Applied Urban Modelling Conference, 26th – 28th June 2013 (AUM2013)
Alison Richard Building, Sidgwick Site, University of Cambridge

PROGRAMME

WEDNESDAY 26 JUNE

Koen Steemers, University of Cambridge, Welcome.

Introduction: Mike Batty (CASA, UCL): Urban Modelling: The Paradigm Shifts Yet Again

Session 1: Large scale land use and transport modelling - a retrospect
Chair: Neil Paulley TRL Academy, Wokingham, UK

José Luis Burgos (Architect): The use of MEPLAN Model in Bilbao and Basque Country

Tomás de la Barra (Modelistica): Modelling and Evaluating Redevelopment: Sao Paulo and Caracas

Steve Platt (Cambridge Architectural Research) The Role of Cambridge Futures in Promoting Growth in Cambridge

Session 2: Policy modelling for city regions - current developments
Chair: John Bates, John Bates Services, Oxford, & Transport Studies Unit, University of Oxford, UK

Felix Huber, University of Wuppertal, and Björn Schwarze, Klaus Spiekermann, Michael Wegener (Spiekermann & Wegener): Modelling the Energy Transition in Cities

Tony Hargreaves, Vicky Cheng, Marcial Echenique, Vassilis Zachariadis (University of Cambridge): Spatial Planning and the Potential for Decentralised Green Technologies

David Simmonds (David Simmonds Consultancy): Policy Modelling for City Regions: Current UK Developments with Particular Reference to Appraisal of Transport Proposals

John Douglas Hunt (University of Calgary): Design and Application of PECAS Model of San Diego

Session 3: Productivity and sustainability of cities
Chair: David Simmonds, David Simmonds Consultancy Ltd, Cambridge, UK

Paul Waddell (University of California, Berkeley): Development of a Sustainable Communities Strategy in the San Francisco Bay Area using Integrated Models

Alastair Donald (British Council): The Integrated Metropolis: Mixed Use and Travel

Jie Zhu (Zhejiang Transport Planning Institut), Liang Zhao (Tsinghua University), Ying Jin (University of Cambridge): A Spatial Computable General Equilibrium Model for Emerging City Clusters in China

Laurent Franckx (VITO), Inge Mayeres (VITO and KU Leuven, Belgium): ATLAS – Assessing Transport and Land use Scenarios
THURSDAY 27 JUNE

Session 4: Transit and cities
Chair: Ian Williams, Ian Williams Services, Cambridge, UK

Jorge Gil (Delft University of Technology): Measuring the Sustainable Mobility potential of TOD Neighbourhoods in the City-Region

Paul Waddell (UC Berkeley): Modelling and Visualizing Transit Oriented Development

Haixiao Pan and Song Xue (Tongji University), Qing Shen (University of Washington): Intermodal Transfer Between Bicycles and Rail Transit in Shanghai, China

Flora Roumpani (CASA, UCL): Building and Visualizing Classical and Contemporary Models in ESRI’s City Engine

Session 5: Mobility and housing
Chair: Thomas de la Barra, Modelistica, Venezuela

Joseph Ferreira (MIT), Weifeng Li: Household Considerations in Valuing Location for Activity-Based Urban Modelling

Anders Johansson (University of Bristol): Data-Driven Modelling of Urban Mobility

Athanasios Votsis (University of Helsinki and Finnish Meteorological Institute): A Fractal Geometry/Fuzzy Logic Model for Space-Time Dynamics of Residential Property Value in Helsinki’s Urban Region

Tatjana Ibraimovic (University of Lugano), Stephane Hess (University of Leeds): A Latent Class Model of Residential Choice Behaviour and Ethnic Segregation Preferences

Session 6: Urban design and modelling
Chair: Steve Platt, Cambridge Architectural Research, Cambridge, UK

Randall Crane (UCLA): Recent Developments in the Economic Modelling of Urban Design

Pete Ferguson (CASA, UCL): A Detailed Network Potential Model of London

Kiril Stanilov and Ying Jin (University of Cambridge): Transport Networks and Land Development – A Historical Perspective

Session 7: Understanding consumer behaviour
Chair: Paul Waddell, UC Berkeley, USA

Tim Gent (WSP) and Ian N Williams (University of Cambridge): Evidence of Changing Trends in Travel Behaviour: Implications for Modelling

Shan Jiang, Marta C. González and Joseph Ferreira (MIT): Using Temporal Activity Profiles to Enrich Lifestyle Considerations in Urban Modelling

Peng Wu (Sichuan University), Bo Feng (South China University of Technology): Which Adoption Mode for Electric Vehicles is Better?

Paavo Moilanen (Strafica): Big Data Driving the Model Developments in Finland
FRIDAY 28 JUNE
Session 8: Modelling and assessment - new methods
Chair: John Douglas Hunt, University of California, USA

William Fawcett, Martin Hughes and Ignacio Robles Urquijo (Cambridge Architectural Research): *Evaluation of Strategies for Long-term Adaptation in Urban and Infrastructure Systems*

Johannes Bröcker (University of Kiel): *Discrete Choice in Urban CGE models*

Daniela Fecht, Linda Beale, David Briggs (SAHSU, Imperial College London): *A GIS-based Urban Simulation for Environmental Health Analysis*

Benjamin Kickhöfer and Kai Nagel (Technische Universität Berlin), Regine Gerike (University of Natural Resources and Life Sciences Vienna): *High-Resolution First-Best Air Pollution Tolls with Heterogeneous Travellers: New Opportunities for Policy Design*

Session 9: New methods in Transport and traffic modelling
Chair: Peter Ferguson, Centre for Advanced Spatial Analysis, London, UK

Alistair Ford, Stuart Barr and Richard Dawson (Newcastle University); Katie Jenkins and Jim Hall (University of Oxford); Mike Batty (UCL): *Economic Accounting of Climate Change Impacts*

Vassilis Zachariadis and Ying Jin(University of Cambridge), Alex Hagen-Zanker (University of Surrey): *Reducing the Computational Requirements of Models of Spatial Interaction*

Alex Hagen-Zanker (University of Surrey) and Ying Jin (University of Cambridge): *Reducing Aggregation Error in Spatial Interaction Models by Location Sampling*

Round Table discussion chaired by Michael Wegener (Spiekermann & Wegener)

Summary by Marcial Echenique (University of Cambridge)