About the Contributors

Tan Yigitcanlar has a multi-disciplinary background and over two decades of work experience in private consulting, government and academia. Currently holding a senior academic position at the School of Urban Development, Queensland University of Technology, Brisbane, Australia, the main foci of his research are advocating and promoting knowledge-based urban development and sustainable urban, infrastructure and transport development in city-regions. These two broad research areas are clustered around several themes: knowledge economy, knowledge-intensive activities, knowledge city, ubiquitous city, local governance, civic engagement, sustainable urban and infrastructure development, urban and transportation modelling, accessibility planning, online planning support systems, and understanding urban structures, processes and driving forces in the knowledge era. Dr Yigitcanlar is one of the leading researchers in the field of ‘knowledge-based and sustainable urban development’, and has been responsible for research, teaching, training and capacity building programmes on urban and regional planning, transport modelling, environmental science, policy analysis and information and communication technologies in respected Turkish, Japanese and Australian universities. He is the (co)editor of five books entitled ‘Knowledge-based urban development’, ‘Creative urban regions’, ‘Knowledge-based development of cities and societies’, ‘Sustainable urban and regional infrastructure’ and ‘Sustainable urban and infrastructure development’ published by Information Science Reference. He is the co-Editor-in-Chief of the ‘International Journal of Knowledge Based Development’, Annual Special Issue co-Editor of the ‘Journal of Knowledge Management’, the Chairman of the ‘Knowledge Cities World Summit Executive Board’ and the coordinator of the ‘Sustainable Built Environment Research Cluster’.

Les Dawes is currently Associate Professor in the School of Urban Development at the Queensland University of Technology in Civil and Environmental Engineering where he teaches subjects in geotechnical and water engineering along with engineering design at both undergraduate and postgraduate level. He has been involved in the environmental and geotechnical research with industry (water recycling, small scale wastewater systems, alternate building materials, contaminated soils and groundwater evaluation) for over a decade. He brings expertise and knowledge in environmental assessment through site analysis, community engagement and the development of sustainable water and wastewater systems. He has been involved in complex projects in the areas of urban systems, regional planning and community engagement. He has worked on long term projects for Aid Development agencies such as ADB, AusAID and World Bank in the Pacific (Tonga) and Asian (Thailand) regions.
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**Severine Mayere** is a lecturer in urban and regional planning in the Faculty of Built Environment and Engineering at Queensland University of Technology. Dr Mayere graduated from Florida State University in 2007 with a Ph.D in urban and regional planning. Her dissertation explored the role of local growth coalitions in shaping growth management programs and the role of the coalitions in influencing the effectiveness of those programs in six U.S states. Dr Mayere’s current research interests focus on land use planning and urban politics, but also on regional planning and growth management, and comparative planning approaches.

**Jonathan Bunker** is a senior lecturer in civil engineering with the School of Urban Development at Queensland University of Technology (QUT) and researches in traffic engineering, transport planning, airports, highway engineering and infrastructure asset management, and sustainable development practices. Jonathan has a Bachelor of Engineering (Civil) with Honours 1 and a Doctor of Philosophy (QUT). Prior to joining faculty at QUT he practiced as a consulting transport engineer in Australia and the United States of America. Jonathan is presently the National President of the Australian Institute of Traffic Planning and Management, is a Fellow of AITPM and Member of the Institution of Engineers Australia.

**Paul Donehue** is a lecturer in Urban and Regional Planning with the School of Urban Development at Queensland University of Technology in Brisbane, Australia. His doctoral research focused on land and housing commodification in intentional communities, in particular examining how the choices that these communities made impacted on resident lifestyles. Fieldwork undertaken during this period included visits to an eco-village, Hare Krishna farming community, and a Christian cooperative and education facility. Dr Donehue’s current research is centered on Australia’s network of rural and regional airports, and aims to investigate the socio-economic contribution that they make to remote communities.

**Luis Ferreira** has a strong multi-modal teaching, research and management background encompassing road and rail, freight and passenger transport. He has worked for 30 years in technical and managerial roles covering transport planning, research, management and consultancy. Luis has been closely involved with transport and traffic planning and modelling, evaluation and performance measurement of transport programs and projects as a practitioner, researcher and trainer. Before joining UQ and QUT, Luis held senior management roles in Australian National Rail. He was part of the team which developed the SATURN traffic simulation/assignment model at the University of Leeds. In 2006/07 Luis was the Technical Advisor to the Queensland Transport Portfolio Agencies, working on the development of a strategic transport model for the South East Queensland Region. Luis has an extensive and distinguished road and rail related publications record in international journals and conferences.

**Godwin Ayoko** is a Fellow of the Royal Australian Chemical Institute, and the current Acting Head of the School of Physical and Chemical Sciences at Queensland University of Technology. His recent research interests include the development and application of analytical procedures for characterising and monitoring pollutants in the environment, odour emission measurements, application of multivariate data analysis techniques to chemical data, receptor modelling and source apportionment of pollutants. He has published widely in the field of environmental analytical chemistry.
Prasanna Egodawatta is a Lecturer in School of Urban Development, Queensland University of Technology. He completed his Bachelor's degree at the University of Peradeniya, Sri Lanka with first class honours in 2001. He received his PhD from Queensland University of Technology in 2007. Dr Prasanna has a research track record in the areas of urban hydrology, water quality engineering and water sensitive urban design. He has partnered number of industry collaborated research projects that has generated research outcomes with significant practical value. Dr. Prasanna’s primary teaching interests are in fluid mechanics, engineering hydrology and water engineering.

Ashantha Goonetilleke is a Professor in Water/Environmental Engineering at Queensland University of Technology. He counts over 16 years experience as a professional engineer and 15 years as a researcher. Prof. Goonetilleke has an established research track record in the area of sustainable development in relation to the water environment. His primary areas of research expertise include, urban hydrology, urban water quality, stormwater reuse and urban hydrologic modelling.

Jason Kerr is a Research Associate at the Queensland University of Technology. He has a Bachelor of Science (Hons) from Griffith University and in 2009 obtained his PhD from Griffith University. His PhD research was on phosphorus cycling in subtropical rivers with a particular focus on exchanges of phosphorus between soils, sediments and the water column. His research interests are focused on the impact of land use practices and catchment management on the water quality of receiving waters. Jason is currently involved in research focusing on major urban water quality issues in southeast Queensland. This includes research on traffic generated pollution in stormwater and the performance of Water Sensitive Urban Design as a pollution mitigation measure.

David Thambiratnam is Professor of Structural Engineering in the School of Urban Development at QUT. Prior to joining QUT, he was attached to the National University of Singapore, during which time he received commendation from the Singapore Applied Research Corporation. He is also one of the founder members of the Singapore Structural Steel Society. Professor Thambiratnam has a total of more than a 35 years industrial, research, teaching and consulting experience gained in Sri Lanka, Canada, Singapore and Australia. His present research interests are in the areas of: disaster mitigation of infrastructure, bridge dynamics and structural health monitoring of bridges, seismic response of structures, impact of structures and use of dampers to mitigate the response of structures subjected to random & unpredictable loads. He has received a number of competitive research grants and has published more than 180 papers in international refereed journals and in refereed conference proceedings.

Tommy H.T. Chan is an Associate Professor in the Infrastructure Research Theme and the Leader of the Infrastructure Safety and Integrity Cluster in the Faculty. Recently he was unanimously elected as the founding chair of the steering committee of the Australian Network of Structural Health Monitoring. Dr Chan has been actively involved in carrying out research on bridges. He has published more than 170 technical papers and over 15 years of experience in structural health monitoring (SHM) of various significant long span bridges in Hong Kong and the mainland China. Besides SHM, his research interests include bridge engineering, structural dynamics, Moving Force Identification and Weigh-in-Motion Studies.
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Manicka Dhanasekar, known as Sekar, is a Professor within the School of Urban Development, Queensland University of Technology, Brisbane. Sekar holds first class distinction degrees in civil and structural engineering from the University of Madras and IIT Madras respectively. He completed his PhD at the University of Newcastle, NSW in masonry and has developed a passion for the behavior of structural joints. His contributions are widely acknowledged in the Australian masonry industry. He also works closely with the rail industry where his research finding on reduction of gap as a means of reducing wheel impact loading in insulated rail joints is adopted. In 2004 he received RW Chapman Medal for the best contribution to the Australian Structural Engineering journal. He has more than 120 peer reviewed publications. He has secured $2.4M in research funding over the past seven years and has supervised twelve postgraduate research students to successful completion.

Andy Tan received his BSc(Eng) and PhD degrees in mechanical engineering from the University of Westminster, London. His research interests include noise and vibration condition monitoring and sensors for machine and structural health monitoring. He applied adaptive signal processing and the blind deconvolution algorithms to enhance the desired signals corrupted by noise into incipient fault detection and machine diagnostics/prognostics. These algorithms together with acoustic emission sensors are currently being used in low speed machinery condition monitoring and bridge structures health monitoring. He is expanding his research in vibration control into developing bi-ventricular assist device as an artificial heart to enhance the life style and prolong live for final stage heart failure patients. He is a professor of mechanical engineering at the Faculty of Built Environment and Engineering of the Queensland University of Technology and his academic interests include dynamics of mechanical systems, noise and vibrations and mechanism design. He is a Fellow of the Institution of Engineers, Australia.

Bambang Trigunarsyah is currently Associate Professor and Course Coordinator for Project Management, School of Urban Development, Queensland University of Technology, Australia. He joined QUT in January 2007. Previously, Bambang was the Head of Department of Civil Engineering at University of Indonesia and Associate Professor in Construction Project Management. Before joining the University of Indonesia, Bambang has worked for Kondur Petroleum S.A. (previously called Hudbay Oil Malacca Strait Ltd.), a Production Sharing Contractor for the Indonesian State Own Oil Company, for 10 years. His last position with the company was a Senior Project Engineer. He earned his Bachelor degree in Engineering (Civil) from Colorado School of Mines, USA in 1998. He completed his master degree in Construction Management in 1998 and his PhD degree in Engineering Project Management at the Civil & Environmental Engineering Department, the University of Melbourne, Australia in 2001.

Johnny Wong is currently a Senior Lecturer in the School of Urban Development, Faculty of Built Environment and Engineering, Queensland University of Technology. He joined QUT in January 2008. From 1996 to 2003 Johnny worked as a Quantity Surveyor in various local and international companies. Later, he had demonstrated his industrial experiences by pursuing PhD study in Hong Kong Polytechnic University and his doctorate was conferred in 2007. Back in 1999 Johnny received Master of Real Estate from the University of New South Wales, Australia. Before that, in 1998 he received his Bachelor of Building Construction Management with Honours Class 1 from the same university. Johnny’s areas of expertise are quantity surveying, intelligent building and building control systems, cultural issues in construction industry, leadership styles and project performance. He has published more than 10 refereed journal papers within those areas.
**Liang Chen** finished his PhD in Shanghai Jiao Tong University in 2009, and is currently a lecturer of the School of Business, East China University of Science and Technology (ECUST). He has a broad range of interests in the social networks, social capital, knowledge management, complex network. He is currently studying the social capital of knowledge workers and R&D teams, and also researching the interrelations between management practice and organizational social networks. He is doing a collaborative research in project management and sustainable development by employing both social network analysis and complex network theory.

**Martin Skitmore** is currently a Professor for School of Urban Development, Queensland University of Technology. He joined QUT in 1995. He is an external examiner for UniSA, Construction Management and Economics Degree, School of Natural & Built Environments. Besides, he is also a Visiting Professor for Hong Kong City University, Department of Building and Construction and University of Tun Hussein Onn Malaysia (UTHM). He is a highly regarded academic, professional and researcher in the construction industry who has written numerous of publications. His research interests include construction management and economics, building procurement, tendering and bidding, cash flow forecasting, quantitative methods, and cost modelling.

**Martin Betts** is the Executive Dean of the Faculty of Built Environment & Engineering at Queensland University of Technology. His research activities and interests embrace: strategic management in construction, construction IT, construction project management, built environment and engineering education and construction futures.

**Arun Kumar** has over 40 years experience as a civil engineer in construction, consulting, research and academia. His areas of expertise include: infrastructure management, project management, roads and civil infrastructure, institutional strengthening and capacity building. He is Professor of Infrastructure Management at the Queensland University of Technology and Professor Emeritus, RMIT University, Melbourne, Australia. He has written over 160 papers in national and international journals and conferences; has been an invited speaker in several countries; has been on the international committees and has chaired at the international conferences. His international experience includes the countries of: Australia, China, India, USA, and Southeast Asia. Professor Kumar is a consultant to the World Bank on project management, infrastructure management Institutional strengthening.

**Glen Murphy** is currently a post-doctoral research fellow and project leader with the CRC Centre for Integrated Engineering Asset Management (CIEAM). His work is currently focused on improving the management of engineering personnel to maximise the performance of engineering assets. Glen is responsible for research investigating two critical areas relevant to engineering asset management. The first relates to the effective capture and recording of quality engineering data. The second relates to the identification and management of best practice engineering asset cultures. In addition to being a project leader Glen is also a principle researcher on two other CIEAM projects 1) testing the applicability of Asset management models in Defence contexts. Clients include Queensland Rail, ANSTO and the Defence Materiel Organisation (DMO) and 2) investigating the requisite skills and competencies required of engineering asset managers. Prior to this he was employed within a teaching capacity for the Faculty of Business at QUT in the areas of strategic management, human resource management, organisational behaviour and human resource information systems.
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**John Bell** has worked for nearly 20 years on thin film materials, with research on materials for energy efficiency in buildings, solar cells, sensors and hard coatings. He was a Program Leader in the Australian CRC for Renewable Energy (1996-2001) and the CRC for Construction Innovation (2002-2004), focusing on the impacts of energy efficient technology in buildings. He has served on the Board of the Sustainable Energy Industry Association (1999-2002), including serving as the Queensland Branch Chair in 2003, and the Business Council for Sustainable Energy (2003), and the IEAust Task Force on Energy in Construction. He was a member of the Energex earthsChoice (greenpower) Advisory Panel and has significant experience. He has facilitated industry workshops for the Australian Greenhouse Office.

**Suharto Teriman** is currently enrolled as a full time Doctoral research student at the Queensland University of Technology. He holds a Bachelor of Town and Country Planning (Honours) degree from the University of Manchester, UK and Master of Science in GIS and Remote Sensing from Universiti Putra, Malaysia. Prior to enrolling at QUT, Mr Teriman has served in both planning practice (with the Malaysia Government) and in academic field (with a Malaysian public university). Mr Teriman's interests are in the fields of urban development and management, with a focus on sustainable human settlements. His doctoral research focuses on developing a sustainability assessment framework for urban residential developments.

**Didem Dizdaroglu** holds a MS of Landscape Architecture from Istanbul Technical University (ITU), Turkey. She is currently a PhD student and senior research assistant at the School of Urban Development, Queensland University of Technology (QUT), Australia. Her PhD thesis focused on developing a new model in achieving sustainable urban ecosystems through environmental planning approach. Her research interests include Ecological Planning, Sustainable Urban Environmental Management, Sustainable Urban Development and Brownfields Development.

**Shinyi Lee** has a Masters degree in Urban and Regional Planning and is currently undertaking a PhD study at the School of Urban Development, Queensland University of Technology (QUT), Australia. Her PhD thesis focused on developing a new model for water sensitive urban design considering stakeholder perceptions and current barriers in the planning and development of sustainable urban environments.

**Benson Au-Yeung** received his Bachelor Degree in Environmental Planning at Griffith University and Master Degree in Environmental management as University of Queensland. Benson is currently studying his Research Master at Queensland University of Technology. Benson also has more than 5 years of experience in the field of urban and infrastructure planning. Benson is currently employed by Brisbane City Council as the Senior Urban Analyst who responsible for the development and maintenance of the Brisbane Urban Growth Model.

**Fatih Dur** holds a MSc degree in Urban and Regional Planning from the Izmir Institute of Technology (IZTECH), Turkey. He is a PhD student and causal academic at the School of Urban Development, Queensland University of Technology (QUT), Australia. He has been researching on urban form and transportation interaction, planning decision support systems and sustainable urban development subjects.

**Kushairi Rashid** holds a bachelor degree in Housing, Building and Planning and Master Degree in Planning from University Science of Malaysia. He is currently a PHD student at Queensland University
of Technology, Brisbane, Australia and is undertaking a research on a topic of transportation disadvantaged and sustainable transportation planning. Prior to this, he is an academician at MARA University of Technology, Malaysia. He has published various conference papers, book chapters and journal papers in Malaysia and Australia, in the areas of travel behaviour, transit oriented development, sustainable transportation planning and sustainable development. In the future, he plans to further his knowledge in Geographical Information System (GIS) Modelling and Visualisation.

**Deepti Muley** is a PhD student at School of Urban development at Queensland University of Technology (QUT) studying Transit Oriented Developments (TODs). Deepti has a Bachelor’s degree in Civil Engineering and Master’s degree in Transportation Engineering (Indian Institute of Technology, Roorkee in India). Her research interests are Sustainable Transportation Planning and Transportation Modelling.

**Yulin Liu** is currently a PhD candidate in transportation in the School of Urban Development at Queensland University of Technology (QUT). His Doctoral studies at QUT are concerned with modelling passengers’ route choice behaviour in urban transit networks. Before joining QUT, he obtained the degrees of Bachelor of Engineering (Civil) and Master of Engineering (Transport) at Tongji University in China at 2005 and 2008, respectively.

**Parvez Mahbub** is currently enrolled as a doctoral research student in the Queensland University of Technology, Brisbane Australia. His current project is mainly focussed on the effects of urban traffic on pollutant build-up on road surfaces and the effects of climate change on the pollutant wash-off from the road surfaces. He holds a bachelor of civil engineering (honours) and a master of engineering degree in stochastic hydrology.

**Janaka Gunawardena** is a full time Doctor of Philosophy (PhD) student at Queensland University of Technology (QUT). He holds a Bachelor of Civil Engineering (Hones) degree and Master of Engineering degree in Environmental Water Resources Engineering and Management from the University of Moratuwa, Sri Lanka. He has worked from 2001 to 2008 as a research engineer and engineering manager at Lanka Hydraulics Institute in Sri Lanka prior to joining QUT.

**Hoi Wai Shih**, Justice of the Peace (Qualified), obtained his Bachelor degree in Civil Engineering with First Class Honours from QUT in 2004. He joined the Robert Bird Group as a structural engineer upon graduation. After having one and a half year of practical experience in the industry, he returned to QUT for his doctoral studies. He received the Research Capacity Building scholarship for his research in the structural dynamic area leading to the PhD degree.

**Praveen Moragaspitiya** is a full time PhD student in Queensland University of Technology (QUT), Australia since 2008. He has completed the civil engineering degree in the University of Peradeniya, Sri Lanka in 2005.

**Nimal Perera** is a Consulting Engineer who has worked in Australia, United Kingdom, Indonesia, Malaysia, UAE, Sri Lanka, Nigeria and Trinidad providing engineering expertise for design, construction and project management. He has been a practicing engineer since graduating in 1973 and a researcher
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with the Queensland University of Technology since 1995 and possesses specialist knowledge in structural dynamics, seismic, blast, impact mitigation and wind engineering.

**Indika Thilakarathna** is a PhD Candidate at the QUT. Indika completed his Bachelor of science in Engineering with 1st class (Hons.) in 2002 and MSc. (Structural) in 2005 at the university of Moratuwa Sri Lanka. He served as a Structural Engineer in Central Engineering Consultancy Bureau for two years in Sri Lanka prior to the start of PhD studies.

**Liang Wang** is currently a PhD student of Queensland University of Technology (QUT), under China Scholarship Council (CSC) - QUT program. He graduated in 2005 with the degree of bachelor of Engineering (Civil) from Hebei Institute of Architecture and Civil Engineering (HEBIACE) in China. Subsequently, he enrolled as a master student of Shanghai Jiaotong University (SJTU), China and graduated with the degree of Master of engineering (Structural) from Shanghai Jiaotong University in 2008, before he joined QUT for pursuing his further PhD studies. Now his research field is: structural health monitoring and condition assessment of steel bridge structures.

**Manindra Kaphle** is currently enrolled as a full time PhD research student at the Queensland University of Technology and has been at the university since August 2008. He received bachelor degree in mechanical Engineering (First class honours) from the University of Sydney, Sydney, Australia in 2003 and Master of Science degree in engineering mechanics from the Royal Institute of Technology, Stockholm, Sweden in 2005. His research interests include structural health monitoring, finite element analysis, engineering mechanics, signal analysis techniques and computational and mathematical modeling. He comes from Nepal and is interested in pursuing academic/research career after the completion of the degree.

**Mohd. Faizal Omar** is an academic staff at Universiti Utara Malaysia since 2004. He has completed his bachelor degree in Information Technology at the same university and earned his master degree in Computer Science at Universiti Sains Malaysia in 2003. Currently, he enrolled in PhD program at School of Urban Development, Faculty of Built Environment & Engineering, Queensland University of Technology. His PhD work concentrates on the development of Decision Support System for Consultant Selection for public sector infrastructure project.

**Anna Wiewiora** is currently a PhD candidate in Queensland University of Technology (QUT) in Australia. Her research is concerned with knowledge management. This study has allowed her to pursue in depth examination of knowledge transfer across projects in project-based organisations. Anna currently has affiliation with CRC Centre for Integrated Engineering Asset Management (CIEAM). She is also involved in a collaborative research on Social Network Analysis. Anna was part of the Organising Committee for the Second Theme postgraduate Conference in QUT held in March 2009. She is an active member in QUT playing roles as RTC Student Representative for the School of Urban Development. Prior to this Anna was employed in a range of roles within industry in countries such as Ireland and USA. Anna holds a Master Degree in Business and Law Administration from the University in Wroclaw, Poland.
Asrul Nasid Masrom is currently conducting doctoral research in Construction Management at the Faculty of Built Environment and Engineering, Queensland University of Technology. He completed his Bachelor of Science in Building at the University of Technology, Malaysia, in 1999 and Master of Science in Construction Contract Management in 2007 at the same university. He has been working in the construction industry for six years as a practitioner involved in cost estimating, measurement, pricing and project planning. In September 2007, he then worked as a tutor in University Tun Hussein Onn Malaysia (UTHM) prior to embarking on his current PhD research program.

Eric Too is a lecturer in the School of Urban Development at Queensland University of Technology. He has worked as a Project Manager in the construction industry before becoming an academic. His current research is in the area of infrastructure asset management.