Generationally Sustainable Housing: Building for a Multicultural Society.

Contemporary Australian society has been built on successive waves of emigration. As yeast is to dough, emigrants have brought incremental change to society is all its aspects. Each wave brings its culture which permeates and enriches the established structures and customs. While the new influences bring change to most aspects of life, the greatest resistance to change is accommodation. Existing housing stock is both an attraction and an inhibitor of social adjustment for the family structures of migrant communities. In contrast to the nuclear family of twentieth century Australia, the newcomers come with extended families.

Traditional alternative living arrangements are forcibly adjusted to the new environment, whether by preference or economic necessity. The suburban environment continues to be formed by the single family house. The quarter acre block determined the form of Sydney’s suburban structure. The suburban grid is predicated on the social goal of the single family home, which in turn predicates the successive forms of increased densities. Strategic goals for the housing of Sydney’s growing population require the provision of a wide range of dwelling types to provide greater levels of access to both rental and owned housing.

In the western tradition, a wide range of utopian schemes to restructure society in terms of work and home have been proposed since Fourier’s Phalanstere. However, pre-industrial societies have always found means of accommodating successive generations with cultural variants of the extended family in China, India, the Philippines, Japan, Korea, and Islamic cultures and these means have informed contemporary practice. Australia now faces the challenge of moving from reluctant market led change to a positive adoption of alternative spatial models, of grasping the opportunity to harness the cultural capital of its contemporary society to reconstruct a generationally sustainable range of housing alternatives.

Planning After the Games

The Sydney 2000 Olympic Games left an amazing legacy for Sydney Olympic Park in terms of monumental stadiums and grand boulevards, design excellence for its buildings, public spaces and urban elements, large urban scales (blocks, streets and buildings), best practice sustainability in terms of remediation, water harvesting, heritage conservation, materials use etc), World class events infrastructure (rail station, facilities & infrastructure), and the largest urban park in Sydney. It also left the basis for the establishment of a post Olympic development authority.

The one thing it didn’t do was leave a legacy plan! While there have been several iterations along the way, Sydney Olympic Park Master Plan 2030 now fills that gap. It very much builds on the above Olympic legacies but also seeks to connect with the rest of Sydney in a way that the Olympic planning did not. It also seeks to continue the sustainability edge of the precinct.
This talk will discuss the new opportunities and challenges faced in delivering a new vibrant and sustainable SOP Town Centre of 60,000 people under post Olympic conditions with less control, increasing stakeholders and limited funding.

**Mr Geoff Barker**  
Design Manager, PM+D Architects

---

# Unplanning the Planned Urban Environment

Health, Safety and Wellbeing of people are central liveability objectives of a development framework. As planners we often hear about the desire to create communities as an important objective of planning but as planners we don’t create community we can facilitate and provide opportunities for a community to develop but ultimately it is the people developing relationships and their involvement in the development of urban space and place with shared or common activities and experiences that generate community.

The planning of the past is less relevant in a world of scarcer resources, climate change, population growth, exploding energy consumption, transport stress and reduced amenity. It is easy to follow what has been done in the past but the familiar planning processes do not necessarily foster innovation, vision and opportunity for the future – liveability, flexibility, diversity, efficiency and relevance. Unplanning the planned urban environment is the challenge and this involves two aspects “reThinking” and “reAction” – challenging current thinking and praxis.

The single stand-alone dwelling in a suburban street has been the long held Australian solution to increasing demands for housing and is an ever spreading phenomenon. We have seen some change for example in smaller lot sizes but the houses are getting bigger! Also in remote areas the common belief is that single dwellings on large lots are the preference of choice among indigenous residents. Our recent work has shown that such is NOT the sole aspiration. Two examples of unplanning the planned urban environment are presented one at Galiwinku in the NT and one in a Perth redevelopment area. They are different approaches to commonly accepted development models showing that different development contexts require different praxis at the planning table and how alternative development solutions can be brought into projects to foster liveability.

**Mr David Barnard**  
National Urban Design Manager, Stockland

---

# Demonstrating the value of community development- Stockland’s Liveability Survey

Stockland has recently completed a 10,000 household survey of it’s residential communities in regards to liveability. The survey was conducted independently and was based on an international review of liveability indices and metrics. The results are compelling and illustrate just how important places and spaces are to how people feel about where they live. The survey tool- 50 questions- has been applied in 4 states and in 12 communities, over 2 years. Insights
include the importance of parks and green space, the value of community connection and correlations between commute time and satisfaction.

This proprietary research is now being used to inform resource allocation, design and planning of residential communities. This paper will explore the obvious links (people want amenity) and the not so obvious links (Parks are valued even if they are not frequented). The Stockland Liveability Index is a highly valued tool internally which are keen to share with our broader stakeholders.

Mr Omar Barragan-Merchan
Urban Design Team Leader, Design Review, Auckland Council, New Zealand

The Path to the World’s Most Liveable City - Policy and Practice

The Auckland Plan has recognised the value and need of quality urban design. Urban design is a key element to make Auckland the world’s most liveable city. Auckland is facing an urban transformation with over 600,000 new inhabitants to accommodate over the next 30 years, resulting in 330,000 new households.

A quality compact urban form is proposed to ensure that this growth follows sustainable principles, as far as possible, within the existing urban limits. Urban design principles have a pivotal role in achieving this density whilst enabling quality design and securing amenity outcomes for new and existing residents. The development of high-quality, compact, walkable, mixed-use neighbourhoods and town centres is fundamental to the creation of a compact city. Design quality is a key issue and the challenge for our city is to create these higher density compact neighbourhoods while maintaining and raising the quality of how they feel and function.

The issue for the Unitary Plan, is how these design led outcomes can be realised. Are urban design principles being used to their full potential? What needs to change? What needs to be improved? Ultimately, what elements does the Plan need to incorporate to enable and encourage great outcomes. The Unitary Plan must work within the council wide urban design framework. Due to its multi-disciplinary nature urban design principles must permeate all aspects of the Unitary Plan for the desired outcomes to be fully realised. The paper will Investigate Auckland’s current policy direction under the Proposed super city’s plan (The Unitary Plan) and current practices that enable the city to deliver high quality outcomes such as design reviews and design enabling.

Ms Karolina Bartkowicz
Research Assistant, RMIT

Co-Authors: Mr Michael Howard, RMIT and Dr Judy Rogers, RMIT

‘Green Skins’: Reconsidering Green Roofs as Sustainable Infrastructure.

Green roofs are increasingly seen as a key design strategy to increase the liveability, efficiency and productivity of Australian cities. They are also often seen as an antidote to the impacts of the compact dense city: a spatial layout that is well established in sustainable city discourse. The list of benefits attributed to green roofs is broad and widely
shared. They include reduction in the heat island effect, noise reduction, energy conservation, amenity, replacement of lost green space, increased property values, storm water management along with what has been described as ‘green relief’ in highly dense cities. Green roofs it is further claimed transform cities from urban grey to urban environments while at the same time mitigating the effects of climate change. There is, however, little evidence to support these claims particularly within the Australian context where the development and construction of green roofs is a fairly recent phenomenon.

This paper presents preliminary findings from a larger study that attempts to monitor, test and evaluate the performance of a Melbourne based experimental system focusing in the first instance on soils and plant material. Evaluation of the experimental systems employs performance-based criteria in an effort to shift attention away from considering green roofs as simply sustainable building infrastructure, towards an understanding of green roofs as landscapes that exist as systems in their own right. This shift involves a consideration of green roofs less as ‘object’ and more as self-generating and inherently unpredictable.

Dr Margaret Beavis
General Practitioner, Wynlorel General Practice

Urban planning as a critical health issue: Why design matters.

Urban design has a major impact on levels of incidental physical activity (PA). As a practicing GP presenting the latest data on health benefits of PA, and research about the relationship between the urban environment and PA, I will explore health as a cross-sectoral priority, with urban design a key determinant. Contents: 80% of premature deaths are from non-communicable diseases, 9% relating to physical inactivity (equal to tobacco). Overweight and obesity levels are rising rapidly, and diabetes rates have more than doubled in a decade. The WHO describes PA as a public “health best buy”. Yet in Australia car dependent, sprawling, single use, single dwelling suburbs are booming.

Prevention is slow and needs a multi-sectoral approach. For every dollar spent on tobacco prevention we have saved $50 in health costs alone. This required environmental, taxation, educational and advertising interventions to be effective. Similarly reducing the road toll needed a multi-sectoral approach. We spend $1.1 billion annually on just one family of cholesterol medications - yet 30 minutes exercise 5 days a week is more effective, and works in many more diseases. Melbourne travel survey data from VISTA07-08 shows 12.6% of car drivers get sufficient PA from travel, compared to 60.3% of public transport users, 58.3% of walkers and 80.2% of cyclists. Logistic regression finds those living in the outer suburbs are 0.15 (95% confidence intervals 0.12-0.20) as likely to get sufficient PA from travel as those living in the city centre.

There is clear evidence from many studies that medium density, mixed use, walkable design and accessible public transport are linked to PA levels. Conclusion: The future health of communities will be heavily influenced by urban landscape. Both politicians and communities need to understand what makes a healthy place to live. A multi-sectoral approach, emphasising health oriented urban design, is essential.
Finding common ground: Creating successful places in the re-development of Mexico City and Melbourne

Urban designers around the world desire to create safe community spaces – sometimes they achieve this goal and sometimes they do not. Creating spaces that contribute positively to the urban setting remains a tremendous challenge to the professional, practitioner and government official as the civic environment one operates in varies from setting to setting. Urban re-development is made even more challenging as a variety of design approaches (e.g. placemaking), improvement strategies and development mechanism (e.g. private public partnerships) may be used to realise desired spaces.

The aim of this paper is to identify and compare the strategies used in the re-development of the urban areas of La Condesa, Mexico City (a district devastated by the 1984 earthquake and now one of the city’s most desirable places to live) and the Central Business District of Melbourne (once described as a useless centre and now commonly regarded as a fantastic 24/7 urban setting) to identify a common set of (international) urban design strategies that lead to the creation of safe community spaces. The research team found that there are a number of common urban design strategies that, if used appropriately, can lead to the creation of safe community spaces.

The team also identified that an essential, yet unplanned, ingredient to the re-development and success of a setting is a crucial ‘X factor’ which is an element that creates the energy to attract people to the re-developed environment. However, these strategies and the ‘X factor’ element should not be considered as standard ‘off the self’ items one can apply to the re-development of an urban environment. There is cultural adaptation and the considered application of these strategies that are essential when utilised in urban design to create safe community spaces.

Synergistic density: Exploring the potential of correlating infill development with upgraded public open space in greyfield suburbs

Presently there are a limited number of strategies for achieving infill development in Australian cities. While the national average target for infill development is 60%, only 45% is currently being achieved. At a regional scale the failure of Australian cities to meet their respective infill targets means that they will continue to sprawl in what is recognised as a typically unhealthy, costly, unsustainable and unproductive manner.

This research explores the potential of a, much needed, additional strategy for achieving infill development in Australian greyfield suburbs. This strategy concerns the residential densification of areas adjacent to upgraded public open space (POS). The research argues the correlation of upgraded POS and residential densification could achieve
positive synergies. These synergies include the provision of significant amenity and ecosystem services which could act as an incentive for local communities to support infill development at higher residential densities. The potential of this approach is tested, in spatial terms, in a Perth greyfield Local Government Area which has significant infill targets and large reserves of POS.

The outcomes of this research are expected to be healthier, denser and more resilient cities.

Dr Rocio Bona
Sustainability Manager, Development Australia, Mirvac

Co-Author: Mr Kim Lawrance, Mirvac

CREATING SHARED VALUE THROUGH COMMUNITY CONSULTATION

Shared value recognizes that the connection between societal and economic progress has the ability to generate sustainable growth. The idea of shared value is not new; however, the recognition of the transformative power of shared value is still in its genesis.

Through a case study, this paper explores how the competitiveness of a project and the health of the community are mutually dependent. Engaging the community on matters that directly impact upon the way its residents live, recreate, work, study, use services and do business adds value to the development process.

In 2012, the Mulataga project team implemented an ambitious Planning Design Forum, embarking on an adventure to transform Mulataga, Karratha’s first coastal residential suburb, into a desirable, liveable and affordable community of approximately 2,000 dwellings.

Underpinned by strong growth in the resource sector, the Pilbara region is a major contributor to WA’s economy. Key challenges include developing and maintaining the community fabric, attracting residents, engaging community, the increasing cost of living and social divide, indigenous wellbeing, under-provision of social, cultural and recreational facilities, transit worker integration, and an overwhelming diverse group of stakeholders whose views are often opposing.

The forum was successful in creating shared value by aligning stakeholders’ points of view, and producing a design concept for Mulataga that responds to the local environment, reflects the needs and aspirations of the local community, celebrates the heritage of the Pilbara region, addresses affordability and sustainable product delivery strategy whilst creating competitive advantage.
Mr Robin Bradley
Director, Urbanix Design

The Transportation Interchange as the heart of the Sustainable City

True city sustainability is only achievable with a city which is based on public transportation. This provides the basis of reduced energy consumption, the reduction of pollution, traffic congestion and environmental side effects and can promote the formation of communities. The challenge is how to integrate the transportation interchange into the city structure in a way which promotes usage and connectivity, making the public transportation more attractive to use than private mobility.

The concepts are illustrated by the exciting case study of the Changsha South Interchange in Changsha, Hunan, China which the presenter was involved with as principal designer in a highly competitive international competition of some of the top firms in the world. His scheme is now currently being documented for construction.

The presentation will address:
• The insertion of a major facility into existing city fabric • Connectivity • Permeability • Public spaces • Site planning
• Internal design integrating trains, buses, coaches, subway, cars, taxis and pedestrians • Pedestrian flows catering for up to 300,000 persons per day • Mode wayfinding • Aesthetics and image • Cultural references

Mr Steven Burgess
Principal, MRCagney

You are going to park WHERE?

Parking infrastructure is often treated as a poor cousin to other infrastructure however it is very important for quality urban life. Every time people are asked about traffic in a town, village or city, the phrase ‘there is not enough parking’ comes up in almost all conversations. Retailers claim they suffer from lack of parking, people say they can’t shop without parking and we apparently can’t live without parking attached to each residence.

This has a massive impact on the quality of our urban places. But how much parking is enough, who should pay for it and what influence does it have on the overall movement system are important questions. We have minimum parking rates for development, maximum parking rates for development, free parking, paid parking...we actually have a bit of a mess...and there are significant impacts on place, prosperity and vitality. Steven’s presentation lays bare some of the facts, myths and mysteries about parking and looks at some meaningful ways forward for quality urban places.
Ms Maud Cassaignau  
Lecturer, Monash University  
Co-Author: Mr Markus Jung, Monash University

**Changing attitudes in urban planning From suburbanization to inner densification, combining bottom up and top down strategies**

We will present how we induced a discussion in the Melbourne architecture community about challenges and potentials of urban development: In a context of intense urban growth, we believe that planning has to be rethought: from a laissez-faire suburbanization, to a planed densification of existing urban fabric. The former industrial area of Cremorne was used as a case-study to demonstrate transformation potentials of atmospheric, well-connected inner neighborhoods. The project is taking a counter position to current sprawling.

To handle the pressure of population growth, cities like Melbourne commonly expand outwards. This creates manifold problems: detached low-rise settlements with inefficient infrastructure, social segregation, ever-increasing land consumption and networks costs. In a context where Melbourne is predicted to grow by 1,8 million until 2036, centrifugal growth needs to be reconsidered: We tested inner densification as an alternative: The case-study project envisioned Cremorne as a dense, lively, mixed and sustainable neighborhood, and developed strategies for the transformation of atmospheric urban heritage. It revolved around integrating history, existing morphologies and genius loci. The vision contained ideas for alternative circulation, catalytic projects and activation of public space.

The research was developed collaboratively with students, urban activists, journalists and used Monash University as a platform. As part of the overall strategy, the activation of urban space was pursued in conjunction with a website and flyer campaign. This method allowed gaining visibility and exchanging with the architecture community, the neighborhood and urban planning authorities. The temporary installation in a car park demonstrated the potentials of underused space. Combined bottom-up and top-down strategies attracted attention to the importance of sustainable urban growth and the potentials of densification as alternative to sprawl. The dissemination was key for gaining local and international visibility: connecting real world problems of sustainable urban regeneration with those faced by urban agglomeration globally. (More: www.cremorne2025.org)

Mr Graham Chalcroft  
Director, VERTEBRAE

**Between the Intangible and Tangible**

This highly visual presentation demonstrates local and international case studies of art in the public domain addressed through the conference themes. This includes the integration of new digital augmented reality technology with physical innovative solutions of place activation. A focus is placed on how hidden artistic cultural layers and interpretation of a site can make the intangible tangible.
This explores the growing commitment by developers, councils and design professionals to engage artists and cultural planners as an integral part of urban design responsiveness. URBANISATION – Creative’s are a connected community in constant dialogue through a global sharing of ideas, design, strategic development and planning outcomes. Never has there been such intense and open conversation. Urban design projects benefit from global knowledge applied to responses of local conditions of climate, sustainable technologies, economic development and demographic shifts.

AGITATION - Artists are the ultimate agitator, enquirer and boundary pusher. An artist can contribute a left of field idiosyncratic contextual and aesthetic approach separate to formal site responsiveness. This is manifested through research and intuitively questioning or bringing to the fore questions that require asking. Artists are increasingly the instigators or expressors of change within local communities yet are equally involved in top down engagement.

IMAGINATION - By default this creative engagement and collaboration can often produce experimentation through temporal and permanent artistic site interventions. With an increased trend in international science-art residency programs, artists have access to cutting edge innovations in science and technology. This skill and knowledge creates energetic and imaginative capacity to be positioned within urban environments. This art in the public domain projects are often a first showcase of new materials, advances in renewable energy and sustainable principles and how these can be applied to future urban design elements.

Mr Michael Cowdy
Associate, McGregor Coxall

Creating a ‘Vital’ Town Centre | An Incremental Approach

As the significant majority of our urban populations live within close proximity to local and regional centres, the role these centres play in forming their communities is of critical importance. With the phenomenal growth of online retailing, the speed and sophistication of the major national and international retailers and the modern immersive experiences offered by today’s new breed of shopping mall, the traditional town centre has declined as the community’s demand for convenience has grown.

Accompanying new expectations in terms of value, service, entertainment, convenience and experience, it is essential that our local town centres adapt to provide an offering that complements the communities demand for convenience in order to re-engage with the town centre. As local councils fail to have the budgets to compete with these convenience good services, an incremental small scale approach to revitalising town centres presents itself. Crucial to this approach is ensuring initial town centre revitalisation strategies place emphasis on community benefits.

This presentation investigates the role incremental urbanism may play to achieve this, offering principles and possible methods for revitalising liveable public space and encouraging community empowerment of our regional town centres. In the face of economic uncertainty and constraints as well as rapidly changing possibilities, incrementalism provides a platform to understand how small scale interventions can become the starting point for larger scale town centre regeneration.
Desegregating urban space in the age of sharing

For almost a century we have seen the systematic privatisation of urban space driven largely by architectural and urban planning practices that responded to the rise of car culture in our cities. With the gradual realisation that this paradigm is broken, and a growing groundswell for policies that support ‘people and place’, the new paradigm must re-establish public space and public life. Delivering liveable cities at a time when we are witnessing unprecedented urbanisation presents us simultaneously with our greatest challenge and opportunity for a sustainable, resilient and prosperous future. How can we deliver cities that are denser, greener, and smarter, while maintaining their liveability? The answer, I believe, will largely be determined by the quality of our public space.

As the density of our cities grows, the demands placed on public space will increase but at the same time its availability will be heavily constrained. How can public space be individually allocated to simultaneously serve the social, business, and mobility needs of the citizenry? It can’t. Public space must be multi-functional, serving the many needs of many disparate groups all at the same time. In short, public space must, as it was originally intended, be shared. From the rise of collaborative consumption to the evolution of shared mobility systems, ‘sharing’ will underpin the liveability of our cities. The shift from privatised urban space to truly public space will require a significant cultural adjustment for many cities, particularly those with a strong ethos of self-interest, self-entitlement and ownership.

This talk will explore the historical evolution of urban space and the cultural and social factors that are driving change in how we think about, plan and design these spaces. The concept of ‘behavioural design’ will be introduced as an approach to designing public space that enables coexistence, by closing the gap between design intent and actual, rather than assumed, human behaviour.

Tomorrow’s Campus: Gaining the competitive advantage through master planning – a comparative analysis of the ‘Group of Eight’ master plans.

The landscape for the delivery of higher education and research is changing. What is most significant is the rate of change and how universities prepare themselves to provide certainty within an environment that requires adaptability and flexibility. Responsiveness will be key for growth, and for some, their survival. Importantly and widely acknowledged is the ‘quality of experience’ in the attraction and retention of students, top academics and researchers. One of the largest contributors to experience is the campus – its built environment. It is the setting in which the theatre of campus life plays out. Additionally, campuses, precincts and higher education facilities are also important barometers of the wealth of our cities and nation. They are the engine rooms for innovation, creativity, discovery and long term economic performance.
Technological and social change has not made our campuses less valued, but it has changed how they currently are and will be used in the future. More than ever they are centres for interaction through socialisation. Students aren’t using facilities less, they are using them differently. New pedagogies, changes in student demography, and increasing competition are putting pressure on traditional campus facilities. Setting the future direction for universities is a critical element of business planning. Master planning seeks to ask questions about the future role of universities; what their form, function and contribution to our cities and regions will be. It seeks to explore the future of these environments, whilst clearly establishing the mission, values and principles in which the universities of tomorrow will be founded. Whilst reviewing and briefing for the development of a master plan for one of the Group of Eight (Go8), a comparative analysis of all the Go8 master plans was undertaken. The aim of the analysis was to understand the type of master planning being undertaken within the group so as to inform decision making against comparable universities.

The study provided a valuable insight into master planning across the country. This presentation will highlight the main findings including: 1. The current drivers of change and themes for campuses and precincts across the Go8. 2. The fundamental elements of master planning, using the Commission for Architecture and Built Environment’s (CABE, England), stages of master planning are: prepare, design and implementation. 3. Findings relating to master plans for the Go8 and processes used. 4. Important elements for the next iterations of higher education master plans, 5. The next stage of the comparative analysis, which seeks to examine an international sample of universities.

Ms Cilla deLacy
Manager Liveable Communities, Water Services Association of Australia

Be aware and care: Enriching the lives of our customers and communities through investing in water efficiency

The urban water industry is the custodian of 260 000 km of pipes and $120 billion in assets. We operate hundreds of water treatment facilities delivering safe drinking water and recycled water to customers, while returning water safely to the environment. Our customers benefit from our ever-increasing utilisation of the private sector in building and operating our assets.

When the Millennium drought hit southern and eastern Australia hard in the 2000’s investment in water conservation programs, seawater desalination and water recycling spiked while Australian householders and businesses all rallied to do their bit to save water. Reflecting on this investment and behaviour change post drought the industry has matured, identifying a long term Vision where customers are front and centre and the communities they live and work in are our priority. We want to be easy to deal with, providing customers with a service experience that is the best. We want to engage the communities we serve to understand and influence how they will use water to create attractive, enjoyable and affordable places to work and live. We want to integrate urban water planning and operations with other sectors such as waste, energy and even transport to create liveable and sustainable communities.

To make this Vision a reality the Water Services Association of Australia (WSAA) has worked with its members to develop a water efficiency position paper that clearly articulates the long-term strategy for maintaining investment in water efficiency as part of a portfolio response to addressing demand for urban water. Such a paper acknowledges the need to maintain and build on behavioural changes in its customers work closely with the energy industry on
appropriate policy, regulation, research and education programs to reduce use of water and energy use smart technology and customer segmentation studies to empower and target customers to make more informed choices about water and energy use upskill our workforce to make the most of the meta data that comes with implementing smart technology. If the scientists and meteorologists are right the next drought will be longer and more extreme. But WSAA hopes that its impacts will be barely felt because the industry and government, in response to this position paper, will have proactively invested in water efficiency measures designed to build climate resilience in households and businesses.

Mr Chris Elliott
Principal, Chris Elliott Architects

What is a City?

To some it is a centre of Mammon, a Gotham city (Batman, film noir – The Naked City, Metropolis) – a centre of power, corruption, greed and crime. In the 1960’s many young westerners rejected the city believing it represented the embodiment of the evils of modern capitalism – disenchanted Australian urbanites moved to the north coast, many around Byron bay and tried to set up alternative communities with alternative or utopian communal lifestyles. In other parts of the world grander versions were attempted (Arcosanti), but I think that these utopian visions will always remain on the fringe – the mainstream will always try to live in cities, taking the benefits and putting up with the myriad problems and difficulties of city life.

My own view is that the city is the greatest work of art that humans can produce. It is a collective endeavour and each new structure is like another tiny brushstroke on a vast canvas. We can either enhance or detract from this artwork with our efforts, and of course like any artwork some cities are more beautiful than others. The work of architects, urban designers, planners, landscape architects, developers and councils combine to produce the next brushstroke. Given this they must work together carefully to ensure the best result. I intend to explore the notions of what a city can be, what it should be and to illustrate our response to these questions by showing what we think are good examples from elsewhere, as well as some of our own projects. These include various competition entries and some realised projects. I've also been around long enough to see the outcome of some of this work (including the ones we didn't win) and to be able to comment on the subsequent progress.

Dr Robert Fuller
Senior Research Academic, Deakin University

Co-Author: Dr Patrik Thollander, Linkoping University

Lessons from the “Greeneest City”

In 2007, the City of Växjö in southern Sweden was voted the greenest city in Europe. Over a 18-year period, greenhouse gas emissions per resident have been reduced by 41% and by 2015 the target is to further reduce emissions to 55% of the 1993 level. The goal of the city is to be fossil fuel-free by 2030. How has Växjö achieved this
impressive result and are there any lessons that could be transferred to Victorian cities? This paper describes research which has compared Växjö, and the measures they have taken, with the Victorian City of Ballarat, which has a similar population.

The research shows that per capita emissions for Ballarat residents were 133% higher than their equivalents in Växjö. The difference is primarily due to the emissions associated with heating and electricity use which are more than two and 33 times greater respectively in Ballarat than Växjö. Emissions associated with travel are 6% higher in Ballarat than in Växjö. Emissions in Växjö have been reduced over the 18-year period to 2.7 tonnes per resident. The introduction of biomass-fuelled district heating had the biggest single impact.

While such a strategy is not possible in Ballarat, the introduction of other proven conservation and renewable energy technologies could prove equally effective. Upgrading the typical Ballarat home to a 6-star rating has the potential to reduce heating needs by 62% and installation of a gas-boosted solar water heater will reduce emissions from water heating by 60%. A 4.0 kW PV system on a home could reduce per capita emissions to a similar level to Växjö. To achieve their goals, the Swedish city has announced a clear long term vision, supported by targets and measured by indicators. Alliances with other Swedish and international organisations has provided important collaborative support.

Mr Hugh Gardner
Urban & Regional Planner, arup

Australia's Cities in the 21st Century - Liveable, Sustainable, Resilient

Australia's cities in the 21st century - liveable, sustainable, resilient 75% of Australia’s population, 80% of employment and 80% of our GDP are currently based in our cities and the trends are for these proportions to increase. The future of the majority of our population therefore is and will be dependent on the sustainability and resilience of these cities. Development solutions exist for our cities that meet these criteria and that will yield urban spaces that are liveable and exciting. This paper will provide a glimpse of those futures.

Mr William Grace
Principal Sustainability Consultant, GHD Pty Ltd

Sustainable Urban Systems – A Resources Perspective

It is expected that 70% of the world’s population the will be urban dwellers by mid-century which will double the existing urban population globally. Urban areas currently account for 60-80 per cent of global energy consumption, 75 per cent of carbon emissions, and more than 75 per cent of the world’s natural resources.
The most recent evaluation of the ecological footprint indicates that we are using natural resources 50% faster than ecosystems are producing them. City planners and urban designers cannot avoid dealing with this challenge, indeed must be a central actor in addressing them. In this presentation, a systems model of urban metabolism is presented that provides insight into the existing unsustainable trajectory of resource use and its implications for the economy and living standards.

The model incorporates energy use and associated greenhouse gas emissions, renewable and non-renewable resources, and illustrates how these are influenced by the urban form. Real data for the world and for selected cities in both developed and developing nations are used to compare and contrast the challenges to be faced in this century, including the equitable allocation of scarce resources. Some best practice case studies are presented. The presentation will canvas the opportunities and limitations of urban design practices, the land use planning system, and the urgent need for the planning system boundaries to expand to meet the challenge.

Ms Diana Griffiths
Senior Associate - Urban Design, Arup

Co-Author: Ms Felicity Lewis, Studio GL

Schools - a critical component in the cities of tomorrow

The decisions we make today shape our cities of the future and create or limit the ability to make more effective use of places. When considering the challenges of livable cities it is common to focus on housing and jobs but the key role schools play in cities is often overlooked. School aged children make up almost 18 percent of the Australian population and schools are the natural focus for a significant part of a local community. To make our cities more livable, productive and cohesive there is value in applying key principles of urban design to schools to gain maximum value from this critical component of our cities.

The presentation will focus on how key aspects of urban design are relevant to the design of schools. It will identify how the principles of legibility and wayfinding are relevant to the school environment. It will show how schools are moving towards mixed uses with the creation of more flexible and diverse spaces, moving away from the big sheds towards places that are inclusive, adaptable and future proofed for the long term.

It will also provide case studies that show how a school location can help shape a community in greenfield development and innovative ways of integrating schools into the wider community including the US trend for internal streets. In conclusion it will show that schools can be far more than a collection of classrooms, separated off from the wider community by high fences. It will highlight how changing the way we think about schools can allow them to become a more effective piece of the jigsaw in the future.
Dr Ben Guy  
CEO, Urban Circus

Co-Author: Ms Tania Crisafi, Department of Planning and Community Development

Planning Melbourne with 3D Virtual Environments

Melbourne’s ongoing growth and intensification is forcing a more holistic evaluation of built form outcomes in terms of public realm and amenity. Correspondingly, the Victorian Department of Planning and Community Development (DPCD) has recognised the need for more efficient and engaging planning processes. With Urban Circus’ support, the DPCD has developed a virtual 3D environment of Greater Melbourne to accelerate the assessment process, increase engagement and reduce costs. The 3D virtual environment enables visual engagement. It allows planners, politicians and the public to present, see and review proposals quickly, without strong technical skills. Key to its success is the capability to assess high fidelity scenarios from any point, modify the building forms in real-time, in combination with a user-friendly interface. Use of the platform is reducing costs for both the planning authorities and development applicants.

Proposals are presented digitally, slotted into the base model, and assessed in a collaborative manner. The City Model also captures the work of State Government (>25,000sqm) proposals. This shared database assists in reducing risk, and enables integrated decision-making between statutory authorities. It has become a quick and easy tool for professionals reviewing proposals across the city, enabling a comparison of existing permits and sites under consideration. DPCD has found that the amenable use of the modelling experience provides the catalyst for more meaningful design-based discussions. Fundamental urban design issues are made clearly visible to stakeholders, natural increasing engagement with the process and outcomes.

The presentation will demonstrate how this cutting edge platform is being utilised by the State Government to save time and money, promote creative thinking and better design outcomes, and show the way for future planning tools.

Mr Digby Hall  
Senior ESD Specialist, Aurecon

Co-Authors: Mr Jeffrey Robinson, Aurecon and Dr Tuan Ngo, Melbourne University

Sustainable Communities by the Numbers

The planning and design of sustainable communities is becoming ever more complex with many things for urban designers, planners and architects to consider including liveability, affordability, sustainability and financial viability. There are new sustainable Community rating tools such as Green Star Communities and One Planet Living which help define and benchmark what we mean by a sustainable community but these tools require precinct wide information which is not always available early in the design process including:
• How much energy will this new community require both in construction and for its on-going operations and how can this be influenced by the orientation and design of the buildings and by the choice of appliances, heating and cooling systems and fuel sources (renewable and non-renewable)?
• What are the energy, carbon and financial implications of individual building verses precinct energy solutions?
• How much potable water will this community require? What cost effective measures can be incorporated into the design of the buildings, streets and landscape to reduce the use of potable water.
• How much waste will the new community generate and can we calculate the potential savings in waste to landfill through modelling different waste reduction and recycling strategies?
• What is the anticipated walk score for this new community under different scenarios?
• What is the potential interaction between the energy water and waste solutions considered for the development of the community?

This presentation will discuss some of the modelling tools which have been developed in Australia to help designers and developers answer some of these complex interrelated questions in a way which is highly visual and easy for designers and developers and their stakeholders to interpret. The presentation will show how the calculations required by some of the credits given in the different rating tools can be calculated by a precinct modelling tool.

Mr Cole Hendrigan
Academic Researcher, CUSP

Imagining a hybrid urbanism by agitating an isolated city’s fabric.

Australian cities operate, it is safe to say, in heavily automobile-oriented urban fabrics. One such city and region with a visibly high degree of this orientation and growing at the fastest rate of any Australian city is Perth, WA. Perth has a very high level of automobile ownership combined with a very low population density per square kilometre and stands out as a global icon of car-culture. However, Perth’s urban fabric both attracts (induces) and repels (in both the historic and transit served areas) car use, a situation which cause concern and congratulation for those involved in transport and land use integration.

The future focussed questions for Perth is how to physically change its density gradients and degree of polycentrism, culturally change attitudes towards urban life while economically changing towards a Green Economic outlook for improved productivity. Perth is very well positioned to respond as it has these advantages: a history of extensive planning; high paying jobs; congestion on the roads which demands resolution; a housing shortage which must be met with higher rates of urban infill; political will to commit to plans; high level of investment on the part of the government; is a financially solvent state due to resource and mineral royalties; is growing at a rate that will fulfil the planning ideals if managed; historic walking fabrics which lend themselves as learning laboratories; a decidedly effective public transit network; and a young and im/migrant society that is connected across Australia and around the world.

What are the urban designs from the regional to the street level to enable these changes and make use of its advantages? Will Perth be a leader and teacher in improving productive growth? This paper will outline results of an exploration and draft some evocative suggestions while agitating for reaction from decision makers.
Mr Murray Herron  
Deakin University

Co-Authors: Prof David Jones, Deakin University and Dr John Rollo, Deakin University

South West Victoria 2012 - 2050 Are the Settlements Sustainable?

Over the past few decades coastal cities around the world have grown at an incredible rate. With this growth have come major challenges relating to land use planning, social relationships, economic development, biodiversity and the ecological footprint. Regional and rural coastal cities have not been immune to these problems. Three selected regional towns situated in The Australian state of Victoria with respect to the following issues: increasing population and population density; open space requirements; residential density issues; public transport coverage; employment and employment density; a shifting economic climate; environment and climate change; water quality issues; and building energy consumption with subsequent CO2 emission. The goal is to highlight the current and simulated future impacts of the selected issues and propose solutions that could mitigate those impacts.

Prof Margarita Hill  
Professor, California Polytechnic State University

Revitalizing Urban Centers: Learning from Madrid

Cities across the world are responding to the challenge of revitalizing their historic town centers. Some of these are recognized and promoted as part of the Best Practices Initiative, now referred to as the Best Practices and Local Leadership Programme of the United Nations.

This paper presentation examines the dynamics of sustainable urban development and community participation in the context of new approaches to the revitalization of the historic town center in Spain. It outlines urban interventions within the Best Practices Initiatives of the U. N. as exemplified in Madrid’s Priority Areas Rehabilitation Program. The city of Madrid has invested significant resources in the integral revitalization of its historic city center. The neighborhoods within these historic centers have suffered from the dynamics of urban flight and abandonment fueled by urban policy of the 1960’s and 70’s that encouraged the development of the periphery of Madrid.

As a result, the city center remains as the location of important historical sites but abandoned or deteriorated housing and public spaces created a negative image within these neighborhoods that are home to a population that is differentiated as marginalized in relation to the larger populace. In comparison to the rest of the city, there exists higher levels of unemployment, lower levels of education, higher incidences of delinquency and violence, and a high percentage of the elderly. The intent Madrid’s rehabilitation program is to recuperate the urban environment and attract new residents while minimizing the displacement of the existing population.
This paper will give an overview of the goals of three major revitalization projects in Madrid and will characterize the major morphological changes achieved within the urban center. It will also outline ten policy recommendations that can be drawn from the Spanish experience, which can be applied in the revitalization of other urban centers facing similar challenges.

Mr Mark Hitchcock
Design Director, BHI Architects

Urbanism and Happiness: Strategic planning for a sustainable green city

WHAT IS THE OBJECTIVE? TO ENABLE BALANCED GROWTH, PROSPERITY AND HAPPINESS AS A SUSTAINABLE GREEN CITY.

2 options to grow, URBAN SPRAWL OR SUSTAINABLE URBANISM

WHAT IS THE THREAT TO THE QUALITY OF LIFE?

A. URBAN SPRAWL - CITY AT RISK OF GROWING IN A TOXIC ENVIRONMENT
B. UNSUSTAINABLE ECONOMIC BASE

WHAT ARE THE SOLUTIONS?

The solution is in transforming, and densifying the communities into compact, walkable towns connected by extensive green space, agriculture corridors, and transport systems.

1. City growth that follows 4 key principles of sustainability and provides a new sustainable economic base.
2. Compact self-sufficient communities, based on new urbanism, and connecting as one larger city community thru ecological corridors.
3. Promotion of a comprehensive community happiness policy.

THESE 3 SOLUTIONS ARE ADRESSED AS follows:

1. THE NEED FOR REVITALISATION AND TRANSFORMATION OF THE CITY
   A. "economic revitalization"
   B. "city transformation"

2. SUSTAINABLE URBANISM

The growth and urbanization of the city needs to consider strategies that will not impact on the criteria for HAPPINESS

3. HAPPINESS INDEX

Happiness for a community will come naturally, to provide employment, prosperity, quality environment for health and recreation, should the CITY TRANSFORMATION and SUSTAINABLE URBANISM be achieved.

THE KEY ELEMENTS OF THE URBAN DESIGN STRATEGY

1. NEW URBANISM
2. ECOLOGICAL CORRIDORS
3. ACHIEVE FOUR LEVELS OF SUSTAINABILITY

CONCLUSION

The strategy outlined is able to form the basis of a new green economy, based on economic transformation, sustainable urbanism, and community happiness. The benefits to residents is a higher quality of life; the benefits to business is improved viability: the benefits to developers is a lower risk, higher return investment; the benefits to government are lower infrastructure costs, real sustainable growth, and community happiness.
Mr Alex Hole  
Group Leader Mechanical & ESD, JHA Consulting Engineers

Creativity and innovation in design

Addressing the future needs of our cities ultimately eventuates in design strategies and solutions. Thus this presentation focuses on design processes and opportunities, represented from an ESD design consultancy perspective.

The ability to produce appropriate, creative, innovative and sustainable design solutions requires both commitment from all team members and stakeholders but also requires consideration of the design process needed to invigorate teams and produce innovative solutions. Centering around a methodology of the “the 5 steps to creativity and innovation”, this presentation draws upon real examples of design solutions applied to projects, applying creative and sustainable solutions. Reference is also drawn from the first certified Custom Greenstar tool, which happens to also be a new foray into sustainability for the large and commercial food service industry.

The presentation will discuss the process utilised in defining the specific Greenstar tool for this particular quick food service sector, and how unique challenges were overcome in this award nominated project.

Ms Suvi Huikuri  
Technical Officer, World Health Organization

Co-Author: Ms Riikka Rantala, World Health Organization

Healthy Urban Planning

Urbanization is a major public health challenge in the 21st century. It represents a great opportunity to improve people’s health, but also a complex challenge for example because of the increase of noncommunicable diseases (e.g. obesity, cancers, and cardiovascular diseases) and health inequities within cities. Urban planning is a powerful tool for policy-makers to improve population health and ensure health equity in cities.

For example through the creation of safe walking and cycling routes and recreational spaces that encourage physical activity, urban planning can help improve urban dwellers’ health by contributing to the prevention of noncommunicable diseases. “Health in All Policies” (HiAP) is an approach that can be utilised to integrate urban planning and health goals in cities. It is an approach to public policies across sectors that systematically takes into account the health implications of decisions, seeks synergies and avoids harmful health impacts, in order to improve population health.

This approach has received a lot of support in recent years, most notably in the UN General Assembly for the on the Prevention and Control of Noncommunicable Diseases in 2011, and in the 8th Global Conference on Health Promotion in Helsinki in June 2013.
The objectives of the session are to introduce the concept of HIAP, and to demonstrate how urban planning can be used as a tool to promote health and to suggest tools for policy-makers and urban planners on how to implement and sustain healthier cities. Practical examples of intersectoral healthy urban planning will be shared.

The conclusions are that urban planning can and should play a role in preventing health problems related to urbanization such as noncommunicable diseases, physical inactivity, and poor air quality, and that in order to effectively address these issues Health in All Policies approach may be utilised.

Mr Nathan Islip  
Team Leader - Urban Design, City of Casey

Co-Author: Mrs Yogeshwari Biju, Senior Urban Designer, City of Casey

Evolving the density models to address our growing pains

Like it or not, our population is growing, and the decision makers of society continue to wrestle with the dilemma of accommodating the dreams of this next wave of new home owners. However cracks are starting to appear in the bricks and mortar as society leans on the comfort of conventional housing models. Beneath suburban utopia’s veneer lie some dark ills that are of grave concern to the social planners and urban designers. Family violence, youth suicide and mortgage stress have been directly linked with sprawl, and it is evident that the dream is actually unliveable. Typically attention is turned to the opportunities of densification; however the majority of successful and vibrant higher density models tend to be CBD and inner suburban contexts, with a significantly different demographic profile and a paradigm that is receptive to alternate housing and living models.

This paper aims to better understand the impacts of urban consolidation on liveability by finding common ground between the inner Melbourne and outer suburban Casey contexts, and then articulating where the differences lie, what definitions need to be reconsidered, and how this needs to be physically manifested in the outer model.

The study includes an assessment of the raft of benefits of alternate models, which extend far beyond basic higher yields, reaching into the viability of our transit networks, the efficacy of our efforts towards a sustainable city, and the physical and emotional health of our community. Growth can be in harmony with liveability, and this has a clear built form outcome. Invariably the solutions lie not simply in built form, but in a more foundational shift in the psyche of our society. While not all questions can be answered, the paper seeks to sharpen the dialogue, elucidate the opportunities and pave the first steps for a liveable society.
Mr David Irwin  
Director, Isthmus  
Co-Author: Mr Ralph Johns, Isthmus

Shrinking the Suburban Dream: How small houses on small lots can offer an affordable slice of suburbia.

Housing affordability in New Zealand is at an all-time low. Auckland is a fast-growing city with demographic change and migration estimated to create a demand for 300,000 new homes over the next 30 years. The immediate challenge is where to develop these new communities, and how to deliver affordable, well-designed homes. While Auckland Council has aspirations for residential intensification largely within the existing urban limits, the Government is pushing to open up the supply of city fringe land for greenfield development.

These divergent views place urban designers at the centre of the debate on housing availability and affordability. One solution is to challenge the standard assumptions and models of suburban development, starting with the house itself. Over the last few decades New Zealand’s single family homes have increased in size, while the size of the lots they are on has got smaller as land has become more expensive. Currently in Auckland the price of the section represents 60% of value of the property.

The resulting ‘suburban squeeze’ calls for new models of housing that are developed around strong community, transport and landscape structures and well connected with existing neighbourhoods. It requires a reinterpretation of traditional NZ suburbia, retaining the qualities that are treasured about traditional suburbs (individual ownership and street address, variety and flexibility within each lot, built by small-scale builders) but shrinking the house and section to address the dual challenges of density and affordability.

As masterplanners of the Hobsonville Point development, we have developed a new typology of small, well-designed, affordable houses that continue the tradition of the working man’s cottage, the state house, and the bach. Incorporating small houses on small lots into the masterplan increases the yield and density and offers the community greater levels of choice and affordability.

Mr Sasha Ivanovich  
Director, FHSIA Architects PL

New Paradigms for the 21st Century Australian City

Considerable debate is underway in Australia in favor of better public transport in our cities, the introduction of light rail, bullet trains between our major cities with the aim to unravel Australia’s dependence on the car that encourages urban sprawl and pits ever more congested road networks against the need for people based livable places and community nurturing neighborhoods.

Extensive investment is called for to transform our cities in a shift to better public transport, better local community and public space that would diminish our reliance on cars. It is open to question whether the move towards
densification and increasing investment in good quality public spaces and integrated transport systems is enough to address the totality of issues facing our cities in the future. Questions remain whether these intentions and initiatives are comprehensive enough to address the realities not only the current state of our cities but of the overreaching prerogatives of climate change, global warming, the switch to carbon mitigation and unsustainable cost of extended infrastructure. Arguably a new paradigm is called for in the design of cities in the this 21st century as climate change, expanding mega cities, shrinking natural resources, the information/electronic revolution and the shift to carbon neutral energy sources call for new solutions. New strategies are called for to address the exponential impacts of these changes and in Australia solutions rapidly adaptable to these changes.

This paper will examine the resilience of current urban renewal and city planning examining alternatives being tested in other parts of the world that in particular seek to address combined impacts of climate change, rising cost of energy and a shift in global economic thinking. It will question and examine our current visions of urban space, relative to place and the natural environment by presenting alternatives pursued elsewhere in comparable conditions. The city of Masdar a new city of 50,000 under construction in Abu Dhabi, United Arab Emirates will be examined in detail as an important example of planners seeking to derive new solutions by design, research and development responsive to a climate not dissimilar to much of Australia. Masdar with its multiform initiatives in sustainable urban planning, carbon sequestration, clean technology, innovation and research as a pure concept and an unique prototype, promises a model for the making of a 21st city based on sustainability principles embodying city planning, infrastructure transport and urban design programs with the potential to inform the shaping and making of cities across the world, on the premise that such a model is adaptable to any place in the world.

What makes Masdar particularly relevant in the debate on the future of Australian cities is its systematic and integrated approach – its form of model governance and implementation, its research and implementation on carbon sequestration, solar and win power on site recycling, absence of cars, its public transport system, automation, design for climate, and passive cooling initiatives, and source to product carbon imprint management.

A Masdar quarter designed for a neighborhood community of two thousand inhabitants, will be presented as a case study with reference to typical urban design and place specific Australian recent initiatives. A comparison of these and other recent models around the world to recent initiatives in Australia will define the suitability of various urban paradigms as plausible typologies for the 21st century Australian city.

Ms Karoline Klein
Landscape Architect, City of Greater Bendigo

Co-Author: Mr Gary Lantzsch, City of Greater Bendigo

Who Knows Best? Learnings from the Bendigo CBD and Hargreaves Mall Redevelopment Projects

Over the past eight years the City of Greater Bendigo has undertaken a series of urban design projects based on a CBD plan adopted in 2005. The plan and the subsequent works won the city a range of awards. However, there was a notable discrepancy between the professional and the public perception of the changes to the urban fabric. Structured as a case study, the presentation will present implemented changes in the Bendigo CBD and the Hargreaves Mall. It will examine the complex interplay between strategic planning, physical implementation, place
making activities, public perception and the media influence in a growing, provincial Australian city of 100,000 people.

The presentation will conclude with learnings about the importance of “soft” factors like community engagement, strategic communication and place making activities.

Ms Kylie Legge
Director, Place Partners

Efficiency in the public realm: a place making approach

Prescriptive regulations requiring 10% of developable land or 30m of waterfront for public open space have led to ongoing problems, particularly in new developments; lack of activity, high maintenance costs and a shared sense of ‘soullessness’.

This presentation will consider the underlying challenges of providing too much public space or the wrong type of public space for communities. A strategic place making approach aims to understand a place holistically and to provide clear briefing directions to the development and design team. It details an appropriate public realm offer that supports marketing endeavours in the short term, minimises commercial risk, meets the long term needs of the community, as well as considering ongoing maintenance and management.

Prof Steffen Lehmann
Professor of Sustainable Design, Director of sd+b Center, University of South Australia

Co-Authors: Dr Queena Kun Qian, Research Fellow, sd+b Center, University of South Australia and Mr Atiq Zaman, sd+b Center, University of South Australia

Framework for low carbon precinct design from a zero waste approach

Today’s consumption-driven society produces an enormous amount of waste, which is putting pressures on land, polluting the environment and creating economic burden. ‘Zero waste’ concepts, focusing on waste avoidance and optimum recycling or resource recovery, as well as minimisation of waste by innovative design and behavioural change, is one of the most visionary concepts for tackling growing waste problems.

This paper will present a holistic methodology framework for designing a low-carbon precinct in three different residential scenarios – mixed use high rise (10-story), low rise (3 to 8-story) and town house scale (3-story), based on the real case of the ‘Bowden Urban Village’ master plan. It examines the waste reduction potentials throughout the waste generation and disposal/collection chain and concludes with overall carbon consequences and reduction options. The authors compared the three different density scenarios with a list of parameters under the categories of social, economical, environmental, infrastructural, institutional and technological indicators.
The input parameters for each scenario are carefully selected according to their unique features. The framework for designing and forecasting the demand of a zero waste low-carbon precinct is developed, based on input/output material flow of products before they turn into the waste throughout the chain to disposal. An integrated carbon consequence in each scenario is generated as the final indicator. This methodology framework gives an in-depth evaluation of the total waste and resource throughout the material flow chain. The findings provide an inventory of leverage points, such as when and where (which stage), how, and to whom, which helps the policy-makers design waste policies and allocate the resources effectively, with minimum the environmental impact and optimum social costs. It also helps planning professionals and business decision-makers better understand the cost and benefit of different waste alternatives and scenarios to achieve a low-carbon zero waste precinct.

**Mr Stewart Mann**  
Design Manager, Sinclair Knight Merz

Co-Authors: Mr Phillip Roos, Sinclair Knight Merz and Prof John Mardaljevic, Loughborough University

---

**I Can See the Light: Climate Based Daylight Modelling to Improve the Public Realm**

Through the centuries the use of light has been fundamental in the design of cities and buildings. Filtering daylight into buildings, alleys and courtyards providing pleasant spaces as well as ensuring safety and maximising the functional use of public and private space. In the built up urban fabric, with hard solid surfaces of buildings and infrastructure, increased lighting means increased heat gain within the space, resulting in the overheating of buildings, as well as the increase of the urban heat island effect.

This paper investigates the application of a Climate Based Daylight Modelling (CBDM) process that instead of using Standardised Sky factors applying the Climate Data based model for daylighting within internal and external buildings, and urban spaces. This technique is used to highlight and maximising daylight within the design of the public realm spaces in an urban environment, considering the integrated connection of internal and external spaces within buildings and the outdoor environment.

This use of actual climate data means that as cities are transformed from a carbon intensive to low or even positive carbon environments, CBDM can be used to show where energy generation can be optimised on buildings through to where it might be possible to install urban food production, and where public realm gathering spaces can be located.

Using selected spaces in Melbourne as a case study, this paper will show through the use of these techniques how internal and external spaces can be transformed to help develop a low carbon city and a more productive, pleasant and functional urban environment.
Ms Mia Marelja
School of Architecture & Design, University of Tasmania

Co-Author: Ms Helen Norrie, School of Architecture & Design, University of Tasmania

Teenagers and the City

Teenagers around the world, including Australia, are key users of public spaces in cities. However, their presence in public places is often seen as undesirable due to the perception that teenagers are responsible for anti-social behavior. Teenagers are often excluded from public space planning and planning policies, which discourages and restricts their use of these places. As a consequence, teenagers' engagement with the public realm is limited.

Although the nature of the teenager and public space relationship is well-documented, it is argued in this paper that the inclusion of teenagers in public spaces and their experience of physical environment can be heightened through the implementation of informal, temporary, active and productive strategies within unused city spaces. Designing for teenagers has a potential to create diverse and inclusive spaces for all ages where new social interactions are able to cultivate, and facilitate an inclusive and cohesive society.

The development of the relationship between teenagers and their environment through unique urban design activities is an important theoretical concept for architects and urban designers. This study seeks to understand the potential this can have in influencing urban policies, strategies and projects that support the inclusion of teenagers within the public realm of the city.

This paper explores how the teenager-inclusive spaces can be created, using the Hobart CBD as a case study. It includes an analysis of the teenager/public space relationship, examining teenagers’ needs, preferences, priorities and general spatial networks within public spaces, in order to understand their implications for design.

This leads to a series of speculations for strategies for formal, informal and temporary interventions that facilitate ‘active and productive’ engagement, that assist in creating more inclusive cities for teenagers.

Dr Andrew Martel
Research Fellow in Housing and Urban Planning, Faculty of Architecture, Building & Planning, The University of Melbourne

Co-Authors: Mr Ian Woodcock, Faculty of Architecture, Building & Planning, The University of Melbourne and A/Prof Carolyn Whitzman, Faculty of Architecture, Building & Planning, The University of Melbourne

Getting Beyond Maybe: Affordable family-friendly housing as catalyst for inner-urban place-making (Refereed paper stream)

Successive Victorian state planning policies have recognized the social, economic and environmental advantages of providing housing suitable for a diverse range of household types in inner Melbourne, and yet these policy goals are
largely unrealized. Recent trends in inner-city Melbourne show a diminishing supply of family-friendly housing, which is increasingly difficult for low-to-moderate income households to access.

The paper details the potential of an interdisciplinary collaborative research project to act as a catalyst to increased diversity through a place-making approach. Working with key stakeholders, the project engages design-research and deliberative planning methods in a novel partnership, and aims to identify and overcome perceived barriers to the inclusion of affordable, family-friendly housing on well-placed inner-city locations ripe for urban renewal.

**Dr Andrew Martel**  
Research Fellow in Housing and Urban Planning, Faculty of Architecture, Building & Planning, The University of Melbourne  
Co-Author: Mr Ian Woodcock, and A/Prof Carolyn Whitzman, Urban Design, Faculty of Architecture, Building & Planning, The University of Melbourne

---

**Getting Beyond Maybe: Affordable family-friendly housing as catalyst for inner-urban place-making**

"Successive Victorian state planning policies have recognized the social, economic and environmental advantages of providing housing suitable for a diverse range of household types in inner Melbourne, and yet these policy goals are largely unrealized. Recent trends in inner-city Melbourne show a diminishing supply of family-friendly housing, which is increasingly difficult for low-to-moderate income households to access.

The paper details the potential of an interdisciplinary collaborative research project to act as a catalyst to increased diversity through a place-making approach. Working with key stakeholders, the project engages design-research and deliberative planning methods in a novel partnership, and aims to identify and overcome perceived barriers to the inclusion of affordable, family-friendly housing on well-placed inner-city locations ripe for urban renewal.

**Mr Tony McBurney**  
integratedDESIGNgroup

---

**Regional Community | Global Conversation**

Bathurst is Australia’s Oldest Inland Settlement and has developed steadily throughout (and so represents) 200 years of western urban planning responses. As the nation now contemplates potential forms of urbanity to suit a rapidly changing demographic and new globalised population growth, the role of “local community” within a “global conversation” is a critical consideration.

Bathurst forms an important case study of the strengths, weaknesses and opportunities of Regional Centres in a new paradigm. It also preserves an urbanism intended for far greater potential than presently realised and a vision of a nation that might develop beyond the mere coastal fringe. This paper will investigate something of the potential of the original grid city, the implications and limits of a suburban fringe, and the character of satellite villages. It will
explore the implications for transport and other connections of regional centres. Along the way we will ask, "Is Australia really the most urbanised nation in the world, or, so far, only the most sub-urbanised?". What is our potential?

Mr Stephen Moore
Principal, Robertsday

Morph My City - Infrastructure Rebirthing & The Creative City

As Australia’s cities embark on their largest infrastructure projects in decades, what infrastructure from our industrial past can be born again to contribute to the social and cultural life of the city? Infrastructure like:

- An iconic bridge and major city access route that now hosts a world-famous Bridge Climb and is one of Australia’s most popular attractions and at the top of to-do-lists – Sydney Harbour Bridge
- An island that used to be a prison, ammunition depot and ship building yard and is now an event space and creative arts venue – Cockatoo Island
- A train depot to hub for creative start-ups and popular farmers’ markets – Carriageworks

Just like Sydney, every city around Australia has major investments in industrial era infrastructure that are ready to be born again into the creative city. Those investments include over-engineered roads, parking structures and service lanes, water reservoirs, and waste plants. Rather than relegating these relics of the past to isolated, single use blights on communities, they can be born again to improve the ecological, social and economic performance of 21st century cities. RobertsDay Principal Stephen Moore focuses on a process to morph the infrastructure of the past into the great places of the future and the role of the hybrid urban professional in doing just that. He also shares techniques, tools and lessons for pragmatic innovation in this emerging field, using real-world examples that include:

- How a car centric centre was reborn with a new public domain the equivalent of five Olympic pools
- How a regional centre could shift $5M in funding from parking to cultural infrastructure
- How an innovative parking structure could be the catalyst for a new arts district

Mr Tom Morgan
Researcher, Department of Architecture, MADA, Monash University

Co-Authors: Prof Nigel Bertram, Monash Architecture Studio, Monash University and Miss Lee-Anne Khor, Monash Architecture Studio, Monash University

Melbourne-Manhattan: Rhetoric & Response

In 2012 the Victorian Planning Minister announced a “bold new vision for Melbourne’s central business district”, proposing a considerable expansion to the capital city zone and inviting public debate around the nature of urban growth in Melbourne. The plan intended to alleviate pressure in existing suburbs by concentrating intensive development within the new city footprint, maintaining the liveability of established residential areas while providing new opportunities for Melbourne to be a world-class city. Beyond a basic map delineating the extent of the new zone, very little visual material accompanied the announcement and few details provided about what it would achieve.
The ‘vision’ was propagandised in mainstream media; the rhetoric was alarmist. Under the plan, development controls would be “abolished” resulting in “wall-to-wall skyscrapers” and a “Manhattan-style metropolis five times its present size”. A shallow and reactionary dialogue ensued, largely criticising the present city’s failings and the government’s motivations for the zoning change. There was a notable lack of debate about the future of Melbourne.

Under the conference theme of “UrbanAg|Nation”, this paper speculates on the potential realisation of the Melbourne-Manhattan provocation. It examines the kinds of density, amenity, services and infrastructure that could be delivered and how might this alter the built form and quality of the city. Importantly, it questions what it would mean for the broader metropolitan area should a Melbourne-Manhattan come about.

Through a design-led research process, the authors reveal alternative urban conditions that challenge conventional strategies for delivering sustainable urban growth through poly-centric activity areas, linear transport corridors and urban fringe expansion. The speculative scenarios ‘unpack’ the rhetoric of the Minister’s announcement and subsequent media reports as a way of examining notions of quality and liveability in contemporary cities. Finally, the research asks, what could instigate a more ingenuous public debate about these complex urban issues?

Mr Michael Neustein
Director, Neustein Urban

Planning reform in NSW - A saga

Planning reform in NSW has turned out to be a much more difficult and lengthy saga than imagined by the NSW Government. Last year’s green paper received generally favourable comment but preparation of the white paper and draft legislation has proven to be a substantial task running behind the schedule set by the Government. This presentation will give planners, especially those from interstate, an update on the direction of planning reform in NSW and the reaction of the planning and general communities to the proposals.

Mr John Neylan
Principal, Neylan Architecture

Co-Author: Mr Ricardo Madrid, Director, Neylan Architects

Minding the Gap: A case study reconsidering urban infill strategies for railway corridors.

As implementation of sustainable urban development strategies struggle in Brisbane, debate over management of Queensland Rail owned land is making headlines again. Even federal MPs are showing concern about underutilization of railway station airspace and corridors. Different voices have pointed out how development of these areas could pay for the expansion of suburban rail services, a more sustainable alternative than the current expansion of the vehicular network through tunnels and motorways. Newspaper articles have also highlighted opportunities for sustainable mixed use development combining traditional uses such as retail, housing and office. In
this case study of a Brisbane suburban rail corridor we intent to test the possibilities of such urban infill development.

The study involves a vestigial area of vacant and underutilized industrial property along the Albion-Wooloowin railway corridor including the embankment between neighbourhoods. Apart from the abovementioned advantages, we will explore how this type of development allows for the physical and social reconnection of neighbourhoods. We will also investigate strategies to overcome the resulting traffic issues and spatial barriers imposed by existing rail infrastructure development in urban areas. Crucially, we will test the idea that this kind of development presents an opportunity for improved social cohesion, diversity and integration, in opposition to traditional zoned-based compartmentalized development. The case study will showcase the idea that by exploiting the obvious transportation advantages presented by railway stations and corridors, and through implementation of hybrid building types, there is an opportunity for traditional uses (retail, office and private dwellings) to be combined with community oriented infrastructure such as public housing, housing for the disabled, housing for the aged and child care. The result will be a more sustainable, connected and inclusive village-type urban environment.

Ms Katherine O'Byrne
School of Architecture & Design, University of Tasmania

Co-Author: Ms Helen Norrie, School of Architecture & Design, University of Tasmania

Engaging children in the built environment through the act of play

Australian cities lack spaces that are suitable for children, and this affects the potential engagement of children within these environments. This study considers the need for cities to develop urban planning policies, strategies and projects that include children-friendly spaces, in order to accommodate future growth in cities as inclusive and cohesive environments. Locations that welcome children are by default also places for mothers, fathers, grandparents, and other children – and these spaces also extend to the widest sectors of the community. The concern for a broader demographic and range of uses is not limited to the provision of amenity alone - its a matter of grasping the cognitive, emotional and imaginative dimension to being young.

Highlighting the engagement of children in the city promotes the importance of the provision of spaces and paths of movement that create safe community spaces for all ages.

This study considers how the built environment can affect children’s perception of the city through the act of play, creating ‘embodied spaces’ that lead to active physical and emotional engagement. It study explores how the design in urban environments can engage the imaginative interpretation of children through the act of play. In particular, it examines the different types of play - active, social, creative and make-believe - in order to understand their implications for design, and it explores the developmental benefits for children through play. This leads to a series of speculations on the implications for urban planning policies related to the design requirements for acts of play and children.
An Urban Coffee Farm and other experiments

HASSELL is committed to the vibrant activation of our cities. We understand the value of temporary and experimental projects as opportunities to disturb the status quo, to agitate and to question established modes of behavior in, and occupation of, the public realm. Our recent work in “pop-up” projects is evidence of our dedication to this pursuit and forms the basis of our presentation.

In 2011, Chasing Kitsune was delivered as part of the State of Design Festival in Melbourne under the theme ‘Design that Moves’. Borrowing the name of a mythical Japanese fox, the illusive ‘Kitsune’ never appeared in the same place twice. Each night of the festival, this Japanese food truck and its changing ‘occupied landscape’ was located in a different inner city location. Social media was utilized to advise followers where to find Kitsune only hours in advance.

Walk the Line was the winning entry in the Australian Institute of Landscape Architecture (NSW Chapter) Street Works Competition 2012. The project proposed minimal intervention, relying on brightly coloured ‘stickers’ applied to the ground surface to link the five competition sites via a series of pink dots stretching across the inner city. Perhaps reminiscent of a ‘pre-ipod era’, passers-by were invited to pause, engage in games and interact with each other on ‘the street’.

Most recently, HASSELL was approached by Melbourne Food and Wine to design the centerpiece of their 2013 Festival. Interested in our growing portfolio of temporary projects, the organizers invited us to design a coffee farm in central Melbourne. 120 coffee trees transformed a windy plaza into a terraced coffee plantation within an abstracted, modulated jungle. The project energised an otherwise empty and subdued city location, inviting passers-by to view their city from a new perspective and surprising them by inserting something unfamiliar into a familiar space.

Railway Stations: Public Realm Gateways to Sustainable Futures of our Cities

Train stations are places of connection in our cities and are the gateways of urban space. They represent one of the most exciting places to experience. Some stations make great destinations offering shops, restaurants, museums and exhibition spaces to commuters.

While new architecture at railway stations acknowledge heritage, the urban spaces around them provide excellent public areas and rationalise functional needs. Grand spaces with monumental structures, including constant
movement of people and trains makes for an exhilarating experience. Modern or historic, great train stations add another level of excitement in the regeneration of our cities. Adding into the mix of the sustainability paradigm, place making of railway stations transforms into sustainable urban centres and signature architecture, but how does it support an environmentally sustainable future?

This paper reflects the journey of exploring the challenging situations of balancing the requirements between operational, functional, economic and innovative sustainable design solutions during the Flinders Street Station Design Competition in Melbourne. The author highlights how the unique spatial, social and cultural circumstance of this world-renowned city railway station possesses specific resilient and sustainable design answers to a public realm and city space that challenge established thinking.

Mr Cleveland Rose
Principal Urban Designer, Cleveland Rose Design

Urban Design and Sustainability on Sydney's "Western Front"

This talk is about urban design and its relationship to “sustainability” within Sydney’s western fringe, concentrating on the local government area of the Penrith.

The talk’s perspective is that of a consulting urban designer who has worked closely with Penrith City Council for the last 5 years. The focus will be about the task to develop urban design attitudes, principles and supporting indicative 3D urban forms for the Regional City of Penrith, and the town centres of Kingswood and St Marys within the context of Sydney’s Metro Strategy.

Urban design challenges, opportunities and achievements will be discussed set against the considerable pressure that constant incremental Greenfield development has exerted on this once productive food basin of the Sydney’s metropolitan region.

If the battle is to be won for the Penrith region to be an innovative sustainable urban edge, what urban design tactics, openings are required to gain traction and instigate tangible reform?

Come along listen and participate in a discussion.

Ms Barbara Schaffer
Principal Landscape Architect, Government Architects Office

Co-Author: Ms Judith Fritsche, Government Architects Office

Parramatta Green Grid

Green space is widely recognised as a key factor of liveability. While the reservation and development of green space has been a hallmark of planning world-wide, the focus of the Metropolitan Strategy for Sydney 2031 is
predominantly on economic development, encompassing employment, housing, transport and connectivity between centres. The Metropolitan Strategy predicts Parramatta to be the region’s fastest growing centre. As the second CBD in greater Sydney and with a focus on urban renewal, Parramatta will increasingly be characterised by medium and high density development. At the same time, the Strategy holds a vision for ‘balanced growth’, for Sydney to remain distinctive and inspiring and to continue to be one of the most liveable cities in the world. Focusing on Parramatta, the Government Architect’s Office is currently investigating an open space framework to augment the Strategy, to provide open space for a growing population as well as the critical linkages required within major centres.

The vision is to create an integrated network of interlinked, multi-purpose open spaces. It is through good and effective linkages to areas where people live, work and play that the benefits of green space are amplified beyond the immediate surroundings. The challenge lies in balancing the competing demands for scarce land resources, between density and open space, between vibrant and active urban centres and access to recreation opportunities and ecosystem services.

Moving beyond strategy, the framework puts policy into action. Investigating current and future deficiencies and opportunities, and working with a wide range of government stakeholders, the framework becomes an implementation plan that collaboratively and creatively delivers an appropriate quantum of quality, networked open spaces. It will ensure that future investments yield multiple benefits across areas such as public health, social sustainability, climate change mitigation, amenity, property values, leisure and recreation, ecological services and biodiversity conservation.

Mr Ian Shears
Manager, Urban Landscapes, City of Melbourne

Co-Authors: Ms Yvonne Lynch, City of Melbourne and Dr Cynnamon Dobbs, City of Melbourne

Transitioning Melbourne’s urban landscapes - climate adaptation for future liveability

Melbourne is facing three primary challenges: population growth, urban heating and climate change. The cumulative impact of these is creating less healthy urban environments; the flow-on effects include the social cost of heat-related illness and morbidity, damage to vital infrastructure, and diminishing quality of city life and liveability. Responding to these challenges requires a holistic approach that acknowledges the critical role of green infrastructure in creating a liveable, resilient and healthy public realm into the future.

This presentation will detail a strategic response that seeks to transform Melbourne's urban landscape with ambitious city targets for green infrastructure development to mitigate flood and urban heat island impacts. It will focus on a range of green infrastructure solutions and strategies that have been delivered by City of Melbourne including green roofs, living walls, urban forest, integrated water management, stormwater harvesting, open space provision and connectivity, permeability expansion and urban landscape cooling strategies.

This presentation will also discuss the role of public participation in transitioning from a vulnerable public realm to one that is robust and resilient.
A/Prof Roderick Simpson
Director, Urban Design Program, University of Sydney

6 star dreams and industrial wasted-land

The concepts of ‘central business districts’ and ‘industrial’ ‘employment areas’ should be questioned for two reasons. The possible effects of the NBN and ICT more broadly on spatial decision-making has generally been overlooked. Secondly, the exclusion of residential from these CBD areas, and commercial and residential from centrally located ‘industrial areas’ can be seen as holding onto redundant urban configurations, with little investigation of the efficacy of these policies, or of the consequences and potentials that might result from their removal.

Reservation of land in centres for ‘commercial office uses’ with high floor space ratios with the expectation that businesses and institutions will invest in these places and that a ‘polycentric’ city will emerge has failed in many instances. In parallel, policies for industrial areas have excluded residential and commercial uses, despite the finessing the definition of ‘industrial’ to include bulky goods retail.

These policies, founded on antiquated notions of ‘zoning’ are derived from a mechanistic view of the city that is as odds with the heterogeneous mosaic of activities and living and working patterns that exist and continue to emerge.

The policies can also be seen to be protective of the vested property interests. Examples of policies, precincts and research from Australia and internationally will be used to postulate possible alternative futures for a number of areas in Sydney if current planning policies were removed: high density residential in accessible centres with zero car ownership and mixed-use mixed-up ‘enterprise precincts’ with very few planning controls in place of ‘industrial’ areas.

A shift in the way we conceive centres and industrial areas, and the way we hold onto conventional office and retail space could result in a city that is more adaptive and accommodating of the heterogeneous living and working conditions that are emerging.

Ms Caroline Stalker
Director, Architectus Brisbane

Good Bones, a Soft Heart: Regional Centres from the Ground Up

What is it that makes regional cities so great to work and live in? The pleasures of ‘urbia’ without the pain? Maybe it’s the more tangible connection to place and community that is so wonderful – the setting in landscape, the scale, the general ease of people. In the regional cities that are growing, there is a strong economic and environmental imperative to densify, consolidate, and revitalise centres.
In our experience regional communities want some of the things of the capital cities offer (particularly in retail, cultural and economic opportunities) but don’t want the same places. So then it’s about recognizing the uniqueness of each place - getting back to the bare bones to uncover and promote a kind of Regional Urbanism - or is it Urban Regionalism? Regionalism and particularly ‘Critical Regionalism’ is a recurrent theme in architecture, not so much explored in urban design formularies like New Urbanism, however as an approach it has much to offer. Ljubljana in Slovenia is probably the best example of where considered urban design has transformed a regional city.

As a practice of ‘regionalists’ at Architectus Brisbane, over several years we have been building up an approach to designing regional centres which stress the power of place. In all instances the ‘givens’ have been intensification, economic development, consolidation and liveability. We have sought to overlay, within this overall pattern of intensification, a rich layer of spaces and places that respond to climate and people’s relationship to nature, supporting the informal community interactions that are so treasured in smaller cities.

This paper will show how working ‘from the ground up’ brings together an important layer of place-creation to the drivers ‘liveability, efficiency, and productivity’, discussing examples in Wodonga, Townsville, and yes, Ljubljana!

Mr Peter Stevens
PhD scholar, Tom Farrell Institute University of Newcastle NSW

On scale and abundance

Between 1990 and 2005 in Newcastle NSW an array of embryonic reforms were undertaken for a transient community of over 30,000 people. As a result of sustained commitment to collaborative design reforms across the University of Newcastle Bushland Campus the work received significant accolade. Twenty years after initial reforms the campus and city offer a perfect platform for modelling Biophilic, Ecocity redevelopment. It is a regional centre with social and economic complexities and considerable natural advantage. Local language of Country includes the term Muloobinba, an edible seafern, semiotic of a fertile and richly diverse physical landscape in which communities thrive year round.

Whilst urban fabric and place making in Newcastle has been mediocre for over 100 years this has not prevented the city from joining the top ten international ‘must visit’ Lonely Planet destinations and the most liveable cities in Australia. Despite a devastating colonial and industrial environment legacy and limited access to crumbs from the Steel, Coal and Port trade table, the city and its environs remain open for the pursuit of something progressive - something demonstrative and exemplary. The opportunity is twofold. As the University shifts some of its functions into the Civic City hub, and urban renewal builds momentum through grass roots innovations there is the chance to realign access and infrastructure patterns with topography, contour and the natural processes of accumulation and abundance. In doing so the community, city and region can flourish with a dramatically reduced exposure to climate, earthquake, mine subsidence and ecological impacts.

The key elements of these reforms are outlined with reference to the laws of the biosphere and the challenges outlined in State of the Environment reporting. In keeping with the conference theme the presentation will provide examples of disruptive intervention and practical, scalable urban design reforms.
Mr Edward Sullivan
Adjunct Professor of Urban Studies and Planning, Portland State University

Co-Authors: Mr Benjamin Clark, (self-employed)

A “Timely, Orderly and Efficient Arrangement” of Public Facilities and Services: The Oregon Approach

Oregon’s Statewide Planning Goal 11 requires cities and counties to plan and develop “a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.” Such plans must take into account the nature of the required facilities to determine the need for and timing of their development.

Goal 11 requires that development of public facilities plans be a coordinated effort among affected public agencies.

This article addresses the enduring public facility and service issues of: coordinated planning; financing; timing; urbanization and protection of resource lands; maintenance; the role of providing these services and facilities play in urban design and how Oregon addresses these common problems.

A version of this article has been published at 49 Willamette Law Review 411 (2013).

Mr David Tickle
Senior Associate, HASSELL

A new Sydney every 3 months: How the rapid urbanisation of China can inform our understanding and design of cities

China is undergoing urbanisation at a pace and scale unprecedented in human history. Under its current (12th) Five Year Plan, the Chinese government has sought to balance this rapid growth with a broadening of the country’s economic base, social development and environmental protection. The Plan sets out a number of targets that affect how people work, live and move.

HASSELL is an international multi-disciplinary design practice that has operated in the Chinese market for more than twenty years. Our work spans multiple scales and typologies, from regional strategies and city-wide masterplans to the design of individual buildings and open spaces. Our China operations have built upon the expertise of our Australian studios, focusing on key areas of urban renewal, transport-focused development, workplace and residential projects.

Through three case studies, this presentation will demonstrate the way in which we exchange knowledge and ideas between our China and Australia studios. Increasingly, our work in China is informing our understanding and delivery of major urban projects here in Australia. The case studies will focus on three areas of consideration: Work - within the context of new Special Economic Zones, we have applied our extensive understanding of workplace design to the creation of a masterplan for a strategic knowledge precinct in Hangzhou Live - an exploration of new models of
affordable housing provision in the southern city of Shenzhen, part of a Chinese government program to deliver 36 million new housing units by 2015. Move - a groundbreaking design solution for a new transport interchange that integrates this large piece of infrastructure into its local context, as well as the national high-speed rail network (soon to be the largest in the world). The presentation will be given by David Tickle, who leads the HASSELL urban design teams in both Sydney and Shanghai.

Mr Paul Walter
Director, City Plan Urban Design

Co-Author: Ms Monica Gibson, City Plan Strategy & Development

Translating community land use visions into development guides: the role of the urban designer in the new NSW planning system

Dramatic planning reform is under way in New South Wales. A new Planning Act is the centrepiece; there is also root and branch reform of the processes of urban planning and urban design. This paper has been prepared jointly by: a key author of the new Act (Monica Gibson) and one of the state’s leading urban designers (Paul Walter).

The paper covers the following: 1. An examination of the practical implementation of the new planning system for NSW. 2. The objective for coordinated and integrated strategic planning, that results in streamlined development assessment, with improved time and cost outcomes. 3. The challenge to create community-supported strategic plans to be reliably translated into development guides for predictable development results via new code assessment track. 4. Role of urban design practitioners in communicating form based development guides. 5. Challenges and opportunities for better urban design. The state faces a set of crucial challenge to develop and implement an effective system.

The focus now is where the rubber hits the road: the interface between applicants, community and the planning authority. The current system has failed to integrate community aspirations or to provide a reasonable level of certainty for developers. The success of the new system hinges on success of code assessment track. In recent years the planning and development processes have been characterised by uncertainty and conflict. Poorly-made or non-existent strategic plans have left communities with no clear understanding of how future development should look and no constructive way to influence change.

The absence of high quality development plans shifted the emphasis onto individual projects, overburdening the development application process and creating an atmosphere of mistrust and conflict. In many jurisdictions court applications were lodged simultaneously with development applications. Code Assessment amounts to shifting from numerical standards to a form based approach. Improved visual descriptions and responsive design will be key tools in plan-making. Important issues will need to be raised and resolved in order to establish effective processes for strategic plans: capturing and expressing community visions, difficulty in getting consensus and, subjective design assessment.
Urban Water ToolKit: raising creeks and growing cities.

This paper investigates the use of an Urban Water Toolkit in the development of local infrastructure solutions in response to food production and energy, land, water supply pressures as part of a climate change adaptation strategy.

The Urban Water ToolKit lays the groundwork for a new way of structuring cities with particular emphasis on raising urban creeks to create multifunctional ‘flood zones’ that provide opportunities for water management, wildlife habitat, transport, recreation and urban agriculture.

The inner city Brisbane neighbourhoods situated in the historical catchment of Western Creek are the setting of pilot study demonstrates the application of the Urban Water ToolKit.

Engaging the Engagers: The role of elected Councillors in community-based strategic planning

Local communities are more and more expecting their local councils to involve them in decision making and direction setting. But people are inherently reactive and Councils who prioritise whole-of-process community engagement, who routinely go beyond mandatory consultation requirements, generally achieve higher levels of community satisfaction. If the mandatory up-front public participation in local strategic planning, foreshadowed in the White Paper on planning reform, is to succeed councillors will need to be centrally involved. They are the public’s elected representatives and spokespeople. They are the intermediary between the planning professionals and the public’s reaction to their plans and proposals.

Even the best evidence-based strategic plans and re-zonings must be approved by them and their automatic approval cannot be assumed. The up-side is that Councillors can add value to the strategic planning process, the process of maximising up-front community strategic involvement so as to minimise reactive backlash at the development approval phase, but only if up-front involvement is only the starting point. City-making involves ongoing stakeholder engagement, from visioning to implementation, and it is the councillors who approve the framework within which the whole process unfolds. The difficulty is that Councillors are not professional planners, nor are they even professional politicians. They are, rather, an eclectic mix of individuals from a broad cross-section of the community. The mandatory up-skilling and professionalising of councillors, foreshadowed in the recommendations for local government reform, will help to address this, as will the recommendation to de-politicise the assessment and approval roles of councillors.
This paper explores ways to engage councillors in meaningful community-based strategic planning. Using Warringah Council as case study, examples based in experience will be presented of both best-practice and what not to do. The examples go beyond only up-front community engagement and look at the realities of city-making as ongoing process.

Mr David Wilson
Consultant, Accent City Planning

Grass Roots Urban Interventions

Grass Roots Urban Interventions Informal, provisional, do-it yourself, insurgent, hands on, unsolicited, unplanned, participatory, tactical, micro, open source — these are just a few of the words floating around to describe a type of interventionist urbanism sweeping through cities around the world. The fact that there are so many competing names for these community led urban improvements suggest that they remain a phenomenon-in-the making, ripe for analysis.

This paper will examine a number of grass roots do-it yourself remakings of the city. These projects are efforts to remake ourselves by asserting the importance of equity, convenience, pleasure in everyday life by addressing areas that the system has neglected, misunderstood, or undermined. These lighter, quicker, cheaper tactics are an alternatives to top down, big power frozen formulas, not just waiting for crumbs to drop from the King’s table. The exponential growth of the modern city has inadvertently estranged many in our communities from the role of reshaping it.

For many, the city seems just too big, too intractable, to inaccessible. Around the world, scores of people and community organisations are intervening directly in their own environments, bringing incremental improvements to their streets, blocks and neighbourhoods. These acts of micro urbanism, of informal urban design, are characterically small in scale, and often temporary — yet their power resides not so much in their forms as in their impacts, in their immediate ability to infuse places with value and meaning.

These grass root interventions celebrate a movement of democratic change. The actions — planting abandoned spaces, nature strips, occupying and reprogramming public spaces to make cities more beautiful, inclusive, productive and healthy are expressions of a desire for good places. From these green sprouts of spontaneity a forest of liberation grows. Word Count 281 Words
Mr Ian Wood-Bradley
Urban Development Strategy and Policy Advisor, ACT Office of the Coordinator General

Linking Canberra City to the Lake

Canberra has evolved to develop a unique identity with wonderful parks, gardens and tree lined streets. As it matures it can become a truly great city - an exemplar of a progressive, inclusive and vibrant city with a distinctive urban culture. Linking Canberra City to the Lake is fundamental to making Civic more than just a ‘drive through’ City centre. It delivers over 1.2 million square metres of mixed use development for 15,000-20,000 new residents located in the City. In ambition and scope the project can be compared to major waterfront projects in other Australian cities. City to the Lake is starting with a strategic public initiative – to create a robust and memorable public domain and waterfront. Rather than turn its back on the Lake and Commonwealth Park the City will embrace these wonderful assets of the national capital - not remote and segregated but unified with the centre of the City. To be implemented in tandem with Capital Metro it transforms the way people engage with the City centre. Light rail will move large numbers of people into the city quietly and beautifully. The key to connecting the City to the Lake is how we treat Parkes Way. It is a major barrier that disconnects the City from its waterfront and its main City parks. To overcome this it is proposed to construct Parkes Way as a split level boulevard allowing free flowing traffic at the lower level and local City streets at the surface. The project will unlock value. It creates 24 new urban blocks on land that is currently surface car parks and over-scaled road reserves. It will provide memorable and robust public domain and facilities to become a place which is more attractive to residents and visitors, where people will happily stay longer.