar's European platform across UK, Netherlands, Germany, Spain, France and Ireland. With data and automation becoming a necessity for the evolving real estate landscape, Kyle is keen to understand how it can be leveraged for efficiency across all verticals of the industry.



Jack Sibley

Innovation & Technology
Strategies, Nuveen Real
Estate

Jack leads Nuveen Real Estate's initiative to embrace technological innovation, change and disruption within its tomorrow's world philosophy. His focus includes analysis and solutions for how technology is changing what end-users want from real estate, proactive engagement with PropTech start-ups and disruptors, and efforts seeking to leverage emerging technologies such as Big Data and AI. These efforts are integrated into Nuveen Real Estate's investment process, driving asset selection, asset management and portfolio resilience.

Prior to his current role, Jack worked in the business' R&D team, which he joined in 2016. Jack graduated with a B.A., honors, in Land Economy from the University of Cambridge and is a member of the Cambridge University Land Society.



Jeremy Barnett

Resilience Partners
Limited

Jeremy is Executive Director at Resilience Partners Limited (RPL). He is also a Regulatory Barrister and an Honorary Professor of Algorithmic Regulation at the Bartlett Real Estate Institute, UCL. He was a founder of the CBC at UCL and is currently a joint leader of the Real Estate Consortium 'DigitalDisruption@BREI'. He is also joint London Chair of FIBREE. Jeremy has published papers: 'E-Legal Services To Speed up Justice for B2B systems' 2006, 'Algorithmic Dispute Resolution' 2017 & 'Algorithms and the Law' 2019.

RPL is a consultancy that specialises in converting critical information to add value. By collecting and validating key data and by using emerging technologies (blockchain, AI, IoT & BIM), RPL organises its clients data to avoid and (where necessary) resolve disputes; ensure regulatory compliance; lower risk and insurance cost; and help clients monetise their data. We work with property owners, developers and professional bodies to design bespoke verification processes and understand how to best harness these disruptive technologies for their individual businesses.