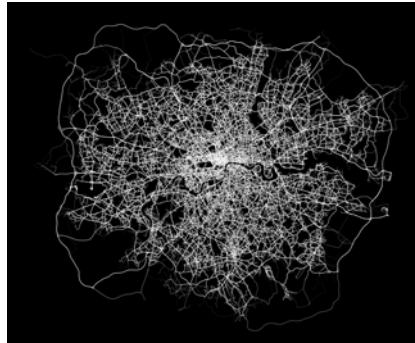UNIVERSITY OF CAMBRIDGE

CSIC Cambridge Centre for **Smart Infrastructure & Construction**

CSIC Emerging Connections Workshop
Tomorrow's Cities and Their Infrastructure

Robinson College, Cambridge: 23 June 2017

In conjunction with AUM2017

The Ove Arup Foundation

Workshop Organisers and Sponsor

The workshop is co-organised by the Cambridge Centre for Smart Infrastructure and Construction, an Innovation and Knowledge Centre at the University of Cambridge, and the Department of Architecture at the University of Cambridge. The workshop is part of CSIC's 'Transitioning Cities' programme sponsored by the Ove Arup Foundation.

Organisers

Professor Lord Robert Mair
Professor Michael Batty
Professor Cecilia Mascolo
Dr Ruchi Choudhary
Dr Ying Jin
Dr Charlotte Lemanski
Dr Ajith Parlikad
Dr Elisabete Silva
Dr Jennifer Schooling

Supported by

Tianlei Wu, CSIC
Xihe Jiao
Bingyu Zhao

Workshop Webpage

http://www-smartinfrastructure.eng.cam.ac.uk/events/emerging-connections-workshop

Online Registration

http://onlinesales.admin.cam.ac.uk/conferences-and-events/department-of-engineering/aum-csic/aum2017-csic-emerging-connections-workshop

Photography and Film/Video during the Workshop

All participants should be aware that photographer will be taking photos and video during the workshop. The photos and video will be used in all manners of media including Internet and marketing materials. Please let the organisers know if you don't wish to be photographed or filmed.

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SPEAKERS

Dr Luca Maria Aiello is a Senior Research Scientist in the Social Dynamics group at Bell Labs in Cambridge, UK and Research Fellow of the ISI Foundation in Torino, Italy. He received his PhD in Computer Science from the University of Torino in 2012 and he has been a Research Scientist at Yahoo Labs for almost 5 years. He conducts interdisciplinary research in network science, computational social science, and urban informatics. He co-authored 50+ peer-reviewed papers and his work has been covered by more than 200 news articles published by prestigious news outlets worldwide including Wired, Wall Street Journal, and BBC. He was General Chair of SocInfo in 2014 and covered different organizational roles in ICWSM, ACM Hypertext, ACM Multimedia, UMAP. He is among the founding members of GoodCityLife.org, a global network of scientist with the goal of giving a good life to city dwellers.

Professor Stuart Barr (Co-I) is Professor of Geospatial Systems Engineering at Newcastle University. His research has focused on the development of spatial decision support tools and spatial analytical approaches for spatial impacts on cities and infrastructure systems. Since 2006 he has been an investigator on EPSRC ARCC (Adaption and Resilience to Climate Change) grants SCORCHIO, SWERVE and ARCADIA which focused on climate impacts on cities. His research team designed and implemented the first UK national infrastructure systems database for analytics and modelling (NISMOD-DB) during the EPSRC ITRC programme grant (2010-2015); work that is being extended in the MISTRAL (multi-scale infrastructure systems analytics, 2016-2020) follow on EPSRC programme grant. Prof Barr has extensive experience of working with stakeholders and industry including funding for several research-led consultancy projects with Infrastructure UK (HMS Treasury) and engineering consultancies. Prof Barr is Newcastle co-director and academic manager of the NERC DREAM Centre for Doctoral Training on Data, Risk and Environmental Analytic Methods.

Mark Bew MBE chairs the UK Government Digital Built Britain programme, which is charged with delivering BIM Level 2 into the UK Public Sector Construction Sector by 2016 and Level 3 by 2025. He is also Chairman PCSG Ltd which is an organsation focused on delivering technology, process and associated sustainability services to the construction and built environment sector. Clients value Mark's forthright approach to business. He possesses strong business acumen and has gained considerable experience serving on two UK construction sector company executive boards, authoring many published papers and presenting at major conferences in the UK, Europe, the Middle East and the United States. Mark was awarded the MBE for services to construction in January 2012.

Volker Buscher is Arup's Global and UKMEA Leader of the Digital Services and a member of Arup's Group Board Digital Council, responsible for developing new advisory services and data driven business models. A Project Director for public and private sector clients in the UK, Europe, Middle East, US and SE Asia, Volker is responsible for the development and implementation of business and technology projects. Volker is a member of a number of external advisory boards including: the Smart London Board advising the Mayor of London, the Smart Cities Forum advising UK Ministers for Cities and Technology, together with advisory roles for ISO, BSI, Digital Economy Catapult and Canary Wharf Cognicity program. He has worked extensively with academia on research projects and acted as industrial supervisor for several doctorates including work with Bristol University, University College London, and Imperial College London. He is a member of the Cambridge University CSIC advisory board.
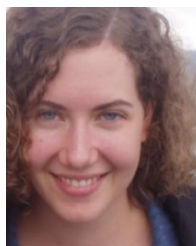
SPEAKERS

	Ruth Duston MSc. MIED is an expert in design and delivery of regeneration strategies combining: economic, social and physical developments, delivered within a partnership framework. In 2004 Ruth established her own consultancy practice – Primera Corporation Ltd, delivering a range of services to the public, private, community and voluntary sector. Ruth Duston is one of the country's leading experts in the development and implementation of business led partnerships and Business Improvement Districts. Her career began in Central Government, then she went on to take up a number of posts that focused on skills, training, education and economic development across London and the east of England. Ruth has extensive experience of working within Central and Local Government and within the private sector. This experience has enabled her to work with a range of stakeholders on major urban regeneration programmes. Ruth was appointed as Chair for Westminster Kingsway College in October 2014 and since appointed Vice Chair for CCCT.
	Professor Gillian Rose is Professor of Human Geography at The Open University and a Fellow of the British Academy. She is the author of Visual Methodologies (Sage, fourth edition 2016), as well as a number of books and papers on ways of seeing in urban and domestic spaces. She is currently PI on an ESRC-funded project 'Smart Cities in the Making: Learning from Milton Keynes' (www.SCiM-MK.org), which is investigating how a range of socio-technical practices constitute both a place as a 'smart city' and its people as particular kinds of 'smart citizens'. She has a particular interest in role of visualisations in both representing and operationalising 'smart', from photorealist computer generated images to app interfaces.
	Dr Navil Shetty is a Fellow & Technical Chair for Asset Management with Atkins. Navil is the global lead for strategic asset management responsible for developing Atkins capability and market position in this area. Navil also plays a leadership role within the Institute of Asset Management (IAM) and has been awarded IAM President's award for his contribution to the subject. Navil has played leading role in the development of a number of standards and guidance documents on assets management including ISO 55000, BS PAS 55, BS PAS 1192-3 and BS 8536-2. Navil has over 25 years of experience in strategic asset management & risk management across several industry sectors. He has advised major asset owners around the world such as, London Underground, Network Rail, High Speed 2, Heathrow Airport, Severn Trent Water, and MTA New York.
	Andrea Silberman is the lead on infrastructure systems modelling in the National Infrastructure Commission. She is currently working on modelling pressures on infrastructure across the energy, transport, water and waste sectors across a range of scenarios for the UK's first National Infrastructure Assessment. She previously worked on macroeconomic analysis and modelling at the Treasury and holds an MSc in Economics from the University of Geneva.
	Stefan Webb leads the design, development and delivery of projects across the Future Cities Catapult. Stefan has designed and delivered the Future of Planning programme, which included working with Greater Manchester to create a new way to understand infrastructure capacity and its relationship with new development. He has developed the case for data devolution to Bristol, as well as leading the review of the Smart Dubai strategy. Stefan has degrees in Sociology, Politics and Government, and Urban Regeneration. Before joining the Future Cities Catapult he worked for different local authorities, including the Greater London Authority where he worked on spatial policy and strategy for the Thames Gateway and Olympic Legacy development.

Programme – 23 June, 2017

08.30	*Registration and Refreshments*
08.45	**Welcome** Dr Jennifer Schooling, CSIC Director
09.00	**Session 1: An integrated approach to infrastructures and cities**
	Assessing the performance of infrastructure across space Andrea Silberman, National Infrastructure Commission **'Smart infrastructure for a smart future city', future-proofing cities** Navil Shetty, Atkins **A geospatial framework for integrated urban and infrastructure systems modelling** Stuart Barr, Newcastle University
10.30	**Facilitated discussion in table groups**
11.00	*Refreshments*
11.30	**Session 2: The role of digital technologies in experiencing and managing the city**
	'Moving from productivity to social outcomes', the journey from Digital Built Britain Level 3 to Level 4 Mark Bew, Digital Built Britain **Digital visualisations as tools for exploring different kinds of smart** Professor Gillian Rose, Open University and Oxford University (from Oct 2017) **Digital Agenda for Cities – outcomes delivered by an ecosystem** Volker Buscher, Arup
13.00	**Facilitated discussion in table groups**
13.30	*Lunch*
14.30	**Session 3: Urban planning and economics of cities**
	Delivering prosperity and diversity through business improvement district projects Ruth Duston, Victoria BID **The future of planning** Stephan Webb, Future Cities Catapult **Sensory Mapping** Luca Aiello, NOKIA Bell Labs
16.00	**Facilitated discussion in table groups**
16.30	*Drinks and Networking*
17:30	Round table discussion in preparation of AUM2018

GENERAL INFORMATION

Registration
Registration for the conference will take place in the Crausaz Wadsworth Building foyer from 08.30 – 09.00 hrs. Please visit the registration desk with any queries.
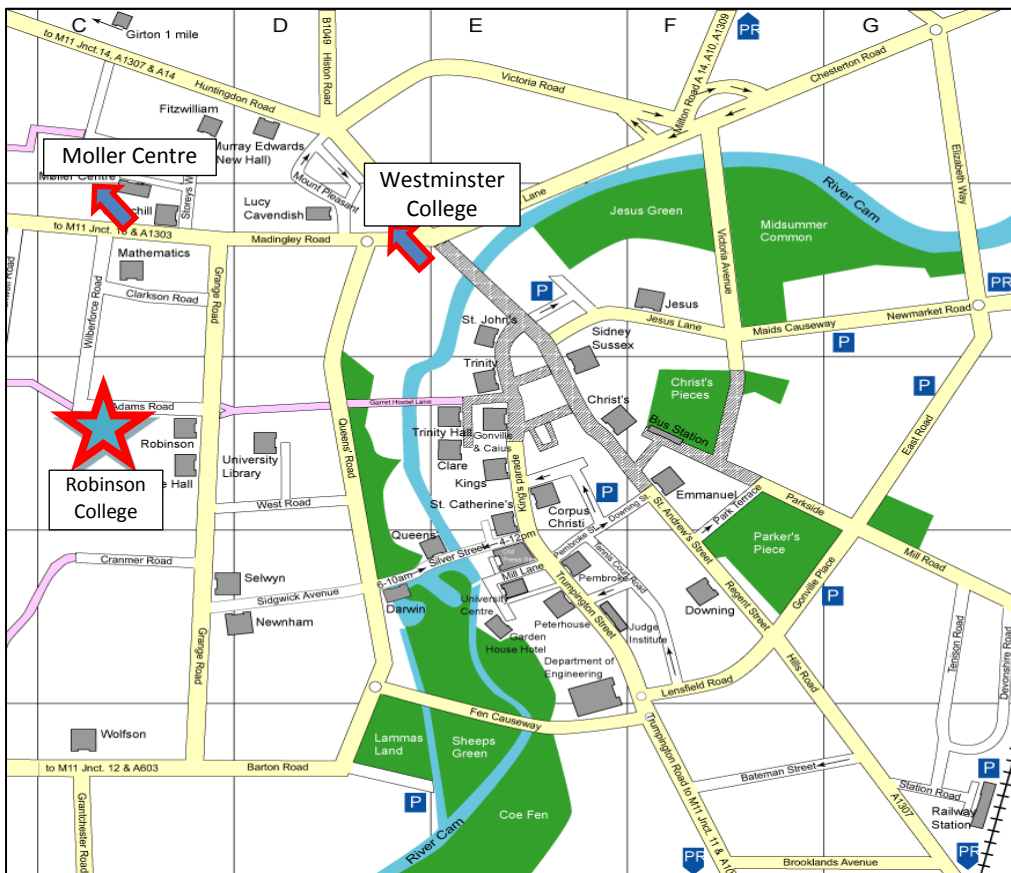
Refreshments and lunch
Refreshments and lunch will be available at the times indicated in the programme. Please let us know if you have any dietary requirements.

Internet access
Internet access is available throughout the College via Eduroam, or by using a guest login which will be provided on arrival.

Locations

Workshop venue
Crausaz Wadsworth Building
Robinson College
Grange Road,
Cambridge CB3 9AN

Accommodation
Moller Centre
Churchill College
Storey's Way,
Cambridge
CB3 0DS

Westminster College
Madingley Road,
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