# **PRRES CONFERENCE 2024**



# 30<sup>th</sup> ANNUAL PACIFIC RIM REAL ESTATE SOCIETY CONFERENCE

GOLD COAST, QUEENSLAND, AUSTRALIA

# ABSTRACTS









# WELCOME

# The 30<sup>th</sup> Annual Pacific Rim Real Estate Society Conference

# welcomes you to the Gold Coast, Queensland, Australia

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# THE RISK-ADJUSTED PERFORMANCE AND DIVERSIFICATION BENEFITS OF AUSTRALIAN FARMLAND

#### JUFRI MARZUKI AND GRAEME NEWELL Western Sydney University

#### ABSTRACT

There has been considerable interest amongst institutional investors (both local and international) in Australian farmland in recent years. This reflects the recent strong performance of Australian rural commodities, as well as a quest for food security globally, and an increasing focus on the role of farmland concerning sustainability issues (eg: carbon farming, regenerative agriculture, green economy). This sees the farmland sector having unique drivers compared to the other property subsectors.

Using the quarterly ANREV Australian farmland index, this paper examines the risk-adjusted performance and diversification benefits of Australian farmland (and farmland sub-sectors) over 2015-2022 to examine the role of Australian farmland in a property portfolio and in a mixed-asset portfolio. The performance of Australian farmland is compared with the other major property sub-sectors and other major asset classes. The strategic investment implications for institutional investors and Australian farmland in their portfolios going forward are also highlighted.

#### Paper ID 3

# THE PERFORMANCE OF THE GLOBAL RENEWABLE ENERGY INFRASTRUCTURE SUB-SECTOR

#### **GRAEME NEWELL AND JUFRI MARZUKI** Western Sydney University

#### ABSTRACT

There has been considerable interest amongst institutional investors in the infrastructure asset class. This has seen major infrastructure fund managers and major infrastructure investors actively involved in a range of infrastructure sub-sectors (eg: transportation, utilities, energy, communications), with the top 100 infrastructure fund managers having over \$1.7 T in infrastructure AUM and the top 100 infrastructure investors having over \$660 B in infrastructure in their portfolios. In recent years, with the global focus on environmental issues, ESG, the transition to zero-carbon and to a greener economy, renewable energy infrastructure has also attracted considerable investor interest globally in both the listed and non-listed infrastructure spaces. This includes the renewable energy infrastructure sub-sectors of windfarms, solar energy, hydro and battery storage.

This paper examines the risk-adjusted performance and diversification benefits of listed renewable energy infrastructure globally over 2007- 2023 to examine the role of renewable energy infrastructure in an infrastructure portfolio and in a mixed-asset portfolio. The performance of renewable energy infrastructure is compared with the other major infrastructure sub-sectors and other major asset classes. The strategic investment implications for institutional investors and renewable energy infrastructure in their portfolios going forward are also highlighted.

# ARE INVESTORS BEING INCENTIVISED TO EXIT RESIDENTIAL INVESTMENT?

#### **NEVILLE HURST<sup>1</sup>, JARRAD HURST<sup>2</sup>** <sup>1</sup> RMIT UNIVERSITY, MELBOURNE, AUSTRALIA <sup>2</sup> LONDON SOUTHBANK UNIVERSITY LONDON, UK

#### ABSTRACT

The provision of rental accommodation is a critical component of the housing system and prices of such accommodation tend to follow the principles of supply and demand. In the Australian context, and in particular, Victoria, Australia's most densely populated state, the supply of suitable rental accommodation has reached critically low levels resulting in spiralling rent increases creating further difficulties for the most vulnerable. Although the provision of private rental accommodation typically comes from smaller "mum and dad" investors the state government recently introduced an extensive list of changes to local tenancy regulations and taxation proposals that is arguably discouraging investment in housing. Such an outcome would exacerbate supply, further compounding rental prices. In addition, the state government is investigating options of creating measures to accelerate the retrofitting of energy efficient measures into existing housing stock. This is currently happening in the UK with the introduction of Minimum Efficiency Energy Standards (MEES) for rental housing stock.

This paper presents a critical review of the current rental crisis that is occurring in Victoria, Australia. It does this by providing a discussion of the reported impacts of the regulatory changes imposed upon landlords as well as potential impacts of taxation laws. It further provides a pragmatic discussion of house energy efficiency standards relating to rental properties and then synthesises these with views expressed by real estate agents to evaluate the potential impact upon investment in the housing market. With much of the data sourced from literature and real estate agents, the aim of this paper is to create a research agenda to explore the potential affects of regulatory imposts to an important social need.

#### Paper ID 7

Refereed

# SHARING BUSINESS MODELS IN A NEW CITY BLOCK DEVELOPMENT: CASE EMBASSY OF SHARING, SWEDEN

#### **RIIKKA KYRÖ AND REBECKA LUNDGREN** Lund University, Faculty of Engineering

#### ABSTRACT

Uptake of circular and sharing economy is accelerating and this study aims to establish the role and specific solutions of facility management in the circular business model of sharing spaces by exploring the management of a unique new commercial city block development in Malmö, Sweden. The case has a strong focus on the sharing economy, innovation, as well as sustainability. The facility management for all multi-tenant spaces will be a separate, out-sourced service provider. This 'community manager' will be responsible for the cohesiveness and service function, which can be categorized as Community on the one hand, and Dialogue on the other. The study highlights innovative solutions from a pioneering project. The facility manager role in the sharing context should focus on community creation and providing platforms for dialogue. The findings are useful for researchers and facility management organizations wanting to implement the sharing economy and adopt new roles.

# LIFECYCLE ASSESSMENT OF A CIRCULAR ECONOMY INITIATIVE FROM THE COMMERCIAL BUILDING SECTOR

#### **REBECKA LUNDGREN AND RIIKKA KYRÖ** Lund University

#### ABSTRACT

The circular economy is a concept which has received increased interest from built environment research and industry in recent years. This study explores two circular business models of adaptive reuse and shared spaces through employing a single-case study of a former factory, refurbished to shared offices and workshops. As circular economy has been criticised for ignoring social sustainability, we engage in three different lifecycle assessments: environmental, profit, and social. The findings show that while the embodied carbon is significantly reduced, it emphasises the role of the operational phase. Findings also indicate the social aspect to be most prominent during the operational phase. The project is deemed economically sustainable. In designing a sustainable built environment, emphasis need to be put towards efficient use of existing buildings, focusing on the operational phase. The findings are particularly useful for professionals involved in refurbishment projects and curious about the sustainability impact of sharing spaces.

Paper ID 9

Refereed

# BLOCKCHAIN IN PROPERTY VALUATION: PERSPECTIVES OF PROPERTY PROFESSIONALS IN NIGERIA

#### CHIBUIKEM MICHAEL ADILIEME, ROTIMI BOLUWATIFE ABIDOYE AND CHYI LIN LEE

School of Built Environment, UNSW Sydney

#### ABSTRACT

Blockchain technology is an emerging digital technology tool touted to bring radical changes within different spheres of life. Within the property industry, the use case is for record, security and transparency, among other features. Accordingly, there have been enquiries on its application within the property and land administration practice area. Through interviews administered to five proptech experts in Nigeria, this paper examines their perspectives on blockchain technology concerning its potential use, barriers and prospects. The paper identifies, firstly, the low adoption of blockchain technology in the property space. Its primary proposed use is as a credible store of record which can present itself as a potential tool to build a trustworthy database for the Nigerian property market. The major challenges include a lack of awareness and secrecy around property transactions. Consequently, the stakeholders identified regulation, and education as critical mechanisms that can promote blockchain technology adoption within Nigeria's property industry.

# THE RELATIONSHIP OF ESG AND SUSTAINABLE TEMPORARY ADAPTIVE REUSE (STAR) OF COMMERCIAL PROPERTY

Sara Wilkinson UTS, Gill Armstrong UTS, Kusal Nanayakkara RMIT, Jua Cilliers UTS, Mark Willers, Charter Keck Kramer, Robert Fleck UTS

#### ABSTRACT

A fallout of the global COVID lockdowns is the change in work patterns. The Monday to Friday 9 to 5 routine has been replaced with a hybrid model, split between the office and home. A consequence of the shift to a hybrid pattern is underuse of office spaces and contractions in space leased at renewal. Supporting retail and food businesses are impacted by reduced city centre footfall. What can owners do with underused and vacant space? Is this a short-term or permanent shift? The STAR (Sustainable Temporary Adaptive Reuse) Toolkit project explores options for encouraging alternative meanwhile uses. Global acceptance of climate change and the need for equitable, responsible action in commercial property is being embedded in Environmental Social Governance (ESG) frameworks which map and evaluate building performance and real-estate practices. This paper explores the relationship between STAR and ESG in commercial property in Sydney.

Paper ID 12

Refereed

## THE FISCAL EFFECTS OF LAND DEVELOPMENT IN GERMANY

# ALBERT GRAFE AND JULIUS RANGE

University of Regensburg

#### ABSTRACT

Our paper aims to quantify the income tax effects of increases in residential areas in Germany. Economic profitability of land development is a major driver for land consumption but is prone to increasing political scrutiny and environmental concerns. We estimate the effect based on a detailed synchronized panel database for German counties. Applying a spatial regression approach, we address the heterogeneity of regions as well as neighboring and spill-over effects. Our findings suggest that an increase in residential areas has a significant positive effect on income tax revenue. Our research sheds new light on the interplay between revenues and costs in residential land development.

# CONSIDERING LUMINANCE & GLARE IN-SITU AT PROPERTIES FREQUENTED BY AGEING POPULATION

**PAULETTE HEBERT & KAREN TANFIELD** Oklahoma State University & University of Melbourne

#### ABSTRACT

Growing ageing population enjoys theatres, museums, restaurants. Older adults need more light but are sensitive to glare. "Glare is caused by excessive luminance or ... contrast"; luminance is "... intensity of emitted light... (with) cd/m2 as unit of measure. Glare may include bare light bulbs or windows. "Visual tasks" include negotiating stairs, viewing art objects, reading menus, programs, signage. Convenience sample of properties: 1) theatre, 2) museum, 3) restaurant/lounge were visited over 2week period. Using innovative, free app and iPhone, luminance was recorded in false colour; luminance quantities were displayed; interior scenes were documented. 55 digital photographs, and false colour image luminance plots, were captured. Luminance ranged from 0.49 to 316.36 cp/m<sup>2</sup>. Results were compared to "100 cd/m<sup>2</sup> lower boundary for adequate light for tasks". 53 measurements (96%) did not comply. Measurements demonstrated 8:1 contrast. Bare bulbs and large windows contributed. App could aid facility managers in easily assessing properties for ageing population.

#### Paper ID 14

Refereed

# COMMERCIAL PROPERTY PERFORMANCE AND ECONOMIC POLICY UNCERTAINTY: A SUB-CLASS ANALYSIS OF RETAIL RENTS IN AUSTRALIA

#### ALBERT AGBEKO AHIADU<sup>1</sup>, ROTIMI BOLUWATIFE ABIDOYE<sup>1</sup>, AND TAK WING YIU<sup>1</sup>

<sup>1</sup>School of Built Environment, University of New South Wales, Sydney

#### ABSTRACT

Over the past two decades, global economic uncertainty has increased in response to recessions, supply chain disruptions, geopolitical and trade tensions, and COVID-19. This study examined the impact of economic policy uncertainty on rents in Australia's retail sector across the regional, sub-regional, and neighbourhood sub-classes. Vector autoregressive (VAR) models were adopted to analyse quarterly data on net rents from 2000Q4 to 2022Q3. Overall, regional retail rents are most resilient to external shocks, reacting slowly in the first two quarters, followed by minor declines. Sub-regional rents exhibit higher short-term sensitivity, experiencing an immediate decline in response to an uncertainty shock, which continues for five years. Neighbourhood rents fluctuate the most in the short term, immediately declining and returning to pre-shock levels within a year. However, neighbourhood retail rents respond positively to uncertainty after a year, indicating that it may represent a viable opportunity for investors when the market outlook is uncertain.

# DRIVERS OF CUSTOMARY LAND REGISTRATION (NON) COMPLIANCE IN GHANA

#### EFFAH AMPONSAH<sup>1</sup>, FREDUA AGYEMANG<sup>2</sup>, AKWASI ADDAI ASOMANING<sup>3</sup> AND OPPONG KWADWO<sup>4</sup>

<sup>1</sup>School of Property, Construction & Project Management, RMIT University, VIC, Australia <sup>2</sup>University of the Western Cape, Cape Town, South Africa <sup>3</sup>Centre for Land Studies, Sunyani, Ghana <sup>4</sup>Land Valuation Division of the Lands Commission, Kumasi, Ghana

#### ABSTRACT

Despite several interventions over the years, Ghana has achieved limited success in its attempts at registering title to customary land. This has been a matter of concern to its government and development partners. Since land registration is central to land tenure security which engenders investment and productivity, some have argued that insecurity of tenure is a key issue creating and sustaining poverty in Ghana. Using data gathered through interviews with key stakeholders and prospective land title holders in the Greater Kumasi Area, this research assessed the drivers of customary land registration (non) compliance in Ghana. The research found that registration costs, the lack of knowledge and socio-cultural perceptions of land registration significantly impact people's ability and the decision to register customary land. Towards addressing these issues, the study recommends changes to the legal and institutional framework for land registration, mass public sensitisation and enforcing the statutory regulations on land management and administration.

#### Paper ID 19

Refereed

# THE EMERGING RESIDENTIAL EXCLUSIVITY IN URBAN REGENERATION: INSIGHTS FROM NEW ZEALAND'S REGIONAL TOWN CENTRES

#### NICOLE XIANG, OLGA FILIPPOVA, DEBORAH LEVY

University of Auckland

#### ABSTRACT

This paper investigates the issue of upmarket residential dominance in urban regeneration efforts within New Zealand's regional town centres. Drawing upon case studies from Cambridge and Whanganui, the study provides insights into the dynamics of the town centre housing market and the approaches employed for town centre revitalisation. Leveraging cultural and architectural heritage, both locations identify built opportunities through intensification and adaptive reuse of underutilised buildings, contributing to urban vibrancy and revitalisation. However, these case studies also reveal the emergence of high-end residential developments catering primarily to affluent individuals, particularly retirees, driven by the profitability of the market. The lack of affordable housing options reinforces the perception of residential exclusivity, raising concerns about a homogeneous society and gentrificationlike consequences. Proactive measures are needed to ensure regional town centres attract a diverse population in terms of age, income, and background. Fostering inclusivity remains crucial for sustainable urban regeneration.

# UNLOCKING INNOVATIONS IN SENIOR HOUSING: EVALUATING THE ROLE OF LAW AND POLICY AS BARRIERS TO IMPLEMENTATION IN AUSTRALIA

#### **DR ANDREA BLAKE** Queensland University of Technology

#### ABSTRACT

Finland has one of the most rapidly aging populations in the world. This has spurred the need for innovative approaches to senior housing, including multi-generational housing and co-designed and co-managed intentional communities. However, despite similar demographic drivers in Australia, innovation in senior housing has not followed at the same pace. This paper reviews case studies of senior living communities in Finland and assesses the possible barries to such innovation in Australia, closely focusing on the legal and policy framework for senior living. By examining these factors, this research sheds light on a potential reasons why innovations are not being adopted in Australia and makes recommendations for changes to the legal and policy framework. Ultimately this research seeks to inform policy makers, industry professionals and stakeholders to drive senior housing innovations in Australia

#### Paper ID 21

# DEEP LEARNING-BASED SPATIOTEMPORAL ANALYSIS AND CLUSTERING OF HOUSE PRICE FLUCTUATIONS AND APPRECIATION LEVELS IN THE DIFFERENT SUBURBS OF MELBOURNE METROPOLITAN

# PEYMAN JAFARY1,2, DAVOOD SHOJAEI2, ABBAS RAJABIFARD2, TUAN NGO1,3

1 Building 4.0 CRC, Caulfield East, Victoria, Australia 2 Centre for Spatial Data Infrastructures and Land Administration, Department of Infrastructure Engineering, The University of Melbourne, Melbourne, Victoria, Australia 3 Department of Infrastructure Engineering, The University of Melbourne, Melbourne, Victoria, Australia

#### ABSTRACT

This research investigates the spatiotemporal dynamics of house price fluctuations and appreciation levels in the different suburbs of the Melbourne Metropolitan area. Quarterly median house price data spanning from quarter 3 of 2017 to quarter 3 of 2022 is utilized, obtained through web scraping from the Real Estate Institute of Victoria (REIV). After data capturing, the research employs data preprocessing, cleaning and missing data imputation using machine learning techniques. Statistical approaches, in conjunction with unsupervised and supervised deep learning methods, are then employed on the time series data to cluster the suburbs based on their levels of house price fluctuation and appreciation. Deep learning techniques such as autoencoders and Recurrent Neural Networks (RNNs) are leveraged to uncover distinctive patterns and provide insights into the varying degrees of property value changes and appreciation levels across Melbourne's suburbs. The findings can contribute to a deeper understanding of the housing market dynamics in the study area.

Paper ID 22

# THE VALUATION OF COMPULSORY ACQUISITION COMPENSATION FOR CULTURAL LOSS BY INDIGENOUS GROUPS

#### **DAVID PARKER**

University Technology Sydney

#### ABSTRACT

The NSW Land Acquisition (Just Terms Compensation) Act 1991 makes provision for compensation for the acquisition of land, including any native title rights and interests in relation to land, which may include compensation for cultural loss by indigenous groups.

Cultural loss may arise in many forms such as travelling over and camping, hunting, gathering and fishing and conducting ceremonies and rituals on the acquired land and the loss of the ability to look after and speak for culturally significant sites and areas.

The paper outlines the findings of a research project to identify and classify forms of cultural loss and to develop a process and valuation method for quantifying compensation.

#### Paper ID 23

# HERITAGE PRESERVATION USING TRANSFERABLE DEVELOPMENT RIGHTS – A COMPARATIVE ANALYSIS, AUSTRALIA AND TAIWAN

#### KEN RAYNER<sup>A</sup>, PEDDY, PIYING, LAI<sup>B</sup> & JOHN SHEEHAN<sup>C</sup>

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Evangelista Purkyne University in Usti nad Labern (UJEP) (Czech Republic).

#### ABSTRACT

The preservation of private property rights is considered to be a fundamental human right in most countries around the world. However, as cities grow and morph into the future with changing demands and priorities, enhanced flexibility of entrenched private property rights allows for the exploration of new means of adapting to the changes demanded of our cities. One means of adapting these property rights may be to allow greater movement within the physical city, potentially with the use of Transferable Development Rights (TDR). This paper explores to current option of using TDRs to protect heritage buildings, by comparative analysis between the Heritage Floor Space Scheme used to protect heritage buildings in Sydney, Australia, and the heritage TDR scheme used to protect heritage properties in Da-Dau-Cheng Special Historic Landscape District, Taipei, Taiwan. In this paper, the authors find some similarities in the unrestricted movement of these rights between the two case studies with consequences for the features of these property rights.

# VALUATION @ RISK: UNDERSTANDING AUSTRALIAN VALUATION APPROACHES TO CLIMATE CHANGE RISKS

#### LUCY CRADDUCK

QUT Law, Queensland University of Technology

#### **GEORGIA WARREN-MYERS**

Faculty of Architecture, Building and Planning, University of Melbourne

#### ABSTRACT

Governments are becoming more aware of the need for proper engagement with climate related risks and, consequently, are gradually imposing (more) reporting obligations on businesses. Ensuring appropriate engagement with climate change risks is becoming a significant concern in the context of the reporting obligations of listed entities and financial institutions as Australia, and other countries, move to impose mandatory reporting obligations. These types of risks, however, in the form that cause adverse effects to real property, have always been a concern for the valuation profession, albeit that the impacts may not have been directly badged as relating to 'climate change'. This paper, which engages with the researchers' ongoing research project, presents the combined results of survey responses, interviews, and focus groups that engaged with the Australia valuation professions understandings and reporting of risks generally, and how climate related risks specifically are engaged with and reported in the valuation process.

#### Paper ID 26

# NEIGHBOURS, NEGLIGENCE, BUT NO MORE NUISANCE: CHANGES TO RIGHTS FOR SUPPORTED LAND UNDER THE QUEENSLAND *PROPERTY LAW BILL 2023*

#### LUCY CRADDUCK

QUT Law, Queensland University of Technology

#### ABSTRACT

Section 179 of the Property Law Act 1974 (Qld) grants the right of support to land and buildings or structures on land. Previously, a breach of this obligation could give rise to an action in the tort of nuisance. However, in 2023 significant amendments were introduced that change the rights protected by Section 179. Notably, the head of claim for a breach of Section 179 will change from being founded in the tort of nuisance to being based in the tort of negligence. That is the new Section 179 will impose a duty of care on the owners of both the supported and supporting lands "not to do or omit to do anything that adversely affects the support provided by the supporting land to the supported land". This paper will consider the impacts of that change; and identify issues requiring attention by owners, occupiers, and developers as a consequence.

# AGEING AND RESIDENTIAL SATISFACTION IN AUSTRALIA: A QUEENSLAND PERSPECTIVE

#### SARAH AITA, ANDREA BLAKE, EVONNE MILLER AND MARK LIMB Queensland University of Technology

#### ABSTRACT

Population aging brings about the demand for housing options that fit the diverse interests and needs of older adults. While most people prefer to age in place -alone or with family, some older adults choose to live in other housing arrangements such as public/community housing, retirement villages or residential parks. Using the most recent "Income and Housing" data from the Australian Bureau of Statistics (ABS), this research explores the spatial patterns and implications of older adults' housing choices on residential satisfaction and age-based segregation. The research aims to highlight current housing trends and market gaps that are specific to that age cohort. Moreover, the study aims to provide valuable insights for policymakers, planners, and researchers working towards creating more age-inclusive housing models.

Paper ID 28

Refereed

# THE IMPACT OF INVESTOR SENTIMENT ON REITS: AN EMPIRICAL STUDY ON THE AUSTRALIAN REITS MARKET

#### JIAWEI CAO AND WEJENDRA REDDY RMIT University Melbourne

#### ABSTRACT

This study investigates the impact of investor sentiment on the Australian REITs (A-REITs) market. A-REITs trade publicly as stocks, offer high liquidity, and play a critical role in constructing welldiversified portfolios and improving returns. This study drew related behavioural finance theories to formulate literature discussion on investor sentiment and its impact. The empirical study adapted the Fama-French three-factor model using 2006-2021 A-REITs data. Considering the heterogeneity of investors, A-REITs investors are subdivided into individuals and sentiment proxies are constructed separately. The textual analysis technique was employed to construct the sentiment proxy for A-REITs institutional investors. Results of empirical study indicate that significant relationship can be identified between A-REITs return and investor sentiment proxies. A-REITs returns increase (decrease) when investor sentiment is optimistic (pessimistic). This study will provide market participants a better understanding of the risk and return characteristics, also suggest ways to improve risk management and investment decision making strategies.

# THE FUTURE PROPERTY WORKFORCE: CHALLENGES AND OPPORTUNITIES FOR PROPERTY PROFESSIONALS IN THE CHANGING LANDSCAPE

#### CHYI LIN LEE<sup>1</sup>, SHARON YAM<sup>2</sup>, CONNIE SUSILAWATI<sup>3</sup> AND ANDREA BLAKE<sup>3</sup> <sup>1</sup> University of New South Wales, <sup>2</sup> Western Sydney University, and <sup>3</sup> Queensland University of Technology

#### ABSTRACT

The rapid advancement of technology has revolutionised the way we live and work, posing challenges and opportunities for various professions, including property workforce. The COVID-19 pandemic has further accelerated the pace of change, prompting property professionals to adapt to new ways of performing their work. This study, therefore, examines the property workforce of the future and the required skills for Property Industry 4.0 by conducting semi-structure interviews with property leaders. Our preliminary results suggest that different professionals perceive and embrace PropTech in a dissimilar way. Further, the key challenges and opportunities for property professionals (e.g. ESG, PropTech etc) have also been identified. The implications of the study have also been discussed.

#### Paper ID 30

# ENHANCING HIGH-PERFORMANCE PARA-SPORT IN THE BUILT ENVIRONMENT FOR WHEELCHAIR ATHLETES AT BRISBANE 2032 PARALYMPICS

#### JAE WON KANG

International College of Management, Sydney (ICMS), Australia

#### ABSTRACT

Sport plays a crucial role in the rehabilitation of individuals who use wheelchairs, allowing them to strive to achieve optimal performance-related goals (Goosey-Tolfrey, 2010). There is a considerable body of Australian research into the accessibility and safety of the built environment for people with disabilities however studies focusing specifically on wheelchair athletes at Paralympic venues remain limited. With Brisbane set to host the 2032 Paralympics, it is imperative that the sporting venues and infrastructure adhere to International Paralympic Committee (IPC) standards and principles to ensure accessibility and inclusivity (Paralympics Australia, 2023). The challenge in the lead up to 2032 is to formulate policy options which will positively influence the built environment for wheelchair athletes, enabling them to develop and excel in their high-performance para-sport endeavours while making sure that their experience of event venues and the wider built environment parallel those of able-bodied athletes.

# OUR NATION, OUR FUTURE - SOCIAL AND AFFORDABLE HOUSING PLANNING FOR ALL

#### JAE WON KANG, DAVID MCLENNAN, JOHN NICOLS AND SAM CUCCURULLO International College of Management (ICMS), Australia DONN WON KIM

#### University of New South Wales (UNSW), Australia

#### ABSTRACT

This study considers existing evidence regarding the relationship between provision of quality social and affordable housing near public transportation and benefits to the local community's economic, health and education outcomes. The authors conclude with recommendations and policy direction on how both government and very low to moderate income households can respond in practical ways to change the demand for liveable environments. The study explores the UN Sustainable Development Goals (SDGs) with the location model of social and affordable housing, specifically SDG 3 (Good Health and Environment), SDG 8 (Decent Work and Economic Growth), and SDG 11 (Sustainable Cities and Communities). The findings of this study will facilitate innovative social and affordable housing projects and State government policy.

#### Paper ID 32

# MAPPING AUSTRALIAN SUSTAINABILITY RATING TOOLS AGAINST ESG CRITERIA

#### G. WARREN-MYERS, C. GHOSN AND C. CANDIDO University of Melbourne

#### ABSTRACT

Write abstract here. Maximum 150 words.

Environmental, social and governance (ESG) metrics has emerged as the new 'sustainability' buzz word. From the 'green building' movement of the early 2000's, to the 'triple bottom line' of the later 2000's, 'people, planet, profit' in the 2010's, sustainability and trying to provide further definition is continually evolving. The proliferation of environmental rating tools over the past two decades has endeavoured to assist the industry in measuring sustainability, so how do these tools assist in mapping the criteria of ESG? The importance of monitoring, reporting, and enhancing transparency in ESG disclosures has emerged as a central issue with significant implications to the property industry. The research maps existing Australian sustainability rating tools against ESG criteria, identifying the various attributes within the rating tools that provide verification of ESG criteria, this will provide clarity regarding the relationship between ESG criteria and existing rating tools.

# UNPROMPTED INSIGHTS: EXPLORING EMPLOYEE PERSPECTIVES ON WORKPLACE HEALTH AND WELLBEING

#### C.GHOSN, C. CANDIDO, G. WARREN-MYERS The University of Melbourne

#### ABSTRACT

Health and well-being in the workplace have gained prominence in recent years. However, the value employees place on workplace health and well-being remains understudied. This paper explores the importance of health and well-being from the employee's perspective using voluntary job reviews from Australian IT companies. Specifically, it examines a substantial dataset of 1697 job reviews from the Glassdoor database (2019-2022), focusing on reviews mentioning "health" and "well-being" in comparison to other types of workplace complaints. Considering the whole dataset 5,18% of the reviews are related to "health" and "well-being", offering insights into employees' views and value on implementing these strategies in the workplace. Findings also suggest that benefits, organizational culture, leadership, flexible ways of working and food provided by the company were associated with the perception of health and well-being experience and perception of employees. Organisations can leverage these insights to improve their strategies when providing health and well-being strategies in the workplace.

#### Paper ID 34

Refereed

# THE RESIDUAL SKILLS TO VALUE PROPERTY

#### **STEVEN BOYD, GARRICK SMALL AND TERRY BOYD** CQUniversity and independent

#### ABSTRACT

Artificial intelligence (AI) has the potential to redefine the way we value property, presenting the contemporary valuer with a new suite of skills to pursue. This research seeks to define the residual skills necessary to complete a valuation in today's technology augmented practice.

This paper commences with a revisit of research into skills development within Australian universities and the emerging role of technology, specifically AI, in preparing valuations. The latter part of the research presents valuation as a framework, or environment, where tasks and roles are allocated. The mapping and allocation of tasks requires careful consideration of ecological and symbiotic relationships, between the human valuer and AI. The residual role of the property valuer defines the new skills necessary to complete a practical valuation.

# AUGMENTING FINANCIAL ANALYSIS IN VALUATION EDUCATION

#### STEVEN BOYD AND GARRICK SMALL CQUniversity

#### ABSTRACT

Artificial intelligence in education (AIED) promises personalized flexible and engaging learning. With real-time automated feedback students can learn and develop skills in a manner and at a speed that suits them, not confined by the synchronous nature of traditional vocational and higher education practices.

This research explores the benefits in learning the financial analysis inherent in property valuation, asynchronously, with the help of AIED. The review extends to consider the potential for unintended consequences by employing AI in property education. The later part demonstrates the research informed design of an online asynchronous unit focused on the apply side of the Apply Evaluate Plan (AEP) sequence. The financial analysis unit incorporates the mathematics applied in the valuation of residential and commercial property in Australia. It is designed to benefit from tailoring and engagement through an AI partnered learning system. The unit content, structure and design process are presented for subsequent analysis.

#### Paper ID 36

Refereed

# HARNESSING UTILIZATION DATA TO REVISIT SPACE NEEDS IN ACTIVITY-BASED WORKPLACES: A CASE STUDY

#### SAMIN MARZBAN<sup>1</sup>, OZGUR GOCER<sup>2</sup>, BEHNAZ AVAZPOUR<sup>3</sup>, IVA DURAKOVIC<sup>4</sup> AND CHRISTHINA CANDIDO<sup>3</sup>

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#### ABSTRACT

The pandemic fast tracked organizations' re-evaluation of Corporate Real Estate footprints and costs, with many debating the need for space altogether. Harnessing utilization data and identifying differences between intended and actual use of various work zones is critical for tenants to reduce office footprint by designing workplace environments that achieve optimized fit between office infrastructure and post-pandemic ways of working. This paper reports on findings from a case study of a floor in an Activity-Based Workplace environment. 12 months of utilization data is analysed to identify work zones more/less frequently used by workers and their respective physical attributes. Findings show workers prioritize work zones with visual access to daylight and nature, as well as assigned zones for individual work. Breakout spaces were the second most utilized, with open collaborative zones predominantly used by groups of four, while formal meeting rooms were underutilized. Internal, noise-prone zones close to lockers, entry points, or under air-conditioning outlets were least utilized. This case study demonstrates the value of a multi-dimensional analysis of workplace utilization patterns, environmental conditions and behaviour patterns in informing effective future real estate and design decisions.

# COLLABORATION IN THE VALUATION PROCESS: A REVIEW AND DIRECTION FOR FUTURE RESEARCH

#### \*HASSAN SHUAIBU LIMAN<sup>A,B</sup>, ABDUL-RASHEED AMIDU<sup>A</sup> AND DEBORAH LEVY<sup>A</sup>

<sup>a</sup> Department Property, The University of Auckland, New Zealand <sup>b</sup> Department of Estate Management and Valuation, Federal University of Technology, Minna, Nigeria

#### ABSTRACT

The commercial property valuation process is highly complex, requiring valuers to use information from different sources, to comply with both internal and external quality control mechanisms, and to exercise professional judgment in dynamic markets and non-routine tasks. Due to the interactive nature of the different components of the valuation process, collaboration is central to the quality of estimated values reported by valuers. Yet, little is known in the valuation literature about how valuers collaboratively solve problems and make decisions. By adopting a narrative approach, this paper reviews literature on valuation decision making and reports that behavioural valuation research is skewed towards examining individual valuer behaviour whereas the behaviour of valuers in a collaborative context has remained largely unexplored. In view of this gap in the literature, the paper identifies opportunities for future research to explore different dimensions of collaboration in the valuation process. Such research can provide insights that may be used to enhance collaborative practices in the valuation process.

#### Paper ID 40

# REAL ESTATE TRANSPARENCY AND REAL ESTATE MARKET STABILITY: AN INTERNATIONAL EVIDENCE

#### HASSAN GHOLIPOUR FEREIDOUNI

Western Sydney University

#### ABSTRACT

Given the crucial importance of transparency in the local and global real estate markets, there continues to be growing demand for studies on the effect of transparency on various activities such as foreign real estate investment, property development, state land management, property occupation, sellers' property pricing strategies, real estate transaction volume, and mortgage defaults. The purpose of this study is to examine the impact of real estate market transparency on stability of residential and commercial property markets across 98 advanced and emerging economies for the period 2004–2022. By applying dynamic panel models and controlling other determinants of market stability, the results suggest that higher level of transparency does not affect price stability in residential markets. However, transparency significantly matters for stability of commercial property markets in economies at different stages of development.

# THE AIRBNB EFFECT: LONG-TERM EFFECTS OF SHORT-TERM RESIDENTIAL ACCOMMODATION ON POST-EARTHQUAKE RECOVERY OF CHRISTCHURCH CBD

#### OLGA FILIPPOVA, MICHAEL REHM AND AKRAM FATOUREHCHISHABESTARI

The University of Auckland Business School

#### ABSTRACT

Christchurch City Council continuously encouraged residential activities in its city centre with a range of policies and strategies. This has become particularly acute following the devastating earthquakes in 2010-2011. Since then, in 2016, the council introduced Project 8011, a housing programme to attract 20,000 permanent residents to the CBD. Current statistics indicate that the number of inner-city residents falls short of these expectations and the city is not on track to meet its target. While the number of permanent residents. Investors own the majority of the dwellings in the centre. Our preliminary investigation points to the prevalence of short-term accommodation on online rental platforms like Airbnb. Using Airbnb listings between 2016-2021, we analyse the growth in short-term accommodation listings on the city centre's attractiveness to permanent residents and its impact on rental and housing prices.

Paper ID 42

Refereed

# EXPLORING THE APPLICATION OF THE CARBON RISK REAL ESTATE MONITOR TOOL FOR AUSTRALIAN OFFICE BUILDINGS

#### A/PROF GEORGIA WARREN-MYERS, DR MONIQUE SCHMIDT, PROF ROBERT CRAWFORD, DR CHRISTOPHER JENSEN, DR JAMES HELAL

The University of Melbourne

#### ABSTRACT

Urgent transitions to mitigate effects of climate change are needed. Policies and reduction targets for greenhouse gas emissions associated with the built environment are emerging. Meeting these targets will be essential to ensure built assets are not stranded. Asset 'stranding' occurs when a building no longer meets emissions targets and, as a result, may not be allowed to be occupied or rented, resulting in implications for asset income and occupancy. The Carbon Risk Real Estate Monitor (CRREM) tool was developed in Europe to enable emissions analysis of assets and portfolios to reduce the risk of stranding. CRREM is regarded as one of the most valuable tools for asset management and valuations in Europe and UK, however, in Australia it has only recently been adapted for local conditions. This research provides key insights into the effective use of CRREM for Australian built assets.

# ADDRESSING THE PRISONER'S DILEMMA IN THE ADOPTION OF BLOCKCHAINS IN GOVERNING INFORMAL LAND TRANSACTIONS

#### GODWIN KAVAARPUO<sup>1</sup>, KWABENA MINTAH<sup>1</sup>, DARCY ALLEN1, JOSEPH AYITIO2

#### 1RMIT University, Melbourne 2PSS Urbania Consulting Ltd, Ghana

#### ABSTRACT

Interest in using blockchains to address challenges of transacting informal lands in developing countries (e.g., multiple sales, record duplication) is growing, but successful implementation is limited. As an institutional technology, its adoption depends on how it enhances the self-interests of the parties involved in transacting land. This situation engenders a prisoner's dilemma. This paper argues that the institutional weaknesses in transacting customary lands with complex, multiple and competing property rights provide avenues to extract opportunistic rents from a transaction. At the same time, these stakeholders are crucial to the technology's adoption. Understanding the institutional adaptations necessary to align these private and social interests better is crucial to foster adoption. Drawing from transaction cost economics and using the case of stool lands in Ghana, this exploratory study examines the nature of customary property rights and transactions and stakeholders' incentives, developing a framework of the institutional adjustments necessary to support blockchain adoption.

#### Paper ID 44

Refereed

# LET ME ENTERTAIN YOU: REAL ESTATE RELATIONSHIP SPENDING AND COST OF DEBT

#### XIALING CHU<sup>1</sup>, YONGHENG DENG<sup>2</sup> AND DESMOND TSANG<sup>1</sup>

<sup>1</sup> CUHK Business School, Chinese University of Hong Kong
<sup>2</sup> Wisconsin Business School, University of Wisconsin-Madison

#### ABSTRACT

This study examines the association between real estate firms' relationship spending and cost of debt. We conjecture real estate firms utilize their entertainment and travel costs (ETC) to negotiate for better terms in the debt market. Our findings show increasing ETC incurred by Chinese real estate firms is associated with lower cost of debt. We further account for the voluntary disclosure of ETC with the Heckman selection model, and we establish the causal impact of ETC on cost of debt in a differencein-difference framework with the imposition of the anti-corruption campaign. In heterogenous analyses, we show the association between ETC and cost of debt is concentrated at state-owned enterprises and at firms with less dominant shareholders. Lastly, we show higher ETC is also associated with better loan access. In summary, our findings show real estate firms in China have been successful in using their ETC for building relationship capital with banks and lenders to lower their financing costs.

# **'TURNING THE ART OF RETAIL LEASE EVALUATION INTO A SCIENCE' PART 1: DEFINING AND UNDERSTANDING THE PROBLEM AND THE CONSEQUENCES.**

#### DONALD E GILBERT

#### ABSTRACT

Valuation of retail leases is increasingly simplistic, and increasingly inaccurate. The industry continues to move away from substantive analysis, putting it in the "too hard" basket. Consequently, it is ignoring key valuation, economic, legal and accounting concepts/practices, including: 'market value', 'effective rent' and tests of 'reasonable rent'; matching Supply & Demand (willing landlord/willing tenant); Contract Law (fully informed, free from duress, misrepresentation); auditing and accountability, business goodwill, and IFRS 16 guidelines.

While increasing oversimplification is understandable given the complexities involved, it is disastrous for the economy, especially for the SME sector, and ultimately for the environment.

Using actual case studies, this paper explores in detail how the first retail lease analysis product in the world, GEM Lease Analytics<sup>TM</sup>, addresses these issues and overcomes many critical retail valuation problems, including:

 $\succ$  The lack of standardized, structured methods and tools to value retail leases; ones that incorporate checks and balances. This leads to highly inconsistent results whereby the method and quality of every lease valuation is dependent on the Valuer's knowledge/skill and integrity, not the pertinent evidence. Inconsistent outcomes are detrimental to the industry and the Profession.

 $\succ$  The disparate quality/types of comparable information available makes it difficult to compare generic evidence from different sources, a problem exacerbated by the nonhomogeneous nature of the evidence itself, whereby properties for lease are different sizes/shapes, in different locations, and experience different levels of traffic and competition.

➤ The imbalance of information access / power between landlords and tenants, the latter being at a disadvantage. Evidence used by Valuers generally overrepresents the Supply 1 B Com/B Econ; Dip Prop Val; Cert Med & Arbit. FVI; MRICS (RICS accredited expert and arbitrator) Specialist Retail Valuer & Arbitrator; Retired Valueer Appraiser Australia; S. Africa "Turning the Art of Retail Lease Valuation Into a Science" Property Institute of New Zealand National Property Conference International Valuation Standards Council ('IVSC') – World Association of Valuation Organisations ('WAVO') Global Valuation Conference, Christchurch, New Zealand, 7th – 9 th June 2023. Copyright © 2023 Donald E Gilbert, and Gilbert Family Trust Pty Ltd All Rights Reserved 2 (landlord) side of the equation, without properly counterbalancing it using Demand (tenant) side evidence and metrics.

GEM Lease Analytics<sup>TM</sup> is an entirely web-based 'Software as a Service' (SaaS) that provides a comprehensive decision-support tool for all parties involved in retail. GEM<sup>TM</sup> uses multiple analysis methodologies to interrogate and link an entire 'body of evidence' from disparate sources and provides easy-to-understand results.

# WHY IS REAL PROPERTY ASSET MANAGEMENT IMPORTANT FOR FINANCIAL SUSTAINABILITY IN THE NOT FOR PROFIT SECTOR

#### LYNDALL BRYANT AND ANDREA SHARAM QUT, RMIT

#### ABSTRACT

Many long-standing Not-for-Profit (NFP) entities own and occupy extensive property portfolios. These organisations are mission driven, membership-based organisations, that have non-independent governance structures and are often largely run by volunteers.

However, these organisations often lack a strategic vision for their property which reflects little to no corporate real estate expertise or asset management knowledge at management and board level.

Ageing assets, increasing building compliance, and the need to respond to changing models of provision and climate change pose very significant financial and other risks. Commonly, lack of strategic asset management combined with limited revenue sources, creates the conditions for financial crises which result in disposal of property. In effect physical capital is lost through poor management.

This research will examine the governance of the real property asset base of the not-for-profit sector with a view to identifying opportunities for improved stewardship of these assets.

#### Paper ID 49

Refereed

# EXPLORING THE IMPACTS OF FACILITIES MANAGEMENT INTERVENTIONS DURING THE COVID-19 PANDEMIC: A QUALITATIVE STUDY IN VICTORIA

# YAN ZHANG, FELIX HUI, CHRISTOPHER HEYWOOD

University of Melbourne

#### ABSTRACT

The COVID-19 pandemic posed a significant challenge for facilities managers to adapt existing buildings with Facilities Management Interventions (FMI). This paper explores the impacts of FMI implemented for infection control during the COVID-19 pandemic in Victoria, Australia. Through 41 semi-structured interviews with Facilities Managers, Health and Safety Managers, and Infection Control experts, we examined the outcomes of interventions such as Indoor Air Quality (IAQ) monitoring, ventilation improvement, access control, occupant density control, and environmental disinfection. Thematic analysis using NVivo software identified five main themes summarising the impacts on building sustainability: health, environmental, economic, social, and technical. Furthermore, the study also highlighted significant changes in occupant IAQ literacy and perceptions of healthy buildings. This research contributes to understanding the pandemic's impact on built facilities and provides valuable insights for FM professionals. By drawing lessons from the COVID-19 pandemic, facilities managers can enhance their performance in the post-pandemic rea.

# **BARRIERS TO THE ADOPTION OF FLEXIBILITY/REAL OPTIONS IN AUSTRALIAN RESIDENTIAL PROPERTY DEVELOPMENTS**

#### KWABENA MINTAH<sup>1</sup>, KINGSLEY TETTEH BAAKO<sup>2\*</sup>, VANESSA GLOVER-QUARTEY<sup>3</sup>. GIDEON KWAME-OTCHERE

<sup>1,2,4</sup>School of Property, Construction and Project Management, RMIT University, VIC, Australia

<sup>3</sup>Melbourne School of Design, University of Melbourne, VIC, Australia

#### ABSTRACT

Despite multiple attempts to develop Real Options (RO) Valuation models devoid of mathematical complexity in efforts to increase its practical adoption, RO theory still lacks adoption in the property industry. To aid its practical adoption, this paper seeks to identify the barriers to the adoption of flexibility/RO theory in residential property developments practice in Australia practice. No study, to the best of our knowledge, has explored factors impeding the adoption of RO theory in the Australian property development sector.

Through a face-to-face semi-structured interview approach, several practitioners provided responses on barriers to the adoption of flexibility in practice, which were analysed using thematic analysis combined with quotes as evidence to determine the barriers to the adoption of flexibility for practical decision making. Multiple factors were emerged from our analysis including the cycle of blame, cost and financing issues associated with flexibility, planning issues and design obsolescence.

#### Paper ID 51

# THE IMPACT OF WILLINGNESS TO PAY BY RELOCATED TENANTS ON PUBLIC RENTAL HOUSING

#### FARIDA RACHMAWATI<sup>1,2</sup>, CONNIE SUSILAWATI<sup>1</sup>, ASHANTHA GOONETILEKE<sup>1</sup>, RIA SOEMITRO<sup>2</sup>

<sup>1</sup> Queensland University of Technology and <sup>2</sup> Institut Teknologi Sepuluh Nopember

#### ABSTRACT

Low-income people live in squatter settlement who are not willing to be relocated to low-income apartments. Many of the squatter settlements are located near the river-bank which is a flood prone area. However, the relocated apartments are located in outskirt of city and not in desirable locations. Therefore, government provides public rental housing. This paper aims to review the impact of willingness to pay of relocated tenants in public rental housing. The insights from relocated tenants will be used to inform the public rental housing price determination strategy. When tenants have been relocated from illegal squatter where they do not have to pay a rent fee, they will not be willing to pay rental even within their ability to pay. An operational deficit can occur on the public rental housing when the relocated tenants pay very low rent.

# IMPACTS OF MIXED-USE DEVELOPMENT ON LAND VALUES IN BRISBANE: A HEDONIC ANALYSIS

#### MAXIMILIAN NEUGER, JOHARI AMAR<sup>2</sup>, ANDREA BLAKE<sup>1</sup>, AND CONNIE SUSILAWATI<sup>1</sup>

Queensland University of Technology (QUT)<sup>1</sup> Bond University<sup>2</sup>

#### ABSTRACT

This study investigates the impact of mixed-use megaprojects on the surrounding unimproved land values in Brisbane, Queensland. Using a hedonic pricing model (HPM), we analysed the existence value of mixed-use development projects and their corresponding site values. HPM is a useful approach for capturing the intangible value of the unique nature of such projects. Our study employs a case study approach that focuses on the development of the Queen's Wharf in Brisbane. We drew concentric rings of the precinct radiating outwards using the QLD Globe to extract land values and shed light on their influence on site values by examining the spatial patterns of these developments. The findings of this study contribute to our understanding of property market dynamics in the presence of such projects. Practical implications arise from the potential financial returns to the state and inform policymakers interested in similar projects. The insights gained from this study can guide future planning and decision-making processes to enhance sustainable urban development.

Paper ID 54

Refereed

# INVESTIGATING THE RELATIONSHIP BETWEEN INVESTOR ATTENTION AND HOUSE PRICES USING GOOGLE TRENDS: A CASE STUDY OF AUSTRALIA

#### THI TUYET ANH NGUYEN, GARRICK SMALL, LAN SUN AND STEVEN BOYD Central Queensland University

#### ABSTRACT

In a market economy, the housing market and house prices play crucial roles, influencing various aspects of the overall economy. Despite the housing market receiving significant attention from researchers and practitioners, previous literature has not directly examined the link between investor attention and house prices. By conducting an empirical investigation, this research aims to contribute valuable insights to this relation and the existing literature on house prices. The study employs cross-correlation analysis with a dataset collected from public sources, such as the Google Trends and FRED database, covering the time span from the first quarter of 2004 to the first quarter of 2023. The findings suggest that fluctuations in investor attention are closely associated with changes in house prices. This paper thus introduces one of the pioneering frameworks that bridge two critical domains: investor attention and housing market, in the context of Australia in the era of information technology.

# ASSESSING ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) IMPLEMENTATION AMONG LISTED PROPERTY COMPANIES IN MALAYSIA

#### MUHAMMAD NAJIB RAZALI, ROHAYA ABDUL JALIL Universiti Teknologi Malaysia

#### ABSTRACT

This study aims to assess the extent of ESG implementation among listed property companies in Malaysia and understand the key drivers and challenges they face in adopting sustainable practices. The research employs a quantitative approach, combining quantitative analysis of publicly available data and qualitative insights from interviews with key industry stakeholders. Preliminary findings suggest that while some listed property companies in Malaysia have made significant progress in integrating ESG considerations into their business practices, there is room for improvement across the sector. The research findings contribute to the existing literature on ESG implementation in the property sector and provide valuable insights for policymakers, investors, and industry participants seeking to promote sustainable practices in Malaysia. By identifying the gaps and barriers to ESG integration, this study aims to inform the development of targeted interventions and support the transition towards a more sustainable and responsible real estate industry.

#### Paper ID 57

# INTERNAL MIGRATION AND RENTAL CRISIS AFTER THE PANDEMIC: A RENTAL GRADIENT ANALYSIS FOR MELBOURNE, AUSTRALIA

#### YIU, CHUNG YIM, KA SHING CHEUNG The University of Auckland

#### ABSTRACT

The rental crisis in Melbourne, Australia, has been a growing concern, with factors like housing supply and border reopening contributing to the problem. However, the impact of intra-state internal migration on rental gradients has not received enough attention. This study examines the influence of internal migration, particularly intra-state migration, on rental trends in Melbourne during the pandemic. Analysing rental listing data from 2018 to 2022, the research uses a hedonic rental gradient approach to estimate the effects on housing rents in Victoria. The findings indicate a flattening of rental gradients from the city centre to the outskirts after the pandemic outbreak. This suggests a shift of renters from urban to regional areas, possibly driven by internal migrations. The results emphasise the importance of considering internal migration patterns in addressing the rental crisis and have implications for housing policies in ensuring affordable rental options in Australia.

# REPURPOSING PUBLIC BUILDING ASSETS IN JAKARTA: PRE-FOCUS GROUP SURVEY

#### CONNIE SUSILAWATI<sup>1</sup>, DARMAWAN ATMOKO<sup>2</sup>, JOSE ARIF LUKITO<sup>2</sup>, BERNADETTA DEVI<sup>1</sup>, SARA WILKINSON<sup>3</sup> AND ASHANTHA GOONETILEKE<sup>1</sup>

<sup>1</sup>Queensland University of Technology, <sup>2</sup>Indonesian Directorate General Asset Management, <sup>3</sup>University of Technology Sydney

#### ABSTRACT

In many countries, governments hold a large amount of public building assets as owner and occupier. The Indonesian Directorate General Asset Management manage all central government public assets in Jakarta and are the key stakeholder for repurposing public building when the Indonesian government relocate the capital city to IKN-Nusantara in 2024 due to climate change impacts. What are the opportunities and threats which surround this action? And what are the ripple effects which could impact surrounding areas in the city of Jakarta? This paper sets out the rationale for research, funded by Property Research Trust, reports on the findings from pre-focus group survey with key stakeholders. The survey was distributed in March 2023 to focus group participants to provide the background information for the focus group participants.

#### Paper ID 59

# HANDOVER IN STRATA-TITLED RESIDENTIAL APARTMENT DEVELOPMENTS IN VICTORIA, AUSTRALIA – PROVIDING FOR DIGITISATION

Karen Tanfield (Architect)<sup>1,2</sup>, Davood Shojaei<sup>1,2</sup> and Christopher Heywood<sup>2</sup>

<sup>1</sup>Building 4.0 CRC, Caulfield East, Victoria, Australia <sup>2</sup> University of Melbourne, Parkville, Victoria, Australia

#### ABSTRACT

There is evidence that suggests that despite legislation that identifies the building information that is required to be provided to owners corporations for use during the life of their building, the 'handing over' of this building information to owners corporation committees of strata-titled residential apartment developments is not occurring at all or, if it does occur, the information provided is poor, incomplete or not properly recorded or stored in a format that is accessible to these committees or owners.

This presentation will look at the issues inherent in the current model of handover as legislated for Owners Corporations in Victoria. The focus will be on identifying improvements needed to ensure that the building information that is required for the digital management of repairs and maintenance of common property can be provided to future owners and managers of these Owners Corporations. This presentation is part of a PhD on this subject.

# THE IMPACT OF COVID-19 ON THE INTERCONNECTEDNESS OF HOUSE PRICES BETWEEN CITIES AND REGIONS: EVIDENCE FROM AUSTRALIA

#### NIRODHA JAYAWARDENA<sup>A</sup>, EDUARDO ROCA<sup>A</sup>, PRABATH S MORAWAKAGE<sup>A</sup>, BENJAMÍN LIU<sup>A</sup>, GEORGE EARL<sup>A</sup> AND VIKKRAM SINGH<sup>B\*</sup> <sup>a</sup>Department of Accounting, Finance and Economics, Griffith Business School, Griffith

\*<sup>b</sup>Corresponding author: Ted Rogers School of Management, Toronto Metropolitan University, Toronto, Canada,

#### ABSTRACT

While several studies analyze house price linkages within cities or regions, none estimate the impact of the COVID-19 pandemic on housing price dynamics between cities and regions. We fill this literature gap by examining a network of core and regional cities in Australia using Diebold-Yilmaz's (2012) network variance decomposition approach. Compared to the pre-pandemic period, the pandemic caused significant change, with core cities significantly linked to regional cities and driving volatility in housing prices. The findings of our study have important implications for real estate investors as well as urban and regional planners, for instance, city-regional housing market planning by estimating future demand and supply changes.

Paper ID 65

Refereed

## ASSET MANAGEMENT SMART TECHNOLOGIES OF THE FUTURE

# DR JUDITH CALLANAN, DR REBECCA LESHINSKY AND DR DULANI HALVITIGALA

RMIT University, Melbourne

#### ABSTRACT

New technology is rapidly changing best practice in asset and facility management. This paper examines the technologies that are available including the opportunities and challenges of implementing smart building technologies in buildings.

Case studies of three prominent smart buildings were analysed to identify best practice and then to apply lessons to commercial buildings in Australia. Interviews were carried out with commercial property managers to identify what technologies are currently being used and what challenges or barriers are faced in adopting new technologies within asset and facility management.

The implication of this research is that although the literature and case studies outline that new technologies exist and integration is easily applied, the interviews and analysis shows us that commercial building owners and managers are still hesitant in adopting smart technologies.

# DIVERSITY AND INCLUSION POLICY ANALYSIS OF AUSTRALIAN VALUATION FIRMS

#### DULANI HALVITIGALA, JUDITH CALLANAN AND REBECCA LESHINSKY RMIT University, Melbourne

#### ABSTRACT

Research has shown that the Australian valuation industry faces challenges in attracting and retaining women in the profession. To assess the level of gender diversity and inclusion in large valuation firms, this study examined public information regarding hiring, retention, and promotion processes, as well as explicit commitments to their gender diversity policies. The study analysed diversity policies, positions, groups/programs, and respondent statements related to diversity and inclusion from the selected large valuation firms' websites and the gender composition of their boards and leadership/executive teams.

The findings revealed that most large valuation firms lack public statements on their websites acknowledging the need for diversity in hiring practices and any positions, groups, or programs aimed at improving female representation within the company. Additionally, men hold most positions on boards of directors and leadership/executive teams in most companies studied. The study highlights the importance of better aligning valuation companies' websites, policies, programs, and interest groups with their gender diversity and inclusion policies and practices.

#### Paper ID 69

Refereed

# NEW WORKING PRACTICES POST COVID AND THEIR IMPACT ON ORGANISATIONAL CULTURE

#### KUSAL NANAYAKKARA<sup>1</sup>, SARA WILKINSON<sup>2</sup> AND DULANI HALVITIGALA<sup>3</sup> <sup>1& 3</sup> RMIT University, Melbourne <sup>2</sup> University of Technology Sydney

#### ABSTRACT

COVID disrupted the global labour markets, causing sudden, severe changes to the physical use of office spaces. Australia's \$40 billion office market had not been immune to the impact of the pandemic, with the sector's revenue falling significantly in 2020-21 due to subdued demand and work-from-home directives. As part of a wider project that examines how the organisational culture of large organisations may have changed with the introduction of hybrid and more flexible work practices since COVID, this paper aims to present the preliminary findings by analysing the existing literature on the research topic.

A document analysis of industry and market reports was conducted to identify the changes in office space demands which may have impacted organisations' corporate culture. The findings identify that disruptions prompted many corporates to rethink their workplace requirements, and more landlords are looking to better integrate flexible spaces into their portfolio strategies. The 'core plus flex' model has become a popular emerging strategy that offers organisations the ability to integrate traditional leased space and flexible office arrangements. Many aspects of corporate culture and the feeling of belonging have changed significantly in the digital environment since COVID, and these require examination.

# THE IMPACT OF MANAGERS' PRIOR BELIEFS ON SHOPPING CENTRE PERFORMANCE

#### ERVI LIUSMAN<sup>1</sup>, JOHN. W. T. HUI<sup>2</sup>, AND K. W. CHAU<sup>3</sup>

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#### ABSTRACT

This study investigates the impact of prior beliefs of the shopping centre managers at different levels on shopping centre performance (SCP). Shopping centre Managers are classified into strategic, marketing, and operational. Their contrasting prior beliefs that are important in shaping their management decisions are identified after an exploratory study based on in-depth interviews with them. We then extract these contrasting beliefs from individual manager by questionnaire surveys. The SCP is measured by comparing human resource inputs with the achieve rent holding the local and physical attributes of the shopping centre constant using a multiple-input-single-output Data Envelopment Analysis (DEA) model. The results reveal that prior beliefs have very different impacts on SCP, which can be used as practical decision-making tools for shopping centre managers to maximize the value of the shopping centre. In addition, we also found some empirical results that are contrary to common beliefs or industry wisdoms. (148 words)

#### Paper ID 71

# SERVICE QUALITY DIMENSIONS FOR HANDLING COMPLAINTS IN THE MANAGEMENT OF STRATA PROPERTIES IN KLANG VALLEY, MALAYSIA

#### <sup>1</sup>YASMIN MOHD ADNAN <sup>2</sup>DR ZARITA AHMAD @ BAHARUM <sup>3</sup>SR ABDUL GHANI SARIP <sup>4</sup>MOHD FAIZAL BIN FOAD @ FUAD

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<sup>3</sup> Dept of Real Estate, Faculty of Built Environment, Universiti Malaya, Malaysia
<sup>4</sup>IPC Property Management Sdn Bhd

#### ABSTRACT

Among many factors affecting the improvement of quality is the efficient management of complaints as it can become an element of competitive advantage to the service provider. Thus, professional complaint handling is a factor that determines customer satisfaction and is deeply related to building a positive image of the service provider of property management services. As complaints are the most effective way to obtain information about the quality of services provided, the study aims to determine the gaps in the handling of complaints in the management of strata properties in the Klang Valley, Malaysia. This paper provides the study framework for the determination of the gaps within the service quality dimensions for service delivery of property management services in the identified areas of the study. The final findings are to be adopted for the development of complaints handling guidelines for strata property managers in Malaysia.

## WHY DO PEOPLE PAY FOR A GREEN BUILDING PREMIUM?

#### K. W. CHAU<sup>1</sup>, DEREK D. HUO<sup>2</sup> AND ERVI LIUSMAN3

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<sup>3</sup> School of Hotel and Tourism Management, CUHK, Hong Kong or *ervi@baf.cuhk.edu.hk* <sup>2</sup> John Hui and Associates, Hong Kong or *derekdh@hku.hk* 

#### ABSTRACT

This study investigates the impact of prior beliefs of the shopping centre managers at different levels on Previous studies in Green Build Premium (GBP) mainly focused on estimating the average GBP without analysing the underlying causes of such premium. An obvious cause of the GBP is the institutional constraints imposed by company due to their EGS policy which explicitly prohibit them from renting non-green building which can be easily observed in the office market. However, noninstitutional factors such as environmental consciousness, tangible benefits (savings in energy and maintenance costs), supply side marketing tactics, and so on are also possible contributing factors. Through an analysis of empirical data gathered from the Hong Kong residential market, this study shows that environmental consciousness and tangible benefits are two primary drivers of the GBP. (130 words)

#### Paper ID 75

# MINING ACTIVITIES AND HOUSING PRICE NEXUS: EVIDENCE FROM SOUTH AFRICA

#### OMOKOLADE AKINSOMI<sup>1</sup>, MUSTAPHA BANGURA<sup>2</sup> AND JOSEPH YACIM<sup>3</sup>

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#### ABSTRACT

Several studies have examined the impact of market fundamentals on housing prices. However, the effect of economic sectors on housing price is limited despite the existence of two-speed economies in some countries such as South Africa. We investigated the effect of mining activities on housing prices in South Africa, using quarterly data from 2000Q1 to 2023Q1, and deploying an Auto-Regressive Distributed Lag model (ARDL). In the short run, we found that changes in mining activities, as measured by the contribution of this sector to GDP, impact the housing price of mining towns directly after the first quarter, and after the second quarter in non-mining towns. Second, we found that inflationary pressure is instantaneous and impacts housing prices in mining towns only in the short run but not in the long run, while increasing housing supply will help to cushion housing prices in both submarkets. These findings will inform housing policymakers in stabilising the housing market of mining and non-mining towns.

# BARRIERS TO IMPLEMENT VALUE MANAGEMENT IN SRI LANKAN SMALL CONSTRUCTION PROJECTS

#### LEBUNU HEWAGE UDARA WILLHELM ABEYDEERA AND WADU MESTHRIGE JAYANTHA RMIT UNIVERSITY, MELBOURNE

#### ABSTRACT

Value management (VM) remains a relatively less explored research domain in developing countries, especially for small construction projects, which remain extremely novel. The findings of this study provide valuable insights for individuals engaged in small-scale construction projects pertaining to VM decision-making and implementation in Sri Lanka and similar contexts. The primary aim of this research was to evaluate the obstacles linked to implementing value management in small-scale construction projects in Sri Lanka, employing a quantitative research methodology. The primary challenges identified in this study encompass "insufficient expertise in VM instruction and facilitation", "absence of suitable guidelines", "inadequate support from government and management", "challenges in reaching consensus among project stakeholders regarding project objectives", and "resistance to embracing novel ideas and advancements". Given the limited amount of empirical research conducted on VM in the context of small-scale construction projects, this work contributes to the existing body of knowledge on the management of such projects.

Paper ID 77

Refereed

# POST-CONFLICT INFRASTRUCTURE DEVELOPMENT IN SRI LANKA: A SWOT ANALYSIS

#### LEBUNU HEWAGE UDARA WILLHELM ABEYDEERA AND WADU MESTHRIGE JAYANTHA RMIT UNIVERSITY, MELBOURNE

#### ABSTRACT

Sri Lanka confronts numerous challenges following an egregious conflict that caused significant challenges in infrastructure development. This study examined the strengths, weaknesses, opportunities, and threats of post-conflict infrastructure development in Sri Lanka using project data from the irrigation and land, port, aviation and transport, regional development, roads, and water sectors. A qualitative approach was used for this study, and findings revealed the availability of contractors` own resources and the use of special technologies as major strengths whilst unfamiliarity with social factors and poor identification of environment as major weaknesses. The identified opportunities include the availability of resources at a low cost, the availability of funding sources. The study also revealed a shortage of resources, language barriers, the risk of violence, and attitude issues among people as major threats. These findings may be useful for other conflict-affected countries to build their capacity to overcome challenges and find better solutions.

# IMPACTS OF COVID-19 ON THE REAL ESTATE MARKET: A REVIEW OF GLOBAL TRENDS IN EUROPE, ASIA AND THE US

#### DR THAM KUEN-WEI, DR CHENG CHIN TIONG, DR ALAN CHONG KIM WING, CHAI WOEI CHYI AND PANG KAI SHUEN

Tunku Abdul Rahman University Of Management & Technology

#### ABSTRACT

The COVID-19 pandemic has profoundly affected the global economy, including the real estate sector, leading to disrupted supply chains, job losses, and altered consumer demand. This study investigates the pandemic's impact on the worldwide real estate market. Drawing from extensive literature, including reputable sources like the World Bank and Wall Street Journal, the research focuses on the United States, Europe, and China. Findings indicate mixed outcomes, with housing prices declining or rising in different countries. The study underscores the significance of macroeconomic stability and the need for effective policies to mitigate economic shocks. Government responses, such as those in China and Korea, can stimulate and protect the real estate market. Job losses from recession, as observed in Italy and Spain, lower property prices. Demand trends reveal interest in larger residential spaces but decreased interest in hospitality and commercial properties due to the pandemic. Improved safety measures in building management and shifts towards online business have also emerged. Suburban and single-family homes are increasingly sought after, presenting a new market for developers.

#### Paper ID 79

# HAVE RISING RENTS IN ADELAIDE RESULTED IN BIGGER INVESTOR RETURNS?

#### PETER ROSSINI

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#### ABSTRACT

Big increases in residential rents over the last 2 years have led to demands for rent capping as tenants struggle to keep up with the rent increases. This exploratory paper examines these changes to the residential rental market in Adelaide over the last 5 years through transaction-level analysis of properties that have been rented and sold on the open market. Modeling of the sale and rental data is used to consider the effect of house price changes on rents and the impact on yield. These changes are examined on a spatial and temporal basis. The analysis shows that there have been significant changes in the micro-level determinates of rents resulting in a spatial change to more affordable rents. The total returns to investors have also changed with the variations in capital growth and return to yield.

# ADDRESSING VACANCY AND AFFORDABILITY CHALLENGES: AN ANALYSIS OF THE IMPACT OF VACANT HOUSE TAX ON URBAN HOUSING PRICES

#### JIAN LIANG, KANG MO KOO, MARIONA SEGU

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#### ABSTRACT

In response to the rising number of unoccupied residential units and the growing affordability crisis in urban centers, certain cities have introduced the Vacant House Tax—a levy based on a percentage of property value for vacant holdings. While it is well-established that vacant, abandoned, and foreclosed properties exert downward pressure on local housing prices, the specific effects of such a vacancy tax system on housing prices within the relevant area remain uncertain. Drawing on transactional and policy data sourced from the Greater Melbourne area in Australia, this study delves into the post-implementation shifts in housing prices following the introduction of the Vacant Residential Land Tax. Our investigation reveals a notable 2% to 3% decline in housing prices as a direct result of the vacancy tax. This decrease is primarily attributed to a reduction in price for property type of detached houses that are more likely to be left vacant by investors aiming to exploit development and speculation prospects.

#### Paper ID 81

## **BOLD AND PREPARED –**

# THE ROLE OF REAL ESTATE MARKET PARTICIPANTS WHEN AIMING TOWARDS A CRISIS-RESILIENT BUILT ENVIRONMENT

#### SAIJA TOIVONEN, LASSI TAHTINEN Aalto University

#### ABSTRACT

The built environment is shaped by a variety of forces taking place in the society. In the future, the number of forces will increase and create crises that are increasingly. The built environment has been recognized to play a central role in crisis management. Many of the crisis impacts influence either the soft or hard elements of the built environment, which makes real estate an element that can be used to cope with crisis consequences. This paper aims to explore what the roles of different real estate market participants are when reaching towards resilient built environment. We employ a futures studies oriented research approach and investigate 128 possible future crisis scenarios created in 58 multidisciplinary workshops together with 179 experts of academia and practice. Our results will contribute to the RE field by bringing novel understanding on how resilience can be built on the different levels of the built environment.

# THE VALUE OF GREEN AND BLUE SPACE: LIVABILITY, WALKABILITY AND HOUSE PRICES

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#### ABSTRACT

Urban green and blue spaces are important amenities within highly urbanised areas which offer social, economic and ecological benefits and provide a number of valuable direct and indirect ecosystem of services to surrounding land uses and urban households. Existing research has revealed that green (and blue) space is not a uniform environmental amenity but rather a set of distinct aesthetic and hydromorphological characteristics which impact upon house prices in different ways. Moreover, the different utility-bearing preferences for green or blue space has been shown to be related to income and education levels and inequalities driven by socioeconomic differences, hence, the relationship between housing prices and these amenities might vary considerably across a wide metropolitan area. Consequently, the purpose of this study is to examine the heterogeneity of green and blue space using 4,985 sales transactions applying quantile regression to investigate the proximity effects of diverse types of blue spaces on property prices across different conditional distributions.

#### Paper ID 84

Refereed

# OCCUPATIONAL LICENSING – EDUCATIONAL REFORMS FOR PROPERTY LICENSING

#### HERA ANTONIADES<sup>1</sup>, CHRIS EVES<sup>2</sup>

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#### ABSTRACT

In the profession of property agency, the need for occupational licensing is widely used in Australia and also overseas. In particular the property sector in NSW has been regulated for over 120 years. The mishandling of trust money is a criminal offence and this is usually accompanied by a jail sentence. Additionally non ethical behaviour such as the agent acting negligently or breaching the duty of care to their principal is also considered a breach of the law. In this regard NSW Fair Trading will take disciplinary action against the agent according to the severity of the breach. The aim of this research is to provide an introductory overview of trust fraud over a 20 year data set, analysed pre and post 2003 to determine if changes in educational requirements introduced in 2003 were a contributing factor accounting for the increase with misappropriation of trust fraud. The findings identified a total of 140 instances of fraud, involving 171 individuals. An analysis of the pre and post 2003 fraud activities, i.e. the 15 year subset within the larger 20 year data set, indicated that a higher percentage of individuals who obtained their licence from 2003 were involved in the fraud instances occurring between 2003 and 2017. The data from the 15 year subset showed 45.54% individuals were licenced prior to 2003 and 54.46% individuals were licenced from 2003.

# TOWARDS PLANNING AND BUILDING PERMIT AUTOMATION: CHALLENGES AND OPPORTUNITIES

#### **DAVOOD SHOJAEI** University of Melbourne, Australia

#### ABSTRACT

Planning and building permits are essential for ensuring the safety, health, amenity and sustainability of building projects. However, obtaining these permits can be a complex, time-consuming and costly process, involving multiple stakeholders, regulations and documents. Automation of planning and building permit processes can potentially reduce the administrative burden, improve the efficiency and transparency, and enhance the quality and consistency of the outcomes. In this presentation, we explore the challenges and opportunities of planning and building permit automation, drawing on the literature and case studies from different jurisdictions. We identify the key drivers, barriers and enablers of automation, as well as the technical, legal and social implications. We also propose a framework for designing and implementing automated permit systems, based on the principles of user-centricity, interoperability and adaptability. We conclude by highlighting the future directions and research gaps in this emerging field.