Mr Craig Addley
PLACE Design Group

‘Imagineering’ Maroochydore’s Future City Centre

The Maroochydore Central Precinct Masterplan provides a once in a lifetime opportunity to deliver a world class destination, an identifiable new capital for the Sunshine Coast and an exciting vibrant new town centre for Maroochydore.

This presentation will provide an overview of this exciting new plan and the Urban Design and masterplanning process undertaken between the Sunshine Coast Council, PLACE Design Group, Cardno and Archipelago over the past 18 months. It will outline the project rationale, objectives, key features and design principles using engaging video animations, plans and graphics.

In contrast to the development of greenfield town centres, the Maroochydore Central Precinct has had to address a number of contextual and land use challenges to successfully integrate over 2000 new dwellings, 150 000sqm of commercial floor space and 65 000sqm of retail floor-space into an established urban centre.

The masterplan itself will be explained, deconstructed and illustrated as an innovative new centre that builds upon the Sunshine Coast affinity with water, open space and an outdoors lifestyle. The presentation will provide details of new and innovative place making elements such as waterway and park fingers that stretch into the centre, a new urban grid that will connect and extend out of the site and boulevards and light rail corridors that will open up the site to the surrounding region.

Building upon the key elements of the plan, the presentation will also detail the economic, social and environmental imperatives that have driven the design requirements and planning provisions for the new centre, creating new housing, lifestyle, entertainment and transit initiatives for the city’s future.

The presentation applauds Sunshine Coast Council’s vision and commitment to taking a bold and pro-active approach to taking control of the city’s future by purchasing the site and taking a collaborative approach with the city’s councillors to plan and design a centre that will become an engine room for economic growth, job creation, tourism and lifestyle within the wider Sunshine Coast.
Miss Lisel Ashby
Registered Landscape Architect, Jensen Planning + Design

Street Party – How Innovative and Integrated Transport and Urban Design is Producing Results in Adelaide’s Streets

Adelaide can now actually party in the street. Party at lunch time, party at night, party party party with your children, mates and pet!

With the release of the ‘Streets for People’ Compendium in late 2012, it is timely to demonstrate how multidisciplinary design teams in South Australia are incorporating the Compendium’s design principles into main street redevelopments and creating innovative streets for community use.

This presentation is intended to showcase transformational streetscape projects within South Australia, some of which have been constructed and some which remain in the design or concept stages. A few of the projects that will be discussed include; Prospect Road (a successful constructed example of a wildly transformed main street), Commercial Road North (where bitumen is to become a beautiful public plaza and park), Regent Street North (once constructed will accommodate multiple transport modes) and Bank Street (illustrating how parklets have been embraced in the CBD).

Discussion will centre around the design process: how projects should start, what can happen as the scope and vision change and what actually gets implemented on the ground vs. the design brief.
Collaborative Planning Praxis for Accessibility, Diversity and Flexibility

This paper explores the opportunity for our Cities to be “productive” through collaborative teams delivering broad planning solutions, including accessibility, diversity, flexibility and future relevance. It is suggested that using a different planning approach within an integrated many faceted “context” out-performs past planning praxis, especially the silo-mentality which continually fails to deliver relevant and appropriate development solutions. This is exemplified in many areas associated with development in the physical environment, particularly in regional and remote areas.

A project in the Northern Territory of Australia is used as an example to interrogate the “context”, and the implications on the make-up of a project team, where socio-economic and socio-cultural requirements were integral objectives. [The context consisted of nine primary areas of investigation; Environmental, Social, Cultural, Physical, Management, Aesthetic, Function/efficiency, Economic/Cost, Movement/Transport]. Parties agreed that a collaborative methodology was required, bringing together expertise, knowledge and experience in these areas and, significantly, including the community voice, all as essential participants in the planning and implementation of development.

Accordingly people with skills in planning, architecture, housing, building, engineering, sociology, anthropology, economics, policy development and community were brought together to develop a process to deliver options and solutions to achieve a wide range of formal and informal development objectives. The team were unified in their commitment to achieve a high level of acceptance, amongst the many other objectives. as well as demonstrate that a team could deliver accessibility not obstructions, diversity not sterility and flexibility not rigidity.

The paper concludes that there were many positive outcomes achieved from the project and the collaborative methodology and while there was a high level of acceptance there were also many lessons learned that could be applied to achieve improved accessibility, diversity and flexibility.
Mr Daniel Bennett
Director, DJB_LA

City as Transport: More than Moving People

The mood of our cities is changing.

The fundamental building blocks of any large metropolis are its interweaved, city shaping transport networks. The pressure on our cities is often centred on ‘mechanical’ and ‘fluid’ movement patterns. The mechanical and fixed routes of trains, trams and buses create congestion in the peak hours. The fluid patterns of people emptying vast office blocks and retail precincts at different times of the afternoon create concentrated and dynamic movements. Until recently we have found difficult to measure and quantify beyond mere pedestrian counts, which are modelled mostly by traffic engineers. The works by some urban designers promote qualitative analysis and understanding how a city ‘works’ over quantitative analysis based on computer models. There is a focus on people emerging.

Instead of a broader spread of movement across the day into and out of our cities, the current trends indicate many cities are reaching their ‘mechanical’ limits. In our inner city areas, congestion continues to reach supreme levels, as it reaches breaking point and perhaps beyond, people will unavoidably look for alternatives - if they exist. This is quite a complex and challenging conundrum.

However there is light...amongst all the dark.

Strategic Planning and Transport Planning is more than what most people think – these are the city shaping texts of each city that are held onto until the next one replaces it. Most of them until recently were word based, spreadsheet based, shelfitters with little design merit or understanding.

We must make our strategies more visual, more graphic, more readable, more contextual and more digestible. We must understand the business case process for large projects otherwise urban design will remain as largely irrelevant boundary riders. There are seismic shifts occurring in the way our city leaders are addressing the problems. Design is taking a centre and leading role.

The value of urban design thinking must be fostered across a project – from high level, early phase, strategic budgetary decisions through to the successful business case, impressing on Treasuries across Australia, the selection of rolling stock, cladding and paving types. It doesn’t cost any more – what it needs is for our decision makers and key advisors to open their minds and ask more questions of what urban designers can do for them.
Informal Settlements and Placemaking: The Case of Caracoli barrio in Bogotá

Placemaking in the developed world can be understood as a concept where through a social and political process, value and meaning in a particular setting is created. This focus of placemaking revolves around a setting in the urban environment, its role as a unique setting and, importantly, the people that make up this place: all of which is focused on a highly structured and formal participatory planning process.

The role of placemaking in Latin America’s informal settlements, however, is largely untested. With more than 75% of Latin America’s population living in cities since 2001 and over 30% (128 million people) of the urban population estimated to reside in what the United Nations define as slums; these informal settlements can offer alternative ways of thinking about urban space and the transformation of spaces people live in. In essence, informal settlements are, to a large extent, what people make of them through their own initiative and imagination. What they achieve is remarkable considering their limited resources and sometimes nonexistent participation in formal planning.

Through empirical data collected in 2013 and 2014, this paper discusses how through a, largely, nonexistent formal participatory planning process (as the west or developed world may perceive it) and lack of resources the barrio of Caracoli, in Bogotá has been able to create value and meaning in their place. This has been possible, despite social and economic difficulties—which are not to be forgotten-, through inventiveness and the richness of one’s life. In this sense, it can be argued that informal settlements can offer a different path to understanding the concept of placemaking currently dominating the developed world.
Innovation and urban regeneration: Going beyond traditional approaches

The local government sector in Australia is increasingly looking at facilitating urban regeneration in ways that transcend its traditional core functions. By embracing pervasive computing technology like crowdsourcing, local government can promote a participatory way of contributing to the wealth and quality of life of our urban environments. Local government could ‘be’ the catalyst and create pathways to maximise opportunities for shared involvement and value creation and utilise its local knowledge base to harness external resources to targeted interventions.

A better understanding of such innovative tools and technologies may help pave the way for local government to adopt ‘smarter’ ways to facilitate urban regeneration whilst making the most efficient use of limited resources. This paper presents the case study of Moorabbin, a middle ring suburb in metropolitan Melbourne and highlights what Kingston City Council is doing to revive this 'tired' suburb. The paper concludes by recommending further research to monitor the effectiveness of innovative interventions in achieving the desired outcomes.
Ms Jennifer Calzini  
Associate Director, Urbis  
Co-Author: Mr Mark Kuhne

City of Liverpool in NSW: Revitalisation by Design

The open and multidisciplinary process undertaken to revitalise key parts of the city will be the focus of this presentation. Liverpool is identified by the Department of Planning and Infrastructure as a ‘Regional City’ within metropolitan Sydney and an important retail, employment and service centre for the South West Subregion. With the announcement of the second airport at Badgerys Creek, Liverpool is set to play an even greater role in the region. The revitalisation is anchored around 5 design projects: the Mall; Bigge Park; Eat Street: connections to the George River and gateways to the city. Three urban design practices, architects and media artists have worked together on the concepts and have worked closely with Council officers and Councillors.

The Mayor has had a key role in promoting and growing the vision. Other players were the Government Architect Office, who led the coordination and public engagement and Rod Simpson from the University of Sydney who contributed high level theoretical critique through the Government Architect Office. Professor Ed Blakely, known primarily for having been Executive Director of Recovery Management for the City of New Orleans, has been the glue. Urbis will speak to the importance of design as a unifying approach that makes sense of the layers of input that included social planning, an art strategy and an economic and commercial contextual layer for the revitalisation.
Shaping informality. 
The role of street-based strategies in revitalizing informal and low-income areas

2007 was a significant landmark in human history since it was the first time that a majority of the world’s population lived in urban areas. In 1950, one-third of the world’s population lived in cities. Only 50 years later population had increased to one-half and predictions say that it will get to two-thirds by 2050.

Urbanization is a transformative process and, as a consequence of cities growth and development, slums formations and informal settlements arise. This urbanization outcome is mainly taking place in the developing world, where the informal city is a growing phenomenon and is becoming the norm. According to the United Nations estimates, 32 percent of the world’s population live in slums, and the number will reach 50 percent by 2030.

Recent approaches to regeneration of informal settlements are evolving into strategies characterized by improving their existing conditions, minimizing relocations of their inhabitants. This on-site approach together with street-based upgrading constitutes an effective eviction alternative that facilitates the regeneration of informal areas.

But, can streets in informal areas be designed? What is the role of urban design in informal and low-income areas? Is street-based urban design and placemaking possible in these areas? Can productivity and economic activity be stimulated through design?

This paper argues that street-based upgrading plays an essential role in the regeneration process of informal areas. It preserves the social organization network of communities, secures land tenure rights and promotes productivity and economic activity. Streets are more than only spaces for mobility, accessibility or pipelines, they are fundamental places where social, cultural and economic activities are promoted.

Drawing upon experiences in Jakarta, Manila and Medellín, this paper concludes that street-based upgrading in informal settlements work as a catalyst for the revitalization and transformation of neighborhoods, generating productive spaces for economy and creating sense of community.
Urban Design is primarily focused on the public environment: streets, lanes, square and spaces between buildings. By its nature, it must also consider the private realm (buildings and private land) as these inherently influence the public realm.

As urban populations grow and cities move towards more sustainable forms and configurations, the importance and value of public space continues to increase, and the relationship between buildings and open spaces presents new challenges for planners and designers, and those that manage and utilise the urban environment. This relationship and its many facets, is a key area of interest and importance for our profession in Australia, and one where we can learn much from other countries.

For example, as demonstrated in recent SJB Urban projects, higher-density urban areas demand a more nuanced, flexible and dynamic approach to the design, management, operation and utilisation of public open space. These spaces must ‘work harder’ for more people, than in more suburban locations. Further, public space becomes additional living space for communities, acting as outdoor living rooms for neighbours to meet, interact and recreate, particularly where dwellings are typically more compact, as is the case in higher-density, more sustainable urban form.

At SJB Urban, we have designed and prepared an innovative and unique tool, which seeks to understand and measure ‘place quality’ toward creating more responsive, sustainable and innovative public spaces. It comprises assessment criteria, grouped under six themes and associated categories, covering aspects such as safety, accessibility, activity levels, usage patterns, diversity, and comfort and amenity.

Exploring the relationships between urban development patterns and public spaces is a vital and valuable area of investigation, with significant potential for application in Australian cities.
Mr Gareth Collins
Principal Manager center for Urban Design, Roads and Maritime Services

The Contribution of a Transport Urban Design Approach, to revitalising urban areas

In 1982 Jonathan Barnett defined urban design as the term given to the process of giving design direction to urban growth, conservation or change.

Since 1999 this definition of urban design has been applied in Roads and Maritime Services and has gradually developed to encompass all projects that affect the built environment. In 2009 the organisation published its formal policy ‘Beyond the Pavement’ which won the 2010 Australia Award for Urban Design. In early 2014 a revised version of this document was published and launched by the Minster for Roads and Ports.

Three objectives form the pillars of Beyond the Pavement.

1. Fitting sensitively with the landform and built natural and community environment.
2. Contributing to the accessibility and connectivity of communities and a general permeability of movement through areas.
3. Contributing to the quality of the public domain – their liveability and attractiveness for investment.

All these objectives address the need for making projects better integrated, more attractive, connected and therefore more productive. In the past 15 years, many projects have been developed and built in accordance with these objectives.

The objectives are reinforced by design methodologies, design principles and case studies. The principles address design quality and the experience of movement; and revitalising areas.

Five key projects will be presented that each illustrates different design principles and solutions as applied to different contexts and scales. These projects might include:

The Iron Cove bridge duplication and improvements to the Bay Run area
The Eastern Distributor, Surry Hills, Anzac Parade pedestrian bridge
Banora Point Pacific Highway upgrade
WestConnex Motorway Urban Design Framework
M7 Motorway
Revitalising the 21st Century Urban Centre | Unplanning the Planned

The formal master planning processes that characterise modern society today have resulted in cities and towns that are over-determined, rigid and by their very nature lack the ability to change and adapt over time. They are planners constructs that offer a sense of permanence and are frequently driven by finance rather than real place-making that build on a local community’s needs. They are the embodiment of an idea, the reflection of a period in time and the product of one system.

However, as varying social, economic and environmental factors become ever present the static planning processes embedded within western culture are exposed. We deceive ourselves in believing that the world is permanent. In reality, the only certainty is that everything changes. This acceptance of change has led to the emergence of more informal planning processes that embrace the transitory nature of our centres. Crucial to this approach is that master planning strategies show a commitment to establishing flexible and changeable solutions to people’s needs.

This presentation investigates the role informal planning processes may play to achieve this, offering possible instruments and methods for revitalising the ‘21st Century Urban Centre’. In the face of economic uncertainty and constraints as well as rapidly changing possibilities, an informal planning process provides an adaptable platform to changing conditions ensuring the development of a viable and vital urban centre.
Unlocking the latent potential in our major health precincts: An urban design approach to positioning, partnering and place-making.

Our major health precincts are maturing and are no longer separated from our city fabric. They are becoming more integrated, more urbane and less institutional in nature. Their role as major contributors to our city and national economic competitiveness is crucial, and across the country they are magnets for government, private and philanthropic investment.

The emerging health model encourages the creation of knowledge clusters organised around collaboration between universities, research institutions and tertiary services. To be viable they must establish the right conditions to attract and retain the best clinicians, researchers, educators and students.

Christchurch, Perth, the Gold Coast and Brisbane, to name a few, are planning, designing and delivering new and major positioning for existing precincts. In Adelaide, the South Australian Biomedical Precinct will be the largest precinct of its kind in the southern hemisphere.

We want and need our complex health precincts to deliver excellence in medical care; unquestionable. They must however, be places of wellness with the utmost respect and compassion for patients, their families and friends.

Using a series of recent case studies, this presentation will explore the influences and drivers shaping these precincts and establish the role that urban design has in re-integrating them back into our cities.

The presentation will outline the city forces shaping complex health, research and education precincts and the role of distinctiveness in gaining the competitive edge. It will explore the role of the third realm in promoting socialisation, interaction and innovation and the value of connections and movement in promoting accessibility, convenience, way finding and safety. The presentation will also demonstrate how restorative places promote health and activity. The role of cooperation in new models that promote governance mechanisms for all stakeholders will establish the foundations for the future success of these precincts.
Ms Melinda Dodson
Principal Architect and PhD Candidate, Melinda Dodson Architects and University of Canberra

Co-Author: Dr Andrew MacKenzie, University of Canberra

Designing for Compact Living: An Architectural Exploration of Occupant Behaviours and Community Preferences to Medium Density Housing Precincts

A goal to increase the representation of medium density compact housing precincts in Western developed cities has been advocated in policy and research for half a century. In Australia despite this ambition, house sizes have doubled while household occupant numbers have halved (ABS 2008). Empirical research on the relationship of house size to energy, resource and land use is well established. More over advocates of medium density housing cite both sustainability and liveability advantages; central to this argument is the increase in housing choice for a changing demographic. As a housing typology however medium density in large sectors of Australia’s cities remain persistently contentious. In particular, a gap exists between findings on occupant satisfaction, environmental performance and the design outcomes of medium density (Hurlimann 2010, Vischer 2008, Sarkissian 2004, Marcus et al 1986).

The research is situated in Canberra, Australia’s national capital. It presents a microcosm of the challenges faced by cities, and like many, Canberra is now shifting its attention to various forms of medium density compact housing in order to contain the outward expansion of city boundaries. The post-war boom years saw numerous projects focused on smaller more sustainable ways of living, often featuring “attached” clusters of small dwellings within a communal landscape setting. This paper is part of a larger research project that seeks to inform the architectural design of medium density through a greater understanding of housing choices and resident living experiences across several such case studies. Discussed is the evaluation of occupant (user) satisfaction of in-progress and completed Canberra housing projects, including 35 houses designed by the author within the ACT Government Molonglo Demonstration Precinct. It is hoped such an approach will offer beneficial user-centred design techniques not traditionally employed in archetypical architectural delivery and in-turn achieve improved design of medium density compact housing precincts.
Providing Transport Choice: providing decision makers with metrics that measure competition between modes

Lobbying for the best transport and urban design outcomes from decision makers can be a tiring process. Sometimes the arguments fail because it is difficult to prove a point because of the lack of quantifiable evidence to support a particular policy or project outcome. Auckland Council is the largest Unitary Authority in Australasia and they understood the tension between the various transport mode advocates. To add clarity to the transport debate they developed possibly the largest accessibility model in the Southern Hemisphere to measure the competitiveness between walking, cycling, buses, trams, trains, ferries, and private motor vehicles; indeed, any mode. They then coupled this assessment with where people live today and where they are expected to live in the future. Based on the changes in modelled accessibility and the identified deficiencies they then added infrastructure to enhance and support particular areas and particular modes.

The result of the model was a better informed urban planning debate that considered the whole city and region both holistically and suburb by suburb. This then enabled funding to be directed to the most appropriate spatial locations and also into the most appropriate modes. The Auckland Transport Accessibility Model (ATAM) enabled an optimised citywide approach to decision making to be undertaken whereas a traditional approach would have been only using a capacity and predict and provide model. In contrast this new method enabled both an understanding of capacity and congestion, as well as measuring transport choice to all modes by all people, not just those with a car. The outcome of which is expected to be a more liveable and internationally competitive city.

This presentation will present an outline of transport planning in Auckland and examine how ATAM has influenced better decision making through better information.
Interchanging: Responsive transport infrastructures for twenty-first century urban digital culture

What if a bus stop could save your life? Read one way, this provocative question considers what else public transport infrastructure might do, and further, how? William J Mitchell (1999) raised similar questions around the relationships between emerging digital technologies, everyday practices, and urban space in his series of ‘eulogies’ for the Western city. The pervasiveness of digital technologies, he argued, necessitated re-thinking the role of “public places, towns and cities for the twenty-first century” (1999, p.4). To set the scene, he drew attention to a form of infrastructure, namely, the centralised pre-industrial village water-well (1999, p.3). Mitchell’s example is significant here in several key ways. Fore mostly, the example outlines that while the primary and intended function of the well was to provide water, as people gathered together in a central spatial location, it subsequently fulfilled a significant social function.

This highlights that while infrastructure is often conceived of in primarily ‘utilitarian’ terms, they are integral to social and cultural processes and practices, and subsequently, the production of meanings. Furthermore, the obsolescence of the water-well – by a new piped water system – points to the ways that new technologies can influence shifts in social and spatial practices, and provoke, new ideas, and uses of urban space.

These key points underscore the objectives of re-imagining public transport infrastructure for the twenty-first century as envisioned by the annual UNSW Faculty of the Built Environment Interdisciplinary Learning (BEIL) studio and design competition ‘Interchange of the Future’. This required interdisciplinary teams to integrate a range of emerging urban digital media and sustainable technologies into new transport interchange designs. Drawing on the project outcomes, this paper will discuss the potential for innovation – alternate business models, functionalities, and experiences – that can be addressed by re-thinking normative understandings of public transport infrastructure through the frame of twenty-first century urban digital culture.
Ms Diana Griffiths  
Director - Urban Design, Studio GL

Harnessing growth for effective change

Across Australia our cities are growing. The result of this growth is that the main issue facing our largest cities is not growth itself but how this change is delivered. A recent strategy by the World Bank explored the System of Cities and ways of using this trend towards urbanisation to alleviate growth and poverty challenges. While focusing on the developing world the strategy also notes: "Urbanization in the developing world was once considered too fast and unmanageable, something to be resisted and controlled. For many today, the question is not one of how to contain urbanization, but rather how to prepare for it."

Many in our communities are scared of growth and change. Our current planning system, with its adversarial approach resulting in a few winners and many losers, has come at a high cost. Given the premise that growth is inevitable, it is now time to focus on finding ways to harness this change to create win-win situations for all. The philosophical anarchist Leopold Kohr, is credited as saying "Men do not love Rome because she is beautiful: Rome is beautiful because men have loved her." We cannot underestimate the economic value of loving our cities and improving the long term quality of life experienced in them.

The presentation will focus on case studies that illustrate examples where foresight and effective planning have helped shaped successful places and neighbourhoods. It will include the Glebe Foreshore Park in Sydney which illustrates how 40 years of planning and community vision created a popular community asset and an effective catalyst for change. It will also identify the challenges of successful community engagement and provide examples of more effective planning controls. It will conclude with five strategies that support the growth of Australian cities towards a more resilient and beloved future.
Dr Ben Guy  
CEO, Urban Circus

**Integrating the Vertical and the Horizontal**

Successful places are “whole spaces” that includes the vertical and the horizontal. The vertical usually being made of buildings, the horizontal being made of roads, pathways and railways. Not only do we have different owners and managers of the vertical spaces, we also have different owners and administrators of the horizontal spaces. Many of which have different priorities and agendas. How do we get these people working together so we can deliver unified and dignified spaces that meet the requirements of the burgeoning urban dynamic?

By the middle of the 21st century, the urban population will almost double, increasing to 6.4 billion in 2050. So, we cannot do business as usual, segregating out the horizontal giving 90% of the space to the motor vehicle, and impacting the qualities of the public realm. New tools and approaches are required, as well as new priorities. A discussion and presentation on this will ensue.
Regional Rail Link (RRL) is a new rail line designed to remove bottlenecks in Victoria’s train network. The Footscray – Deer Park (FDP) section of RRL is a ‘brownfield’ redevelopment on a major scale with specific urban issues.

HASSELL prides itself that the design of infrastructure is informed by safety, efficiency and enjoyment. Specifically of FDP, a common thread was chosen to unify the three stations, Footscray, West Footscray and Sunshine, with a consistent design for materials, componentry, functional layouts and activated forecourts. To instil local context, core elements were overlayed with art and colour.

These stations interface with the surrounding suburbs, beyond the project boundaries, in distinctive ways at each location.

FOOTSCRAY STATION: A collaborative project vision realised

Above and beyond the functional successes, the civic presence of Footscray Station on Irving St looking towards central Footscray has been transformed. The idea: to place the station facilities on the street and open up forecourts, offering inviting and legible circulation routes between transport modes.

WEST FOOTSCRAY STATION: Re-build and people will come

West Footscray is undergoing a major industrial to residential transition. The impetus was there to rebuild the ageing station. A safer, more connected and modern station has been built for expected population growth. Its quality and distinguishable presence will attract the attention of buyers and developers as a prime growth area of Melbourne.

SUNSHINE STATION: Urban design can change the mood of a place

As part of the FDP urban design strategy, re-planning the station precinct required roads to be truncated, bus circulation to be consolidated and ageing subway to be removed, in order to create better station entries and new pedestrianised pathways.

The adjustment has seen immediate benefits with improved community sentiment and safety.

SUMMARY: Brownfield station redevelopments have significant impacts on communities for urban regeneration.
Global Challenges of Accelerating Urbanization

Urbanization is not a new phenomena and has its roots in the developmental transition of our species from migrant hunter-gathers to societies with permanent settlements of farmers and traders. Cities have since become the hub of economic activity, cultural exchange and technological innovation. From the early civilizations of Mesopotamia, through the city states of Greece, pre-Columbian America, Asia and the European renaissance to the industrial revolution and the digital age onwards.

Based on census statistics and UN projections I will explore the challenges that we need to anticipate as a global society as a result of ongoing population growth and increased urban concentrations. The UN for example projects that 85% of the world’s population will live in cities of over 750,000 people by the year 2050. In Australia there are currently only 5 cities of that scale and the pattern of urban concentration of population is already established. I will show the impact of UN projected population growth (c50%) on Melbourne as a case study. I will also show how other cities will combine as they expand notably around the Pearl River Delta (Hong Kong, Macau, Shenzhen, Foshan and Guangzhou) where the urban population is projected to reach 120 Million by 2050 but also similar conurbations of greater New York, Tokyo and Mumbai.

The implications of the rapid acceleration in urban living are multivalent and demand a reassessment of our approach to understanding cities, from practical considerations of infrastructure, transport, water, housing and public places to the broader socio-political and economic contexts in which the framework of physical infrastructure is set. I will discuss how we may begin to navigate this complex urban future in a manner that is specific to the local conditions, culture and climate of each place.

The visualisation of a small coastal town to 2050

In the State of Victoria the high value of waterfront property has created a high demand for development and placed great pressure on the environment. The concept of sustainable development is coming under increased pressure as more and more individuals desire the coastal lifestyle. The current trend in land use planning is to favour urban and tourism developments which increases the negative impact and also the costs of shore protection from natural hazards such as coastal erosion and flooding.

In keeping with the theme of the 2014 conference “Designing Productive Cities” this paper examines the urban development in Portland from 1820 through to 2012 and forecasts coastline movements to 2050. Three scenarios were developed (Low, Average, High) for the period 2016 through to 2050. Eight (2016, 2021, 2026, 2031, 2036, 2041, 2046 and 2050) milestone years were selected to report on.

The scenarios were inputted in Community Viz software where the software performed three analyses which highlighted the buildout, suitability and allocations of new residential development. In addition to the proposed development a series indicators were developed that showed the impact of proposed development on the landscape. The objectives of this paper are to demonstrate the ability of visualisation techniques to aid, assist and simulate current and future directions in coastal planning.
Mr Stuart Heseltine  
Principal, Hemisphere Design  

Co-Author: Mr Stuart Heseltine, Hemisphere Design  

“You can’t do that here!” – Place Management, the challenges that lie ahead  

Stuart has recently completed a twenty four month study for the Local Government Authority (SA) where he has explored the potential to introduce a model of ‘participatory governance’ which would deliver a new paradigm in how Councils ‘do business’.  

Effective Place Management is more than merely delivering a design outcome, it is a process where sustainable mechanisms are put in place through partnerships to realise and manage the place product. Place management is implemented in numerous ways, however all best practice examples of managed places involve successful partnerships underpinned by a sense of real collaboration, where the local businesses and residential community see themselves with an inclusive role and shared responsibility for the delivery of outcomes.  

Drawing from international best practice including the acclaimed ‘totally locally’ initiative (UK) Stuart has devised a methodology for a process of community capacity building which has the potential to deliver the desired social, cultural, economic and environmental ‘wealth’ and governance mechanisms that underpin ‘place capital’.  

The project has concluded with the delivery of stage one of a two-stage methodology in each pilot – an exercise which has revealed the ‘myriad’ of place making and place management risks and challenges that lie ahead.
Mr Sasha Ivanovich
Architect, AURA Urban & Regional Alliance

The Australian City in the 21st Century

Abstract submissions below for the following streams:
- Strategic Planning
- Whole City Thinking
- Urban Design Projects

In the 21st century, cities will need to be more ‘smart machines for living’ where public and private transport, landscape, buildings and infrastructure integrate and where utility and market place is mediated by design for people. In Australia, the cost of infrastructure, every increasing distance of travel from home to work, economy of health, cost of pollution, energy consumption and sheer inconvenience will be driving the economic analysis Australian cities to densification. The search for alternative energy sources, reduction of infrastructure costs /densification has brought out a new approach in a re-vision our cities calling for appropriate practical solutions.

One of most radical models of a 21st century city to be is Masdar, a fossil fuel free city of 50,000 people, to rise on the outskirts of Abu Dhabi that promises a radical model for a 21st century city, shifting city planning from the implicit dependence on the motor car and proposing a carbon neutral design-for-climate city model and development program. By contrast, the port city of Fremantle Western Australia, is a typical Australian city with a rich history and mixed demography, extensive heritage building stock and car oriented past, beginning to address livability and the making of high quality urban spaces for people.

With Masdar as reference and AURA’s Urban Alliance latest propositions for Fremantle CBD, this paper will trace recent urban renewal initiatives in Fremantle, promising to bring the City to the forefront of urban renewal in Australia. In the outcome, the paper will interrogate where urban renewal in Australia is heading in the context of climate change and commercial imperatives that will impact on the overreaching vision of an ideal 21st century city for Australia.
Ms Suzette Jackson
Academic, Deakin University

Co-Author: Prof Hisham Elkadi, Deakin University

Growing city resilience: Integrating urban ecologies research in urban agriculture, water and climate

Profound problems exist for city resilience worldwide. Accelerating human population and urbanisation place growing pressures on urban ecologies and the resilience of urban environments. City planning and development has focussed on conventional approaches to infrastructure, curbed by economic value of physical assets and the current political determinant of planning for greater private vehicle use, population and suburban expansion.

The inability of existing city infrastructure and urban environments to deal with extreme weather events, climatic changes, fresh water and food access leave existing cities poorly placed to deal with 21st century issues of urban heat island effect, drought, hunger and malnourishment.

A review of recent research across the complexity of urban ecological systems and resources highlight the potential for a transdisciplinary approach with multiple benefits for regenerating cities. The paper reviews recent research into the urban productive capacity of water and urban agriculture explores linkages and transdisciplinary approaches, along with potential urban heat island mitigation and improved climate resilience.

To improve urban ecological resilience to climate change we need to develop an integrated approach for productive urban landscapes, infrastructure and water cycling. To improve the urban ecosystem we look at the role of de-infrastructurisation in creating water sensitive productive cities.
Mr Michael Jeffreson  
Design Director, Demaine Partnership Architects

Towards a Pro-Urban Architecture

The post war, oil age city was visualized by architects and urban designers as a series of freestanding structures, functionally zoned, set in a matrix of open space and linked by freeways. An ‘object oriented’ architectural language was developed to support this conception of urban form.

As we move towards the post-oil age, it is understood that an urban structure dependent on energy intensive mobility is not sustainable. We are looking again at urban form that is dense, walkable and functionally diverse. However contemporary architecture has fallen behind urban necessity, still shackled to the object oriented design approach developed for oil age urbanism. This is impeding the capacity both to effectively retrofit existing centres with appropriate urban form, and to create new urban areas that are responsive to human need.

The paper provides an overview of the urban structure of Australian cities, the ‘tree rings’ of urban growth. Like actual tree rings, the character of successive periods of urban development tell us about the ‘growing conditions’ of the city at each period. This overview makes a critical comparison of the key urban typologies of the pre-oil age, oil age and late oil age periods.

The paper briefly summarizes the goals of a post-oil age urbanism, and discusses the role of density and functional diversity in achieving these goals.

The concept of ‘elemental’ and ‘object oriented’ architectural design is introduced, and the impact and effect of these design approaches on urban outcomes is reviewed, with comparative examples.

An elemental urban model that systematically addresses post oil age design goals is presented, and the possible physical characteristics of this model explored using virtual modelling.
Christchurch and Palmyra - Urban Regeneration Case studies

Perhaps more than at any other time in history, regional/urban planning and development are becoming increasingly important factors within the policy-making of any government. A strong focus is being placed on the development of integrated strategic/urban plans before infrastructure development projects are implemented. This paper will discuss the methodology that supported the development of strategic plans for the urban development and the revitalization of two cities - Christchurch in New Zealand and Palmyra in Syria. Ultimately the goals of these two design led masterplans were the development of a more productive and sustainable future for both cities.

The nature of data collection, historic and economic research, identification of SWOT and clearly defined strategies will be explored in the context of the urban design methodology. The need for a strategic plan for Christchurch come about as a result of the loss of the central business district, infrastructure and amenity following a series of devastating earthquakes that started in September 2010. This plan defines a spatial framework for the central area of the city not only to recover the positive qualities that the place had prior to the earthquakes, but addresses less favorable urban form and function issues that existed prior to the earthquakes. In Palmyra, the strategic plan arose from the need to provide guidelines for regional economic development and to bring critical added-value to the local economy. The city is justifiably regarded as a major asset in terms of cultural heritage and tourism and is included on the UNESCO World Heritage List.

The Strategic Plans for both cities are not restricted to traditional land use, planning or building regulations but are a coordinated framework for the balanced development of populations and business communities; their built-up areas and heritage.
Social Capital: Increasing the Social Interaction Potential of our Cities

Urban sprawl and increased commuter times is reducing the social interaction potential of cities, restricting the ability to foster and nurture relationships, and directly impacting quality of life for Australians. While government incentivises the development of Greenfield estates, as opposed to urban infill, industry must innovate and invest in measures to support social capital and the wellbeing of our sprawling communities.

Research draws a direct link between the quality of relationships we have with others, and our personal-wellbeing. People with strong social connections are less likely to suffer from depression, cardiovascular disease, cognitive decline, and morbidity. With an ageing population and decline in household size, it is increasingly more important to support social connections within communities.

Located in Sydney’s South West Growth Corridor, Willowdale House is a place where sustainable design and living will meet community health and wellbeing. Designed as an 8 Star sustainable home, Willowdale House will provide the community with access to sustainable design and construction methods, and social activities founded on the principles of Health & Wellbeing, Lifelong Learning & Prosperity, and Sense of Belonging & Vitality. Engagement with the community will occur prior to the first residents moving to site, and continue for the life of the project, ensuring this small-scale initiative has a large community impact.

This model surpasses industry best practice for creating cohesive communities. In comparison to upfront delivery of parks and open-space to increase chance encounters, Stockland’s Willowdale House will create social capital by connecting residents from day one. As a replicable initiative, the Willowdale House model will improve the liveability and social interaction potential of our cities.
Mr Jon King  
Architect  Design King Company

An incremental rebuild. A re-activated Central City in post-quake Christchurch

Design King Company were finalists in the Breathe a New Urban Village International Housing Competition in Christchurch. The competition was billed as “an opportunity explore and provide the blue print for the rebuilding of a new compact and sustainable city after the devastating earthquakes”.

Our team believed that the re-population and activation of the central city would be underpinned by the provision of affordable, quickly realized mixed-use housing, with a high quality public realm that was adaptable and flexible enough to respond to the dynamic of the rebuild. We envisaged an “incremental model” that would help in the creative transformation of the city from a place of trauma and disaster into something more progressive, energetic and optimistic.

We imagined a central Christchurch of finer grain and scale, better connected by public transport, by foot and by bicycle. We considered how the city could encourage and facilitate opportunities for young, clever and ambitious people to engage with the public realm and reinvent the city in a form suitable and attractive a younger generation. Precincts that had developed and innovative systems of governance that empowered and encouraged individuals and communities to make changes and adaptations to the environment as it evolved in the projected course of the rebuild, allowing the city to not only rebuild but to flourish. We saw the recovery of the central city as dependant on the provision of affordable and mixed-use housing solution that was replicable and scalable as a piece of thinking, not just a singular piece of design.

However by divesting Government of any role in openly or comprehensibly supporting the delivery of these ambitions, it ultimately compromised the key driver for delivering a sustainable and activated central city in post earthquake Christchurch. This paper will focus on a year-long competition process and that might teach us about the how affordable, compact and liveable urban environments might be created, funded and governed.
Mr Jonathan Knapp  
Director, SJB Urban  

Newcastle’s East End Revitalisation: Delivering Change

Following the closure of the Newcastle steelworks in 1999 the city has been wrestling with the most appropriate form, mechanisms and catalysts for urban revitalisation. After several false starts, numerous studies, and the excellent work of Renew Newcastle in their support for local businesses the attention of the public and private sectors has once again refocused on the prospects of the city.

The Newcastle Urban Renewal Strategy 2012 provides a rigorous framework for the various projects and proposals that have emerged in recent years, including the NSW State Government’s commitment of $500 million to the revitalisation of the city centre, which involves the removal of heavy rail and replacement with a new light rail service. With this strategy in place and the government expressing their intentions for the city, the joint venture partnership between The GPT Group and UrbanGrowth NSW (UGNSW) was established to deliver the major mixed-use proposal for the East End of Newcastle.

In late 2013, the GPT and UGNSW team appointed SJB to prepare the concept masterplan for the city centre site originally purchased by GPT in 2008, and which includes the state heritage listed David Jones building (now vacant). At the time GPT proposed a predominantly retail scheme that was envisaged to bring residents and visitor back into the city centre. The Global Financial Crisis put a stop to those plans and in 2010 the project was shelved.

The emphasis for SJB’s urban design concept was on the respectful retention of the existing city centre character, reintroducing the urban grain that’s been lost over the years, and the creation of a multi-level retail circuit that’s integrated into the existing city fabric. The shift from an entirely retail to a mixed-use, with up to 500 dwellings, commercial and community uses required amendments to the planning policies.
Creating vibrant communities in greenfield suburbs

The quality of the urban environment in Australia’s outer suburban areas is regularly discussed in the media, within the urban design industry and increasingly by government. There is clear evidence that disadvantage is becoming spatially concentrated in these areas. People who live in these suburbs have poorer access to services, amenities and jobs than their inner city counterparts.

Australian cities, particularly those along the east coast, are predicted to accommodate incredible population growth over the coming decades. This is likely to drive further expansion of our outer suburban areas. There are over 50 Precinct Structure Plans currently in the pipeline for the Melbourne metropolitan area alone.

Traditional development models, driven by property developers and retailers, often fail to incorporate the characteristics that make neighbourhood centres vibrant, socially inclusive, healthy and economically sustainable places. How can we, as designers, assist to create new neighbourhood centres that encourage greater social inclusion and greater diversity of housing choices whilst achieving commercially viability in the real marketplace? What initiatives can be introduced into new neighbourhood centres to improve access to employment?

This talk will explore two case study projects located in the western and eastern growth corridors of metropolitan Melbourne respectively; the Soho Village within the Alamanda Estate, Point Cook and St Germain Village, Clyde. These projects take a strategic approach to the provision of housing diversity, access to services and amenities, jobs and long term economic prosperity whilst maximizing return for the developer.
Local and State Government urban renewal and transport agencies are struggling to revitalize Australian cities using traditional public funding sources. In order to support sustainable urban growth, these agencies must often rebuild existing obsolete transport infrastructure, amalgamate highly fragmented land ownership patterns, and rejig metropolitan plans to support new, higher density housing and employment developments to respond to shifting demographic, economic and social trends. Not only are these problems difficult and expensive to fix, urban renewal agencies do not have the legislative powers needed to create equitable revenue generating schemes to supplement traditional funding sources. New funding options are required if Australia’s cities are going to address these problems and compete successfully in tomorrow’s global market place for talented workers.

Value capture funding methods have been used to supplement urban renewal projects in North American for over 40 years, and were introduced to the UK urban regeneration program in 2011. Value capture is simply a means of redirecting a portion of the increases in economic activity caused by a public investment to help fund redevelopment activities and infrastructure projects. There have been numerous research efforts, pilot projects and technical studies over the past few years which have investigated the application of value capture methods in Australia, but a value capture funding method has yet to be adopted in any jurisdiction.

This paper examines the opportunities and challenges of implementing value capture funding methods to support urban regeneration in Australia. Efforts to establish value capture programs in Australia are used to highlight some of the hurdles facing proponents and policy-makers. Drawing from successful projects in the US, the paper sets out a framework for an Australian value capture model.
Creating positive places in the World's Global Cities: International design 101 and beyond

Creating spaces that contribute to the urban environment has been and will always be a challenge for the design practitioner. When conducting international design work the traditional 'problem-solving' approach one is taught and expands upon is not always appropriate for use overseas. In this sense the city’s cultural fabric, rather than its physical, can be more important than the country one is designing in. To then shape ‘our cities to make them more functional, attractive and sustainable’ may move away from the use of concepts like renewal and redevelopment to focus on social and community aspirations.

This paper describes a process that enables designers and educators to work internationally in the local urban setting to create positive places. A three step community and design engagement process was developed in Melbourne, Australia while conducting a 2014 visioning exercise for Elizabeth Street and the process was refined in Mexico City, Mexico on the visioning of Corregidora Calle – an ancient street used by the Aztecs to ferry produce form the canals of Xochimilco to the Zocalo (the City’s market area). The process was developed in partnership between Universidad La Salle (Mexico City) and RMIT University and is now used by these universities as a bases for their international collaborations where more functional, attractive and sustainable community spaces are desired to be created.
Becoming Urban: Residential Planning on the Edge of Chinese Cities

This paper examines the planning and urban design of new residential districts in the peri-urban areas of Chinese cities. In the past three decades, urban activities are continuously spread into rural hinterlands, which have made the urban fringe one of the most dynamic spheres for observing social and spatial changes brought by China’s phenomenal urbanization.

The introduction of the policy of “linking the increase with decrease in land used for urban and rural construction” in recent years, in particular, gave rise to intensive local initiatives to carry out large-scale projects of rural relocation and combination. Under this policy, numerous villages with age-long histories have been razed to the ground and redeveloped into cultivable land. Peasants are moved to newly constructed residential blocks, where modern spatial planning and design strategies are adopted.

Based on in-depth interviews and surveys in Hebei, Hubei, and Jiangsu Province, this paper provides an analysis of how peasants’ material frames of daily lives (space, place, nature, time, and culture) have been radically restructured in these new villages. On one hand, many peasants are satisfied with most aspects of the new residence, which are better equipped with modern facilities. On the other hand, forced to live in walk-up tenements, peasants not only lose space to continue their usual courtyard economy, but also need to pay much more expensive electricity, water, and gas bills. Other changes include: the sense of community is diluted, the link to place is cut, and the distance peasants have to travel to work is increased. The paper calls forth more sensitive neighbourhood design models to enhance the quality of life in new villages.
Mr Guy Luscombe
GLAD Studio

New housing for the new aged

The desire to age in one’s own home is universal. However in a rapidly ageing society this is not always possible because, for a variety of reasons, the typical family home is inappropriate to age in and despite the oft stated desire to find new ways to accommodate older people, the choices currently available are still limited and often unappealing.

Are there other alternatives that can provide more choice for the diverse needs of the burgeoning cohort of the new aged?

This presentation will present the findings of a Byera Hadley Travelling Scholarship undertaken earlier this year to study recently completed innovative buildings for the aged in Europe. A variety of building types were visited including multi-generational and mixed age housing and shared equity co-ops. Issues addressed included urban context; connection to and creation of community; and density, sustainability and affordability as well as the more obvious age related issues like accessibility and safety.

The goals were to see firstly if these buildings had been successful in what they set out to achieve and secondly whether these models could be applied to the domestic (Australian) context. The projects were broadly analysed against a set of quantitative and qualitative criteria and user feedback where possible.

The results presented will suggest there are examples of alternatives that can not only meet the needs of an increasingly picky older generation and be more attractive to them but provide better, more sustainable urban outcomes for all.
Mr Michael McKeown
Jensen Planning + Design

Caboolture West and the ‘CabPat’ – Designing an Urban Extension for 70,000 people and 17,000 jobs in South East Queensland

The March issue of Urban Design Quarterly reprints a Leunig cartoon where a man asks a town planner: ‘Planned any good towns lately...?’ ‘Not really’, is his unhappy reply.

Opportunities to test your urban design skills on a big canvas aren’t the norm, but wait! In 2013 I was asked to work with Moreton Bay Regional Council in South East Queensland to design a town. Or at least, a major extension to a town. Caboolture West is big: 27,000 homes, 70,000 residents; and 17,000 jobs. But more than just size, Caboolture West advances a number of Australian urban design techniques and good practices.

Urban design typologies were researched, adapted and developed for the design of Caboolture West. Key among these is the ‘CabPat’, a cluster of three or four walkable neighbourhoods with the central neighbourhood being higher density and accommodating a local centre.

The urban structure of the town is based on neighbourhoods clustered around six local centres and 17 neighbourhood ‘hubs’. All centres are located on a major street grid at 800m spacing, supporting excellent connectivity and transport choices. Space syntax modelling was used to guide the design of the urban structure.

The 100ha town centre at the heart of the town is designed with two main streets: one with a retail and community function, while the other focusses on business activity. A high quality public transport connection - a guided busway known as the ‘C-bahn’ - is integrated into the town centre. The town centre takes advantage of a north facing location with views to the Glasshouse Mountains.

In most years in Australia, only one or two urban design projects of this type and size come up. The purpose of the talk is to explain the significant urban design features of Caboolture West, and to reflect on the likelihood of the successful implementation of its design in the future.
Mr Peter Maxwell  
Team Leader - Urban Design, Auckland Council

The Auckland Design Manual – urban design best practice and learning international lessons

The purpose of this presentation is to locate the Auckland Design Manual (www.aucklanddesignmanual.co.nz), a web-based design resource, within the wider lineage of non-statutory urban design guides and best practice.

Auckland, like many Australasian cities, is experiencing a period of sustained growth with the population likely grow by an additional 1 million people over the next 30 years (to 2.5 million). To plan for this Auckland Council has led the production of a regional spatial strategy, the Auckland Plan, and developed the legal planning framework, the Proposed Auckland Unitary Plan, which is about to go through the statutory hearing process.

The translation and discussion of the quality compact model promoted by the Auckland Plan, by both communities and developers, will have lasting effect on whether this transformation will be successful.

Alongside the statutory tools, the Auckland Design Manual (ADM) aims to support Aucklanders to better understand the options and opportunities these changes may bring, particularly with reference to design outcomes and design process - from a neighbourhood through to individual sites.

To do this Auckland Council has researched and evaluated international design guidance and information tools. The presentation will touch on how successfully some have been adopted and broadly trace how international guidance has historically been developed with a particular reference to the UK.

The speaker will also discuss how different audiences and their preferences may influence the effectiveness of the information, advocacy and tools that have been provided by government bodies. This will then conclude with an illustration of the ADM showing how these collective issues have been addressed, pose questions for its development as a positive tool to help in the realisation of Auckland’s future and highlight lessons for other contexts.
Mr Caimin McCabe  
Director, Cundall  
  
Co-Author: Mr Andrew Thompson, Cundall  
  
Alphington Park: Re-lifing of the AMCOR site in Melbourne  
  
The redevelopment of the AMCOR site represents a unique urban renewal project within the inner suburbs of Melbourne. The 16.46 hectare parcel of land, 7 km from the city, enjoys almost 300m of Yarra River frontage and is adjacent to local parklands. The original site housed paper recycling plant which ceased operations in 2012, will be developed to include supermarkets, specialty retail, apartments, townhouses and traditional house blocks, as well as community facilities, including a school. Once developed it will offer magnificent city, river, parkland and golf course views, plus immediate access to bike paths, to create a truly enviable lifestyle in what will become a new suburb of Melbourne.

In addition to providing an overview of the Development Plan Overlay prepared for the site to inform the redevelopment design response, an overview of the proposed development solution by Glenvil, the successful developer, will be given. The overview will present how the proposed redevelopment is to meet the following key urban renewal challenges.

- Creating community infrastructure, including promotion of healthy living, education and housing diversity;
- Enhancing indoor environment quality, including air quality and natural ventilation;
- Improving energy efficiency, including targets and on-site generation;
- Managing of water resources, including on-site collection/re-use and design guidelines;
- Stormwater management, particularly considering its proximity to the Yarra River;
- Materials, including retention of some original plant buildings;
- Transport, including road, surrounding public transport and cycling infrastructure connections;
- Waste management, in respect to recycling in the public realm, re-lifing of existing buildings and construction waste management;
- Urban ecology, in respect to decontamination of the site, retention of significant trees and rehabilitation of the river frontage; and
- Innovation and ESD excellence, including the use of the Urban Development Institute of Australia's (UDIA) EnviroDevelopment rating tool to benchmark the development.
What’s the use? Discussions with practitioners about the costs and benefits of good apartment design

There are significant economic, social and environmental benefits from improving the design quality of the built environment. In the residential sector, these benefits can include outcomes such as improved liveability, improved safety and security, improved occupant wellbeing, improved environmental performance, increased community connectedness and reduced living costs. Despite this, design plays a limited role in housing production as ‘intangible’ design elements typically have a limited impact on the exchange value of housing, represented by the market price. This paper aims to re-visit and re-articulate the use value of housing, and the role of design in optimising this, in order to provide a clear definition of good design and a means to value sustainable and best value built environment outcomes to influence investment decisions and market behaviour.

Without a rigorous evidence base, the arguments for good design are too easily dismissed as part of a discipline-based ‘belief’ system and any additional costs that arise may be deemed unnecessary. Use value calculations need to be of a form that is compatible with development proforma spreadsheets. Research addressing these issues has begun to emerge internationally, particularly from the UK. However, the value of good design is under-researched in Australia.

This paper presents a critical discussion and review of the current state of the value of good design research for the built environment, with a focus on apartment buildings. This review is supplemented with 15 interviews with key building industry stakeholders in Australia and from the UK. The research finds that while the benefits of good design are recognised by building practitioners, these are not translating to exchange value. If the building industry is to improve the design and in turn the value of apartment building in Australia, there is a requirement to find ways to measure and articulate these benefits to housing consumers.
PARKING PLEASURE:
How do you use parking to transform towns into places people love?

How do you use parking to transform towns into places people love? By marrying the traditional ingredients of parking and place-making to create a suite of 21st century ‘park-in-place’ city strategies where the bemoaned vehicle now plays an important role in creating cities for people.
The unlikely combination of parking and place-making has been the focus of significant research and the winning of projects for RobertsDay over the last three years.

Beginning with an overview in global trends and innovations, including the success of San Francisco’s real time, user pay smart technology to Los Angeles’s employer paid parking schemes, RD Principal Stephen Moore will explain the hidden cost of parking, its impact and how this can be used to leverage sustainable change.

To demonstrate the potential of ‘park-in-place’ city strategies in Australia, a range of projects will follow including how a hybrid parking structure launched an arts district; how discovering the hidden costs of parking has saved a city centre over $100 million; how a car park may be transformed into a mixed-use waste-to-energy plant; parking in ‘car-free’ precincts, and how tactical interventions and retail surveys are dispelling preconceived ideas about the relationship between shops, parking and profit.

In closing the discussion, Stephen will provide a practical framework for understanding how ‘park-in-place’ city strategies can benefit your city or town.
Ms Marsita Omar
PhD Researcher / Urban Planner, University of Melbourne

Co-Authors: Ms Marsita Omar, University of Melbourne & A/Prof Alan March, University of Melbourne

Good Design as Professional Discretion: Planning Practice Perspectives

Decision making processes in urban planning involve interconnectivity and interdependence between planning and other policy objectives. One particular area of concern is how 'good quality' urban design principles are interpreted by planning professionals in choices that matter. The Integrative Theory of urban design acknowledges the significance of substantiative forms of urban and urban design theory, emphasizing the need to consider ‘person-environment’ relationships.

Many authors have contributed to defining key features of what might constitute ‘good quality’ design principles that take this relationship into consideration. However, there is limited documented information about the experience of how these design principles are interpreted and delivered in practical ways by planning professionals. Using research findings drawn from our practical observations of English, Dutch and Victorian Statutory planning, the paper explores the circumstances of professional planners’ interactions with respective urban design policies during development management processes. It is argued that the environment within which respective urban design policies are formulated and delivered are complex in nature which inherently require further interpretations and adaptations by planning professionals.

They articulate a series of ‘coping and adapting’ strategies to enable them to interpret and use relevant urban design policies to find solutions to the planning issues they are involved with. Using Lipsky’s work on “Street Level Bureaucracy” and its implications for the micro-analysis of urban form decisions, our findings suggest that there exist circumstances where successful use of planners’ professional discretion seems to deliver better outcomes, functioning as one of their ‘creative decision tools’ in delivering better quality urban form outcomes. Thus, to establish understandings of how cities are managed over time, and how particular good quality urban forms are actually delivered through or alongside planning, we demonstrate how links between site-based concerns are made with wider analyses of planning professionals’ experiences during the interpretation of urban design policies.
Selecting quality ingredients for the urban consolidation recipe: the case of medium-density housing.

Mix together all ‘grounded’ ingredients: medium-density housing, quality public spaces, retail units, offices, and community and health services. Shake well and distribute liberally adjacent public transport corridors, interchanges and stations. Ensure the mix is mounded highest at its centre and tapers gradually to the edges. Steam continuously (avoiding stirring) until a resilient, sustainable and cohesive community develops with a unique local identity. Cool on cooling rack and enjoy your TOD/Activity Centre/ Livable Neighbourhood with lashings of locally produced cream and lemonade.

A good meal requires quality ingredients; so too does a good city, centre, area or neighbourhood. In the promotion of urban consolidation recent and current metropolitan plans for Australia’s capital cities call for universal increases in the provision of medium-density housing as an essential ingredient for a more sustainable urban future. When a cake or biscuit recipe calls for sugar it deliberately specifies the texture and degree of refinement required to achieve the desired outcome. When metropolitan plans call for medium-density housing no such specification is provided.

While minimum standards for quality and design are either enforced or suggested in a range of jurisdictions, planning documents arguably need to provide more attention to the variety of medium-density housing types possible and how they impact consolidation outcomes. Given this lack of specificity in metropolitan plans, who decides what to build? How is the design brief determined? Is there an alternative? This paper will review existing literature and current Australian housing projects to present responses to these questions and enhance the consolidation recipe.
Mr Stephen Pearse
DWP|SUTERS

Converge Connect Coexist: Future Visions for Our City. A case study exploration of re-imagining our cities. Challenging old ideas of boundaries, shared and owned community and zoning, constructions.

A fundamental shift in the world economy + what this means for our cities. The business landscape is changing rapidly. Cheaper, well educated + highly motivated world labour markets and new technologies mean we are all closer than we ever thought possible. Traffic, commuting times, cost of real estate, generational change and expectations are combining in a realisation of a new density which will challenge the old planning systems.

Why is this happening?

Globalisation and technology, increased competition and efficiency, demographic shifts with generational change and lifestyle attitudes, multiculturalism and diversity of experience and attitude, all combined with costs of labour in construction means we must look at new ways of building, sharing, occupying. This is leading the whole world economy into a fundamental shift.

What evidence do we have of all this?

Hotels becoming workplaces, Retail - bricks versus clicks- online, Workplace taking to the street, the virtual office, smaller apartments and affordability creating communities on the street for living, education - social learning/self teach/virtual university, Health and aging in place for local treatments - E-Health/telemedicine.

We are all aware of the need to be productive to compete in the new world economy. The growing middle class aspirations of huge developing population areas and their impact on our societies as we know them. Efficiency is paramount and engagement of the workforce to collaborate, be flexible and adaptive: is creating a new community.

Revolution or Evolution? Change means opportunities – I will explore some areas where this is occurring and propose opportunities.

Case study –future visions for our city will look at a physical realisation of what this future might be for one part of the city.

The study will explore the city block with mixed use, health clinics, residential, growing, making, producing energy, transfer of meeting rooms to the street, cafes as conference centres, more people per floor in our existing buildings, pressure on lifts and floor plates, operable facades achieving higher energy efficiencies, aerial bridges connecting cafes in the sky and plug on lifts like armatures to rebirth our existing buildings.

Companies of the future will have SOFT EDGES, flexible and changing with a workforce who don’t want to commute. The street as the public domain increasingly becoming part of the workplace, not exactly privatised but removing some space pressure from our office spaces and delivering a more diverse, rewarding workplace in tune with our humanity. The cities as an organism + precinct planning and the new community.
This paper investigates the proposal for the SkyCycle bicycle network in London and its relationship to how we think about cities and transportation today. We draw upon the concept of the technological sublime as a way of analyzing city form and the role of contemporary urban cycling. The continued fascination with the technological sublime, and the intertwined social and economic systems that valorize it, influence how we see cycling today, and how we expect cyclists to behave. We attempt to uncover the unspoken values that underlie the SkyCycle proposal in order to understand the range of reactions to the proposal.
The Changing Face of our Cities

We are now in the midst of a generation of change which is being driven by rapid advancement in technology. At the turn of the century you would have been a brave person to predict that newspaper circulation would sink by 40% over the coming decade. Young people are showing less interest in driving and more in public transport, roof top solar energy is now a viable alternative, Sydney now has a declining percentage of separate dwellings with apartment living on the rise, traditional manufacturing industry is in decline in Australia whilst the logistics industry is growing steadily, and professional sectors like journalism are now faced with competition from 4 billion other would-be journalists all qualified to comment and observe from the comfort of their smart phones.

These examples are but a few which demonstrate the trends facing society today. This presentation will use Sydney as a case study to illustrate how these market forces are already influencing the shape of this city. A brief historical introduction will set the scene and look at past trends and interventions which shaped this city. Planned game changing infrastructure projects which influence how and where we will live will be highlighted and likely scenarios on their influence on surrounding land-use will be discussed. Brownfield infill development will be highlighted as a trend to accommodate Sydney’s housing demand; and examples of how infill development can add diversity and assist in the provision of essential infrastructure to neighbouring suburbs will be provided. And finally, the planning for Western Sydney Employment lands and the influence it will have on industry will illustrate Sydney as a global city which is responsibly planning for population growth within its physically constrained boundary.
An objective approach to place identity: exploring Melbourne’s capacity for more productive established suburbs

The Victorian State Government recently forecast that Melbourne would almost double its population to 7.7 million people by 2051. With 60% of this growth expected to be accommodated within established suburbs, a new approach to urban design is critical to manage the increased density given Melbourne’s predominantly suburban morphology. This paper aims to address the conflict between the metropolitan desire for increased urbanity and the fiercely defended perceived place identity of existing suburban communities. It presents a more objective place identity for two of Melbourne’s established suburbs; Coburg and Camberwell, thereby exploring the latent capacity for more productive suburban centres.

The central activity districts of the two case study suburbs are initially analysed using a quantitative approach, drawing on data rather than perception. All existing spaces are measured and categorized into built, green, vacant or transit spaces for comparative analysis. In addition, the various social, cultural and economic factors are explored to provide a qualitative overlay. The synthesis of quantitative and qualitative results provides a more holistic portrait of the place identity of each suburban centre. These balanced portraits interact with the urban narratives of such places, challenging fiercely defended perceptions of place identity. The findings reveal significant capacity for increased density within established suburbs, providing an opportunity to meet the escalating demand for a more urban and productive Melbourne.
The BaT (Bus and Train) Project, Brisbane
A precinct planning and urban design project within a major priority transport project

The Queensland Department of Transport and Main Roads and Brisbane City Council have partnered to deliver the BaT (Bus and Train) project - a five kilometre, 15m diameter, double-decked tunnel with buses running above trains. Starting from Dutton Park, south of the Brisbane CBD, this world-first tunnel heads north under the Brisbane River and city centre, to Spring Hill on the inner-city fringe. Subject to government approval of the project business case, the BaT project will connect to the existing high-frequency passenger networks and includes three new underground stations at Woolloongabba, George Street in the CBD and Roma Street, boosting network capacity and unlocking Brisbane’s productivity.

The BaT project recognises that urban design positively influences the productivity of cities and is critical to successful public transport infrastructure. BaT has utilised a suite of urban design principles to shape the infrastructure and urban outcomes around each station/portal. The BaT project will improve connectivity and promote patronage by providing a quality journey to and from stations, seamless network interchanges and opportunities for high quality places. The identification of new and enhanced development opportunities maximised the catalytic effects of the infrastructure and the value uplift from the station/portal precincts which positively influenced the project’s business case and economic justification.

This paper presents the BaT project’s Precinct Planning and Urban Design which identified outcomes to attract patronage and activate new stations/portals. Utilising Brisbane City Council’s strategic planning, the project took a whole-of-city approach to maximise its community value. Precinct Planning identified redevelopment sites, renewal opportunities, and way-finding strategies to enhance the precincts. The paper outlines how these recommendations influenced the infrastructure design and supported the business case.

This work is presented in 30 minutes with PowerPoint.
Mr Ian Shears  
Manager Urban Landscapes, City of Melbourne

**Designing the Biophilic City**

Melbourne today is facing environmental, social and economic challenges which we believe can be largely remedied by reinvigorating nature in our urban landscape.

Biophilic design, in this regard, encapsulates multiple inspirations for us: Firstly, creatively weave the urban green infrastructures such as parks, street trees, green roofs into the building fabric; Secondly, consciously design in a way which resonates the innate affiliation between human beings and nature, therefore leverage nature for health, wellbeing and productivity of our urban community; Finally, unleash the potential of the city as part of the ecosystem that can regenerate and evolve as a living organism.

This presentation will outline our endeavours on biophilic design: The Open Space Strategy determined to increase Melbourne’s green spaces by 7.6%, providing a distributed open space within 300 meters’ walk for the future population; the Urban Forest Strategy aims to double public realm tree canopy cover from 22% to 40%, reducing summertime temperature by 4 degrees; and the Growing Green Guide which focus on bringing up more good quality green roofs, wall and facades in Melbourne.

It will cover projects such as the ‘Errol St Park’ whereby a 500 m$^2$ street reserve is creatively expanded into an 5000m$^2$ new park; the mini urban forest planted over approx.1ha of the Fawkner Park where people can experience walking through a forest of trunks with connecting canopies.

It also will introduce more experimental projects via which the city has just started to explore - how we create different urban landscapes which mimic the nature for its regenerative power; and how we create space which supporting ecosystem services for both human, plants and animals. The Birrarung Marr Wildflower Meadow and the temporary park are the trials in this direction.

While biophilic design still requires more institutional change at a city scale, we find it much more simple and cost-effective than we thought. Being creative is the key.
A/Prof Roderick Simpson  
Director, Urban Design program University of Sydney. Director, Master of Urbanism, Faculty of Architecture design and Building, University of Sydney  

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**Strategic urban design: a response to planning hubris and delusion**

Metropolitan planning purports to influence, if not determine the shape and character of our cities. Focussing on Sydney, the paper will critically examine this claim and pose the counter view that much metropolitan ‘planning’ is a post-facto formalisation of changes in the city driven by social, market, and economic trends and policies that are beyond the control of planning. It will be further argued that this formalisation has the effect of reducing the potential for adaptation and evolution of the city.

The paper will suggest that there should be a polarisation of planning to be more concerned with city-shaping infrastructure and city wide natural systems on the one hand and more localised place-based urban design on the other- hence the term ‘strategic urban design’.

The paper will comprise 3 parts.

The first will demonstrate the importance and potential of major public transport infrastructure to address both social justice and ‘productivity’ objectives and demonstrate that these apparently divergent aims may be resolved by a commitment to public transport and a shift from a suburban/centres conceptualisation of the city to an ‘urban mosaic’.

The second will examine the weaknesses of previous planning for the City of Liverpool, largely as a result of the conceptualisation noted previously, and contrast it with more recent ‘strategic urban design’ approach to planning for the City. This includes the early use of analytic tools at the ‘precinct’ level to provide indications of the performance of different scenarios in relation to greenhouse gasses, affordability, water consumption and travel patterns. These in turn may inform built form, parking and land-use policy for the precinct.

The paper will conclude by positioning this more agile urban design practice in relation to adaptive emergence as an appropriate framework for thinking about the city, rather than notions of resilience transferred from environmental and ecological thinking.
It is generally accepted that the ability to improve sustainability outcomes in urban development decreases the later in the development process they are considered, while costs and potential delays increase. This has been one of the primary drivers behind the increasing inclusion of sustainability requirements in planning ordinance. In Victoria, this has been seen in the amended City of Melbourne Planning Scheme requiring certain commercial and residential projects to achieve Green Star Rating equivalency, and a group of six councils seeking to implement a local policy focused on environmental sustainability. However, challenges remain in how these objectives and requirements are set, and the ability of the design and development sector to meet them.

The City of Greater Geelong, in planning for the region’s largest growth area Armstrong Creek, has identified the potential for this strategically significant precinct to foster improved sustainability outcomes. This opportunity was prioritised in the preparation of the Town Centre Precinct Structure Plan. This document includes a range of sustainable design requirements and guidelines that new development must adhere to. It takes the general ambition of improved sustainability outcomes in urban development and makes them specific to a new, mixed-use precinct.

Recognising that these requirements will be new to many developers, Council has committed to a range of supporting measures to help developers to better understand these requirements, how they can be met without compromising feasibility, and what additional value improved sustainability outcomes might add to their projects. This approach, well received so far, demonstrates the potential of a new, more collaborative model of sustainability integration in strategically significant sites.

Peter has been involved as a consultant throughout this process and will present on the origination and drivers of this approach, the benefits identified, and what this experience might offer in lessons for other councils and sites.
Regional planning efforts for coordinated urban design are often hampered by policy disagreements, parochial jealousies, and personality clashes. These differences are especially pronounced in a system, as in Oregon, USA, in which coordinated planning is required. These differences may thwart regional planning as an efficient and effective urban form require consideration of methods other than ipse dixit to encourage parties to set aside their differences. The Oregon Regional Problem Solving (“RPS”) Process and its application in the Jackson County area (around Medford and six other cities in this region of Southern Oregon) provide one example as to how such collaboration can work.

Jackson County is politically, socially and economically diverse. Its urban areas include Medford, the economic hub of the region and Ashland, with its Shakespeare Festival and Southern Oregon University, and surrounding areas in which farm and forest uses predominate and which tend to be less affluent and more conservative. These differences are especially apparent in attitudes towards land use planning, with cities more prone to consider design and the countryside more libertarian in outlook.

The challenges presented by the political, economic and social diversity of this region to achieving consensus on urban form and design are more acute in view of the requirements of the Oregon planning system, which requires a 20-50 year assessment of urban residential, commercial, employment and open space land needs, projections as to adequate public facilities, and efficient use of urban lands to avoid sprawl.

The paper will trace the origins of the RPS process from the political promise of a gubernatorial candidate to the passage of legislation which was used to bring forward a 50-year plan that had unanimous support of all eight jurisdictions. The paper will analyze this process and the promise this process has for future urban design efforts elsewhere.
Ms Sally Swanson  
Founding Principal and CEO, Sally Swanson Architects, Inc.

A City that Works for Everyone: An International Design Perspective on Incorporating Strategies of Universal Design and Sustainability - From an Urban California Elementary School to the 2014 Sochi

Everyone deserves a chance to participate from the school yard to the world stage. Universal Design (UD) is inclusive and provides design functionality for all people, not only those with traditionally diagnosed disabilities. How do we create invisible barrier-free environments that transition smoothly? UD principles give direction rather than correction so we present three cities, three real-world lessons on making UD work.

Ford Elementary, a new school in Richmond, California, shows how UD supports “the whole child” beyond academic requirements to nurturing spaces. At Ford, Sally Swanson Architects (SSA) made the educational experience inclusive for a diverse student body, staff and community instilling ownership and pride beginning with bilingual community meetings. A seven-foot-drop across the campus requires no ramps; eco-plantings and bioswales absorb rain runoff and a community garden illustrates sustainability in action.

SSA was on the planning and design team commissioned to prepare Russia’s International Olympic Committee bid to host the 2014 Olympic/Paralympic Winter Games. The task of creating an accessible environment was not just a massive design undertaking, but also required a great deal of education, political will and cultural change. As an architect, the aim was to profoundly push accessibility barriers. Had that happened?

For the 2018 PyeongChang, South Korea Olympic/Paralympic Village, SSA created UD standards for town/village circulation and construction, helping to achieve innovative barrier-free housing and athletic spaces in the early conceptual phases to ensure that an accessible path of travel is fully realized. Instead of an afterthought at the end of the design process, this framework provides accessibility solutions from day one. We include plans that describe the firm’s work for this upcoming international event.

UD principles, when applied in the problem-solving development of site planning, building design and circulation, create “invisible” accessibility becoming completely integrated into the design process.
Creating Healthy Cities: An exemplar integrated and strategic partnership – the Healthy Built Environments Program

For some time now urban designers and planners have been working alongside health promotion professionals endeavouring to create cities that support healthy behaviour on an environmentally sustainable planet. Research in this field is growing exponentially leaving little doubt that city, suburban and neighbourhood form contributes significantly to health.

We know that a sustainable environment is characterised by a variety of housing, much of it medium density, which meets the diverse and changing needs of residents. Employment opportunities are close by facilitating short commuting distances. This is supportive of active transport – walking, cycling and public transport – and with more time available, communities have increased opportunities to be socially connected and physically active within their local area. Fresh food is also readily available, some of it grown in local community gardens and throughout residential streets.

Although this vision of a sustainable and healthy environment is well accepted, its actualisation is proving more difficult. Interdisciplinary and connected ways-of-working across the built environment and health are critical. This paper presents an exemplar for other jurisdictions, both nationally and internationally, of how this has occurred in New South Wales – the Healthy Built Environments Program. Planning and urban design academics within a university-based built environment faculty, a health NGO, local councils and private planning consultants have come together as partners in this state government health department funded consortium.

The Healthy Built Environments Program focuses its work in three strategic areas: research, education and advocacy. The paper provides an overview of these activities showing how they have brought about closer links between health professionals and those from the built environment. It concludes with an overview of some of the challenges encountered working in this interdisciplinary way. Of particular interest are divergent research traditions, academic and professional policy goals, and the negotiation of theoretical and practical understandings.
Greening, Regenerative and Improvement Districts (GRIDs): Alternative funding mechanisms for low carbon development

Although many outstanding examples of low carbon cities, districts and urban developments exist around the world, these concepts and approaches have not yet become mainstream. In Australia, many factors prevent developers and local governments from pursuing low carbon urban development. Some of the main obstacles include: high capital costs; split incentives; information barriers; longer approvals process; first mover disadvantage; policy and pricing uncertainty; lock-in; credibility of carbon claims; multiple stakeholders, and; regulatory issues.

While not all of these are financial in nature, the majority have some form of economic impact, making it hard for innovative low carbon developments to compete financially with standard, business-as-usual development. This research highlights various incentives and opportunities, which can help to overcome some of the barriers, but focuses on the need for new funding models to assist with the higher costs often associated with this type of development.

Some new and existing funding arrangements are examined that could help to facilitate the shift to low carbon infrastructure within our built environment. These include: Environmental Upgrade Agreements (EUA’s), which help to fund retrofits in existing buildings; Energy Service Companies, or ESCo’s, which can help to make low carbon, decentralised energy options for developments more commercially viable by absorbing the upfront capital costs and ongoing maintenance costs associated with running equipment, and; Business Improvement Districts (BID’s), which are an alternative, privately funded, independent and participatory governance mechanism for improving specific precincts within cities. Based on these, a new concept is proposed – a GRID (Greening, Regenerative, and Improvement District) - which could potentially provide a mechanism to help developers and councils fund the additional costs associated with eco-infrastructure at the urban precinct level.
Most people will live in cities in the foreseeable future.

Research into the physiology of visual exposure to soft (green) landscape is pointing to measurable health benefits, even beginning to label such exposure as a vital human nutrient – Vitamin G. The benefits include positive effects on immune system resilience, with implications for public health expenditure, labour productivity and inclusive wealth.

Pritzker Prize winner Wang Shu has recently argued impressively that Landscape is the key to Architecture. The emerging research on landscape impacts indicates that this is equally, if not more, true for urban design.

This paper contends that, as they do not provide visual access to landscape, much of the occupied space in current CBDs, and particularly above 25m, are Zero G. The research is indicating that they thus offer a living/working environment which delivers sub-optimal health, resilience and wealth outcomes in comparison to urban contexts with higher landscape values.

In order to illustrate key themes from the current research, a design study is presented. The potential value-add elements are explored insofar as who benefits in order to broadly identify who might profitably invest in what and why, as a touchstone to the most appropriate locations for intervention and as a foundation for challenging urban design policy orthodoxy.

The benefits of more urban landscape are understood already to include absorption of noxious gases (healthier streets) and carbon sequestration. The additional benefits now recognised from Vitamin G make the case for a much greater bias towards urban green in the planning and development of our cities overwhelming, and particularly above 25m, in order to deliver more productive cities.
Mr David Tickle  
Urban Design Sector Leader, HASSELL

The Housing Challenge:  
London density / Sydney style / Shanghai speed

Housing is the building block of the city. For most of us, a home is our most fundamental physical need, our biggest financial investment, the place that encapsulates our sense of self. Cities the world over are facing critical housing issues – from quality to delivery, affordability to sustainability.

Over the last 12 months, HASSELL has undertaken a self-funded research and design project on the topic of urban housing. Within three global city contexts – London, Shanghai and Sydney – we have investigated the housing challenges that are shared by, and specific to, these cities.

We have then speculated on how a typical housing typology in each city can be transformed to generate better social, economic, environmental and urban outcomes. These speculations test the application of the successful elements of one city to the others: for instance, what happens when Sydney adopts the density of London? Shanghai, the lifestyle qualities of Sydney? London, the speed of delivery that we see in Shanghai?

In London, a city experiencing its worst housing shortage in more than 60 years, we have generated methods for the rapid delivery of highly adaptable and highly affordable housing units. Our Shanghai response re-programs an existing “shikumen” neighbourhood with a rich diversity of uses, building forms and public spaces. And in Sydney, addressing the ongoing sprawl of the city, an investigation of the walk-up apartment (the “six-pack”) illustrates how the density (and quality) of this housing type can be intensified. Each of these explorations will be presented in a highly graphical and engaging way.

This project is part of HASSELL’s Urban Futures initiative, a research and design program that brings together the diverse skills of our global design team. In exploring the global issues of the city, we reveal locally meaningful solutions – insights that we apply to our professional work.
Brisbane’s city centre is growing rapidly with 50 new towers and a doubling of pedestrian trips anticipated over the next 20 years. This strong economic outlook together with the riverfront location and subtropical climate present fantastic opportunities for our city’s heart.

Brisbane’s City Centre Master Plan 2014 sets out a bold vision to guide future development and investment and create Australia’s New World City. The master plan sets out 10 city-making moves that will transform our city over the next 20 years. Priority projects are also identified to be delivered within the next 5 years, including new riverfront precincts, street upgrades, a new pedestrian bridge and major public transport infrastructure.

The master plan was guided by community input from the Ideas Fiesta which encouraged the Brisbane community to explore the future of their city centre through a 3-week program of events across the city. Over 16,400 people attended 27 events including street picnics, guided walks, laneway events and industry workshops. Online platforms also generate a significant range of ideas and discussion, resulting in more than 1.2 million social media views.

Urban Renewal Brisbane (URB) and lead consultants Urbis will jointly present on the innovative processes, strategies and projects comprising Brisbane’s City Centre Master Plan 2014, including:

- Overarching vision and strategies
- Ideas Fiesta
- 10 city-making moves
- Priority projects for the next 5 years
Home delivery: do you want density with that?

For Australia’s Gen Y, housing affordability is not only about the raw numbers, but also a lack of desirable places to live. The demand for urbanism outstrips supply. This presentation looks at this imbalance, why greenfields have been unable to deliver the sustainable urbanism promised in the masterplans and how recent changes are unlocking the delivery of the 20-40dw/Ha neighbourhoods necessary for transit oriented development (TOD) that meet our home ownership aspirations.

Urbanism has a good ally in Gen Y. Raised on a pop culture diet of Seinfeld, Friends and Sex in the City, 20-34 year olds aspire to an urban lifestyle where they can spend more time on fitness and social media, and less time alone behind the wheel of a car. Urbanism is in demand.

But what of the supply? We are good at designing TOD, but have been much less successful at delivering large scale, new urbanism in brown and greenfield sites. TOD has been planned across Sydney’s new release areas with approximately half of all new neighbourhoods of a net residential density between 20-40dw/Ha to ensure active transport is viable and create new urbanism. These densities are well above the 10-15dw/Ha created by the business as usual, conventional detached houses on 450sqm lots.

This presentation explains why the TOD planned in Sydney’s new release areas had stalled due to planning and financial impediments. It details how the Housing Diversity package addresses these issues, making the delivery process for medium density housing fit with the industry established split contract business model to reduce the cost of capital and make development in the 20+dw/Ha areas viable. The Package also includes urban design objectives and controls enabling urban streetscapes, not preventing them. Built examples of compact and microstrata housing from recent projects are included.
Will tactical urbanism transform urban planning?

Traditional processes of urban planning are characterized by a plan-and-control approach that offer little opportunity for immediate citizen engagement—and certainly not control. They are technocratic, rather than democratic. Furthermore, the resultant plans are not flexible enough to accommodate such failures prediction upon which they are based, shifts in social structure, rapid changes in the economy, or new insights into how cities might operate.

As a result, plans can quickly grow out of date and out of synch with the current state and direction of the city. For the powerful, this is often addressed by having the plans overridden through political power, or through the courts. The middle classes often respond through NIMBYism: protecting what they have. The poor have no recourse when planning either fails them, or when planning positively disadvantages them.

It’s in this context that we’ve seen the emergence not just of resistance to planning, but of alternatives. These alternatives have emerged in the developed world under the rubric of tactical urbanism. In New York, tactical urbanism has had a major impact in the transformation of Times Square. In the developing world, they take the form of various kinds of self-organisation in slums.

This paper will examine the known weaknesses in traditional urban planning and the social and technological changes which have bother driven and enabled tactical urbanism. It will then examine the question: Is tactical urbanism just a fad or an historical blip, or a possible harbinger of a new form of city-making tailored to a future of more democratic, equitable, fast-paced and flexible cities?
Impact assessment of street trees in the City of Melbourne using temporal high polygon 3D canopy modelling

Impact assessment of projected street tree life expectancy in the City of Melbourne using temporal high polygon 3D canopy modelling

As Australian cities experience record heat waves there is a critical need to better understand heat retention in city centres – increasing the canopy coverage of the Urban Forest helps mitigate the Urban Heat Island Effect through increasing shade and evapotranspiration.

During the ‘millenium drought’ (1998 - 2007), the health of Melbourne’s Urban Forest was dramatically impacted. Though some tree species have managed to regenerate, for numerous species the damage was irreversible. Many of Melbourne’s historic boulevard trees are also nearing their useful life expectancy with substantial canopy loss projected over the next five years.

Decisions need to be made about replacement strategies, species selection and species reduction, efficient and strategic placement of trees to maximise their growing potential while providing maximum shade amenity.

In this paper we examine a new approach to modelling urban street tree morphology bringing together advances in botanical accuracy of digital tree models based on parametric L-Systems; GIS based distribution, species and life expectancy mapping; animatable parametric proxy-object modelling; photometric solar analysis; and GPU accelerated rendering. The approach is explored through a precinct case study in the inner north of Melbourne modelling projected useful life expectancy and potential renewal over the next 5, 10 and 15 year period.

The results of this study demonstrate that it is now possible to produce high quality three dimensional studies at different time intervals that are visually compelling and show great potential as performative design tools for shade, walkability comfort and urban heat island mitigation.

The new techniques for street tree modelling and analysis provide designers and policy makers with a powerful approach to inform decisions on species selection, strategic placement for optimal growth and solar shade amenity impact. The approach also shows great potential for communication and advocacy to councils and the greater community.
Mr James Whitten
Sasaki Associates, Boston

Co-Authors: Mr. Juan Carlos Cristaldo, Universidad Nacional de Asunción Paraguay; Mr. Oscar Malaspina, Intercorp Group Peru, and; Mr. Daia Stutz, ETH Zurich

Design & Territory: Tools for a new phase of infrastructure-led urbanization

The increasing scale and complexity of infrastructural systems poses significant challenges for the planning and design disciplines as they strive to create more sustainable and inclusive urban environments. In response, this research initiative focuses on so-called megaprojects – large-scale transportation, water, energy, and communications infrastructures – that shape regional-scale urban systems and affect the success of localized planning strategies. As the first step towards a comprehensive practice of territorial development, this paper outlines a framework for the application of design thinking to the territorial-scale.

Since the collapse of the political and economic conditions supporting regional planning during the 1970s, infrastructure has become the exclusive domain of global engineering firms and aspatial planners such as international development banks, management consulting firms, and government treasury departments. Focused on narrowly defined technical and fiscal criteria, their methods fail to render the redistribution of human, natural and financial resources that drive processes of urbanization. In addition to outlining a framework for mapping and analyzing these flows, this paper provides a method for the construction of narratives that critique the broader ‘social’ role of large-scale infrastructures.

The long-term goal of The 5th Thesis Research Initiative is to develop new tools for policy- and decision-makers, spatial planners, designers, stakeholders and community groups, to shape more sustainable and inclusive patterns of urbanization. Design & Territory outlines the conceptual framework for this research by providing five lenses for application to any large infrastructure project: (1) Scales of Time, (2) “Uneven Development,” (3) Suggested Patterns of Urbanization, (4) Negotiated Visions, and (5) Totalities without Project. This method will be tested and further developed within an academic setting this January.
Creative approaches to regional development: a rural Victorian case study

The decline of regional and rural towns is the not-so-secret downside to the magnetism of urban centres in the 21st century. Maintaining the lifestyle and livelihoods of these places and communities is a key challenge for urban designers and planners. This paper documents a case study of a creative approach to community engagement and precinct revitalization in a rural Victorian town, and presents the ongoing results of this intervention. Key components of this on-ground project were employing a multi-disciplinary team of planners, architects, and arts professionals to engage with the community, draw out stories, and develop a strategic plan that encompassed the 'hard' and 'soft' infrastructure of urban revitalization. In this way, the community was supported to 're-imagine' the future of the town, investing in key sites of historical and cultural significance, whilst taking advantage of the opportunities offered through place making and creative intervention. This approach was not without its challenges, and there are several lessons to be taken, including methods of engagement, and appreciation of the distinct demographic trends and needs of rural and regional communities.
Designing for Productivity - Design tools for a healthy community

Designing for productivity
Design tools for a healthy community

The productive cities of the future are healthy cities. The World Health Organisation report that worldwide obesity levels have nearly doubled since 1980 and the direct and indirect costs of obesity and obesity-related illnesses in 2008/09 were estimated to be $37.7 billion in Australian alone. Obesity also has an impact on productivity; absenteeism, attending work when sick and premature death is estimated to cost Australia $6.4 billion a year. Governments locally and globally cannot continue to fund the health requirements of our ever expanding waistlines.

Robina Crook, was the HABD project team leader, working in collaboration with Trevor Shilton, Director of National Heart Foundation of Australia (WA) and his team. The Healthy Active by Design (HABD) Tool demystifies the urban design principles required for a healthy active productive community. It provides the local community, health professionals, town planners, government officers and urban designers with a suite of tools to design healthy communities. There is a checklist of strategies, evidence summaries and case studies for nine design features that research demonstrates are the key drivers to a healthy active community.

HASSELL, working with Fiona Bull, Director of University of Western Australia’s Centre for Built Environment and Health (CBEH) and AURECON, developed a comprehensive, content rich, evidence based online tool, www.healthyactivebydesign.com.au

Robina will highlight the way the HABD Tool has been used to inform master planning the adaptive reuse of the deco cathedral style South Fremantle Power Station in Western Australia and the wellness inspired community of some 82,000 people in the new Elmina estate in Malaysia. She will also highlight some of the exciting research being undertaken by CBEH and the Centre for Research Excellence understanding the impacts of residential density on residents’ wellbeing as an extension of the current HABD Tool.
Ms Melinda Dodson
Principal Architect and PhD Candidate, Melinda Dodson Architects and University of Canberra

Ideas for Compact Living: An Architectural Exploration of Occupant Behaviours to Compact Housing

A goal to increase the representation of medium density compact housing precincts in Western developed cities has been advocated in policy and research for half a century. In Australia despite this ambition, house sizes have doubled while household occupant numbers have halved (ABS 2008). Empirical research on the relationship of house size to energy, resource and land use is well established. More over advocates of medium density housing cite both sustainability and liveability advantages; central to this argument is the increase in housing choice for a changing demographic. As a housing typology however medium density in large sectors of Australia’s cities remain persistently contentious. In particular, a gap exists between findings on occupant satisfaction, environmental performance and the design outcomes of medium density (Hurlimann 2010, Vischer 2008, Sarkissian 2004, Marcus et al 1986).

The research is situated in Canberra, Australia’s national capital. It presents a microcosm of the challenges faced by cities, and like many, Canberra is now shifting its attention to various forms of medium density compact housing in order to contain the outward expansion of city boundaries. The post-war boom years saw numerous projects focused on smaller more sustainable ways of living, often featuring “attached” clusters of small dwellings within a communal landscape setting. This paper is part of a larger research project that seeks to inform the architectural design of medium density through a greater understanding of housing choices and resident living experiences across several such case studies. Discussed is the evaluation of occupant (user) satisfaction of in-progress and completed Canberra housing projects, including 35 houses designed by the author within the ACT Government Molonglo Demonstration Precinct. It is hoped such an approach will offer beneficial user-centred design techniques not traditionally employed in archetypical architectural delivery and in-turn achieve improved design of medium density compact housing precincts.
Increased multi-modal retail business models are changing how we experience shopping. What lies ahead for the traditional shopping district and land use?

As the arguments for managing population growth through intensification along transport and commercial corridors increase, consideration needs to be given to the changing retail and commercial landscape. A recent Urbis survey in 2010 found that at $9.4 billion, only 3.9% of retail sales in Australia, were occurring online. Comparatively other countries have ‘online penetration’ in the range of 3%-8%. In the Australian online market there is growth in clothing at 5% and footwear and groceries at 1%. Urbis estimates that over 40% of retail sales will ultimately be delivered via shopfronts while online spending by Australians is forecast to grow by $32 billion over the next decade resulting in less than 40% of the overall retail market forecast to be through online avenues.

Shopping and the design of commercial land use to achieve the maximum productivity of land has always been closely linked with convenience. As change occurs to the intensity and demographics around commercial and transport corridors, so too will the pressure on built form and land use strategies to achieve higher levels of productivity. This paper investigates the implications of increased integration between online and ‘bricks and mortar’ retail business models with multi-channel business delivery and the resultant implications for land use within inner urban environments.
Mr Weston Lewis
University of Melbourne

Living Building Challenge in Australia: Lessons learned from the Sustainable Buildings Research Centre

With recent reports illustrating the impacts of climate change, new development strategies are being established to adapt and create resilient communities. The Living Futures Institute out of the Cascade Green Building Council offers a framework that works to address these challenges through regenerative development. This certification framework, the Living Building Challenge, is achieved based on performance that is proven rather than anticipated outcomes. The aim of this presentation is to review the Living Building Challenge in relation to other green building certification programs using an Australian example. I will explore challenges encountered by the newly built Sustainable Buildings Resource Center at the University of Wollongong and the strategies it is using to fulfill the principles and objectives of Living Building Challenge.

Currently there are only 14 projects worldwide with a Living Building Challenge or Petal certification and over 170 registered projects. This small number is because the system is relatively new being launched in 2006, but it also challenges project teams to rethink the way buildings are designed and operated. Performance categories, or ‘Petal’s’ include: Place, Water, Energy, Health & Happiness, Materials, Equity and Beauty. This framework is designed so that it can be implemented in any location and at any scale. As we look towards designing productive cities that are more functional, attractive and sustainable, the Living Building Challenge and the Sustainable Building Research Center can help point us in the right direction.
Dr Yaacov John B. Myers  
Director Clinical Science research, Wellspring’s Universal Environment P/L


Aim: To determine whether Urban design can be based on a biological model or General Systems Theory.  
Introduction: General Systems Theory model provides understanding of functional interaction at any level of organization. Thus, a biochemical model of response to change in the environment led Myers to propose that the theory of the constancy of the milieu intérieur as proposed by Claude Bernard (1813-1878), be changed to reflect cellular response or what living units do, namely, optimally maintain the external environment constant, whether as uni- or units within multi-cellular organisms. For instance, red cells or circulating cells maintain the milieu extérieur constant so that functional optimization can occur.

Application: On this basis, noise, lighting, traffic, dust and pollution all would need to be controlled to ensure cell, or house or dwelling functionality for those living within them, as would the surrounding space within buildings need to be controlled to optimize the environment for those living within them. The external environment would also need to be optimized for individual activities and habitation or movement in open spaces or transitional domains that people use every day or use as public space and for recreation or education, and respect privacy. Visual impact, lighting, rubbish disposal, Eco-social© habitat for flora and fauna intermingled to enhance diversity underlies health and well-being which is the aim of the General Systems view of the world and Eco-social© environment.

Conclusion: Understanding the concept of the constancy of the milieu extérieur provides a basis to plan projects within cities and providing a framework for strategic design and innovation and a holistic approach, to enhance well-being, while providing for an increase in population growth, specific needs and an aging population, as well as utilizing public space and design to educate and stimulate innovation coupled with consideration, i.e. harmonic “Eco-social©”, urban design.
Mr Damian O'Sullivan  
Principal Officer, Ipswich City Council

Co-Authors: Ms Sheree, Jenni Hughes, Carr, Heart Foundation  
Mr Dick van den Dool, GTA Consultants

2km Safe & Healthy Zone Travel to School Framework

The growth in obesity rates in the Australian population is amongst the highest in the world, including that of children. Australian school children rank among the worst in the world for overall physical activity levels, with 80% of 5-17 year olds not meeting the physical activity guidelines of at least 60 minutes of exercise each day, as documented in a new national report card released by the Heart Foundation in May 2014.

Ipswich City Council are encouraging active travel among the Ipswich community and are dedicated to promoting the health benefits that physical activity provides. As part of this endeavour, the council invests in encouraging people to actively commute to school and work.

The promotion of, and increase in, active travel within the community raises complementary concerns for the council and the community regarding road safety for children. Any prospect of traffic incidents involving child pedestrians and cyclists on Ipswich roads are considered a priority to address, particularly in school zones and areas of high pedestrian and cyclist activity.

Ipswich City Council is proposing a research project to examine the extent to which its metropolitan primary schools are capable of safely and comfortably allowing pupils to travel to school using active travel modes. The research will involve the comparison of two case study schools in Ipswich and the development of criteria set which would promote road safety and active school travel within a 2km radius of a school.

The research would be used to develop an active school travel assessment framework, which could be used in other existing and planned schools, in Ipswich and elsewhere in Queensland and Australia. Considering the physical and budgetary constraints, it could be determined which elements the schools can leverage from the framework and promote road safety and active school travel within their schools.
This paper presents a spatial and temporal analysis of the propensity for families with children to live in medium and high density housing forms in Australia.

Higher density residential development and redevelopment is a key goal of many development and planning schemes, and there appears to be an increasing desire to achieve more compact urban designs. The attractiveness of higher density living to families with children (pre-school and school-aged) may be a key determinant in the success of this strategy, yet there is a limited focus on where this has been successful in the past, and what factors may drive this trend in the future.

This paper uses historical census data to look at the age profiles and numbers of children living in “attached” dwellings, including an analysis of areas yielding high versus low numbers of children. The results show evidence of a general trend towards higher density housing forms being more attractive to families. However this trend is not universal, with a number of inner-city areas increasing only marginally in the number of school-aged children, despite a large increase in total population due to high density housing development.

Future research will examine the characteristics of child friendly high-density neighbourhoods in more detail using a case study approach, including factors such as affordability of housing, and proximity to educational facilities, employment, retail and recreational facilities. Implications for the design of child-friendly urban spaces and educational facilities in urban areas are also discussed.

The results in this study could be used to improve the accuracy of population projections and to assist in the medium and long term planning of social services, including educational facilities. It is hoped that this work will also inform the development of planning and development schemes where the creation of higher density family-friendly urban centres is a desired outcome.
Planning in the face of uncertain futures: why an external explorative scenario planning approach should be applied to complex waterfront urban renewal projects

The proposed paper examines the potential application of external explorative scenario planning (EESP) to support resilient planning and design for complex waterfront renewal projects. Widely used across many professions to tackle complex problems, EESP has rarely been applied to urban planning problems. Hobart’s Macquarie Point Development project is identified as being likely to benefit from EESP, with the project demonstrating a need for such an approach and having an environment conducive to its effective implementation.

It is recommended that EESP be implemented as part of strategic planning for waterfront renewal projects. However, in order for the tool to provide maximum benefit, a commitment to implement the outcomes of EESP must be in place and the scenario planning process should actively engage a broad set of stakeholders.

The research underpinning this paper is high level and involved a discursive review of literature from fields including strategic planning, business strategy, cross-disciplinary problem solving and public administration in order to establish a theoretical basis for applying EESP to complex waterfront renewal. There is an opportunity for further analysis of the different models for EESP in order to identify attributes that would provide most benefit to urban planning. Moreover, the research identified a lack of available research evaluating the efficacy of the few documents instances where EESP has been used in waterfront renewal planning and recommends that future attempts to apply EESP in urban planning and design projects should adopt rigorous reporting and analysis of processes and outcomes.
Public Art, Place-making and Social Capital: An Adelaide Case Study

Public art’s capacity to enhance sense of place and social capital has made it an immensely popular tool for stimulating urban vibrancy; however, empirical research into this phenomenon is still relatively rare. Academic literature posits that public works which complement the material and non-material aspects of the sites where they are situated or are produced with the active involvement of community members will be much more likely to fulfil planning objectives, although many also argue that accurately determining their impacts is a difficult if not impossible task. This thesis explores such issues through a case study of public art and related policy in the Adelaide CBD, with the ultimate goal of providing both a comprehensive picture of the city’s public art scene and suggestions as to how it might be improved. Research methodology comprised interviews with planners and artist, surveys of public opinion, comparative behaviour mapping, and general artwork appraisal, all of which have been employed successfully in other studies of a similar nature. Final results suggest that although it has evolved markedly in recent years, Adelaide’s public art is still under-performing in terms of place-making objectives, and that current policy is in a similar state. Provision of more works, increased interactivity and vibrancy, greater stakeholder collaboration, and better artwork/site relevance were identified as means for enhancing Adelaide’s public art, some of which are reflected in policy revisions due to be released later this year. Additional research is therefore desirable in order to monitor the impacts of these developments as well as to further validate and expand on thesis findings.
Humanity has an under-utilised capacity to create vibrant and biologically productive landscapes, within which to live and prosper. By focussing on increased biocapacity and environmental risk factors the design sector can foster the necessary shift to ecologically engineered cities, biologically productive infrastructure and biologically active living environments. By building on natural landscape functions and actively contributing to the resource cycle the new urban model can be used to address the risks associated with inflexible supply chains and climate events. The symbiotic relationships between people and the rest of the biota are at the heart of the new global city model. Photosynthesising plants and invaluable soil biota, algae and fungi will be the new design tools.

Two examples are provided, including a recent award winning vision for high value urban centre in NSW.
Testing a bike-sharing system on the Gold Coast

Urban sprawl, disconnected communities, air pollution and health problems are some of the alarming consequences due in large part to the growth of car traffic since the 20th century. In order to limit the degradation of the urban setting and promote sustainable development, some agents of city development and planning are once again calling for more compact cities (Bonin O. and Tomasoni L., 2013). Under this model, distances are shortened and cars should give way to public and active transport.

The city of Gold Coast, situated in South-East Queensland and with a major development since the 1960s, is assimilated to a polycentric city with high density historical coastal centers. However, more than seven in ten trips to work are done by private car and half of car trips are less than 10 kilometers (City of Gold Coast, 2014). While the city hopes to reduce this car dependency with the provision of a more connected active transport network and with the opening of a light-rail system in June 2014, the current cycling facilities do not encourage people to commute by bike or to cycle for recreational trips. There are not enough bicycle paths or end of trip facilities.

In many cities worldwide, bike-sharing systems not only increased the percentage of cyclists but had a positive influence on health issues, congestion, air pollution as well as drawing together communities (NYC Dept. City Planning, 2009). The article will present the theoretical references and real examples on which an assessment was conducted to establish the potential of implementing a bike-sharing system on the Gold Coast. This paper also aims at presenting a guideline draft for the development of a bike-sharing system on the Gold Coast.
Mr David Vago
Principal, Habitation

TURF WARS: A rise in the battle over public space

Do different community groups have rightful ownership over the Public Domain or does it belong to all global citizens? Are current techniques in calculating the amount and type of public space efficient in a fast growing and rapidly changing world or are they falling short putting too much pressure on community assets?

INTRO:
As cities and urban areas grow in density through height combating urban sprawl, population increases can be extreme putting pressure on public space and facilities. In recent years the size of new apartments have shrunk in size leading to additional pressure on public space and facilities. In older areas of Melbourne and Sydney, many apartments do not have outdoor space, again resulting in a larger population relying on public space. In addition to this, access to the internet (and GPS/maps software) and cheap air travel has contributed to popular spaces becoming more accessible and easily found by visitors.

AIMS:
This new urban population explosion has caused some angst between “old” locals, the “new” locals and those visitors to public space. Using Bondi Beach as a case study and the battle over this hallowed piece of sand in Sydney important questions surrounding age and economic demographic shifts and the concept of localism shall be investigated. The poignant question for designers is how can place making and urban design tackle the issue of “turf wars” and perceived ownership by certain groups over public space. Is it our place as designers to solve this issue? Can it be solved? What role does physical design solutions play in better community integration and should this be given a higher importance when a consultant is asked to do an urban design study or landscape plan?

CASE STUDIES:
Bondi Beach
-anti social laws, families vs young people, locals vs visitors, “Scum Valley” the new book criticizing new residents of Bondi, public space as political football, what matters to locals?
Cronulla Riots
-How did they start? Race was not the original trigger. It was a turf war between visitors and locals over public parks and the use of the beach.
Green Square Sydney
-How much public space has been planned into this important Sydney urban renewal area? Has the shift in the cultural and age demographic been considered and has it been designed for the next 10 years or well beyond.
CONCLUSIONS:
This presentation shall interpret the psychology of space ownership against the growth and the effect density places on the inhabitants of new urban renewal areas. Through the presentation and discussion we shall define the significant points that influence the design of public space and appropriate ways to calculate the amount of public space required in urban renewal areas. We will challenge some existing principles and ask the question, are we providing enough public space with the appropriate variety to service a rapidly changing world.
7 Senses Cities

Current thinking has accessible and inclusive innovation largely driven by the notion of people depending on wheelchairs. However only 2.7% of the Queensland population has a physical disability that requires a mobility aid. They represent only a small fraction of physical disabilities. And what of non-physical disabilities? How are we planning for the whole spectrum of disability, which is actually a rapid growing health problem? How we consider disability today, significantly impacts the potential for community inclusion in the future.

But it’s not just mental illness that is growing. So too are sensory disabilities. Currently 1 in 6 Australians are affected by hearing loss. It’s projected to be 1 in every 4 by 2050. The numbers of people with low vision and blindness are projected to almost double by 2024. Sensory processing disabilities such as Autism are also on the rise. One in every 100 children in Queensland has Autism.

So why are these facts and figures important?
If we aim to create an accessible, inclusive, liveable city, we need to consider who and how our community can readily participate in city centre spaces.

These facts and figures have a significant impact on the city centre economy. Small businesses loose potential revenue when entire families avoid the city due one member of the family having a disability.

Moving forward
Our cities and its design needs to move past current thinking on accessibility; move past thinking about wheel chair accessibility, and towards thinking about how sensory aware spaces. By considering the 7 senses, not only do we improve the accessibility and liveability of our city in 2030 for our growing disabled population. It will also enhance the experience for other 75% of the population fortunate to live without significant impairment.
Terrace 62: A case study of successful Architect / Developer collaboration to provide low-cost housing.

In South Australia, it is predicted that in the 2014/15 financial year, housing starts for new dwellings will increase by 5%, with approximately 76% of these new dwellings being detached, semi-detached or town houses. With further increases in dwelling starts predicted over the following financial years, it appears that ‘the great Australian dream’ of home-ownership is still an ideal that Australians hold.

In Australia there is a long established history of architectural involvement in the provision of affordable market housing yet our current climate sees a market dominated by developers and project housing companies.

Recently in South Australia there has been some renewed interest within the Architectural profession in engaging the affordable market housing sector, with the objective of delivering alternative models for better-designed, more sustainable suburban housing. Yet while this renewed interest is a step in the right direction, few of these cases have been considered successful.

One successful case to provide low-cost housing to suit the first home buyers market is the collaboration between Adelaide based Studio 9 Architects with developers CIC to deliver, award-winning, ‘Terrace 62’ in the new infill suburb of Lightsview. The success of this collaboration can be measured by its high uptake with first-home buyers, with potential buyers needing to win a ballot to proceed with purchase, and by CIC initiating a National roll-out of the ‘Terrace 62’ model.

This presentation will discuss the ‘Terrace 62’ case study as a successful example of an Urban Design project, where the model sits comfortably with more expensive housing, enabling low cost housing to be distributed throughout the overall Lightsview development. The presentation aims to highlight the difficulties architects face through discussion of the reasons and process for architects accessing the affordable market housing sector, and will conclude that successful outcomes are possible.
3 G City Model and city transformation in China

There are many criteria to differentiate cities, however
- Life style with economy is the most important one chosen by us:
  - 1st Generation city naturally is agricultural city, which mainly trading food related goods
  - 2nd Generation city is industry city, which mainly manufacturing physical product.
  - 3rd Generation city is information city, which mainly produce knowledge/solution.

Agricultural city serves the agriculture economy. It is the market place trading farm produce, as well as a wall or armed force against robberies. Economy based on food and related living basics. It used to be small.

Industrial city has complex system for sanitation, utilities, and transportation. Using machines and power, industrial city can be large and complicate. It services larger scope, and also contribute even to global level.

Informational city is a brain city. As economy is more based on information and knowledge, Cities processing more and more information less and less item, people value spiritual enjoyment more than life basics. Information city has to be global.

In China’s context, the majority of cities are a mixture of 1 G and 2 G model. Land shortage, pollution, scarcity of natural source are driving these cities to a very bad situation, desperately. However the transition from 1 G to 2 G, from 2 G to 3G is happening so dramatically. And it is happening worldwide.

Suizhong, a typical Chinese city we are currently working on is just transforming from 1 G to 2 G, but all 3G city elements existing in the city at the same time. We try to work out a plan to make the city grows right.

3 G city model and transformation theory give us a clear concept of how the 3 G cities are, and how it transforms from 1 model to another.