



G

A

Government
Architect

2000

+

Shaping our futures
Since 1816

Discussion paper
GA200+ Symposium/
Forum 02
How do we live?



NSW
Architects
Registration
Board



Introduction

Our role as the Office of the Government Architect is to help Government deliver world-class design and planning in order to make people's lives better, through sustainable and inclusive growth.

As part of that role, we are drafting recommendations to the Minister for Planning for an inaugural NSW Policy for Architecture and Built Environment. Your participation and feedback to this series of events and discussion papers is important to informing the direction and emphasis of these recommendations.

Our effectiveness in the role of independent and expert advisor to Government relies on robust and collaborative relationships with industry and other Government agencies. To that end, we have commissioned industry leaders and respected academics to contribute their expertise to the preparation of the event primers and discussion papers.

This discussion paper, prepared in collaboration with Andrew Nimmo (Lahz Nimmo Architects), summarises the second forum in our series of events, which focused on the subject of housing and the increasing pressure on our cities to accommodate growing urban populations.

In 1900 only 10% of the global population lived in cities, today its five times that amount. By 2050 more than 70% of people on earth will live in cities. While Australia is already one of the most urbanized countries in the world, we won't be immune from the impacts of mass urbanization. In Sydney, we're going to need an extra 664,000 new homes over the next 20 years alone, just to keep pace with demand.

Our regional areas face similar challenges. This year the areas outside of Sydney are estimated to grow to just over 3 million people or 40% of the state's population. Regional areas in NSW contribute around \$138 billion to the Gross State Product – one third of the state's total.

The portfolio of planning is not just about building more houses in our cities; its about obtaining equity, opportunity and sustainability right across the state.

Your feedback is important - let us know what you think about design-led approaches to city planning by emailing us at:

info@ga200plus.org

How do we live?

All participants at the forum were given a series of case study projects as a 'primer' to the conversation. The case studies were compiled in collaboration with the UTS Masters of Architecture Design Studio – The Singular Collective (led by Tarsha Finney, Senior Lecturer). Jeffrey Shumaker (Chief Urban Designer and Director of Urban Design, New York City) was invited to present a keynote talk sharing his experiences of government involvement in residential projects and, in particular, methodologies for achieving good urban outcomes through these projects.

Jeffrey and guest panel members were then invited to take part in a conversation about housing; affordability, the social and cultural



impacts of different models, reimagining suburbia, and how the clever design of buildings and neighbourhoods can sustainably support aging populations and healthy communities.

While the panel discussion did not propose any definitive answers to the questions we posed, a series of themes emerged through the discussion, which also included questions for the panel from the floor.

Image credit:
Adam Hollingworth

Forum summary and synthesis

Can a radical approach to living provide us with a sustainable approach to densification? Can high density development ensure equitable access to public and shared space as well as good quality housing? Andrew Nimmo summarises the forum discussion.



1 / Housing Affordability

— Housing affordability is the number one issue for many people in Sydney and around the world.

Andrew Nimmo: Whilst there was no direct discussion about the causes or solutions to the housing affordability crises, as a global issue, it would seem reasonable to assume that there are common causes and potential solutions that can be shared. The obvious variables are: land cost, housing density, housing size, building cost, supply and demand, development risk and profit, Government and legal costs, interest rates, shared services – however which of these levers are effective in improving affordability?

2 / Communication

- Types of drawings necessary and appropriate in a commercial context do not always clearly communicate the issues relevant to public spaces;
- When understood, drawings have the capacity to move the conversation beyond aesthetics and beyond short-term solutions, to challenge the status quo;
- Illustrating an understanding of the specific local issues is critical, it demonstrates knowledge and respect to local communities;
- Community workshops and public exhibitions are a consistently useful means to facilitate community discussion and ensure that the community is kept up to date and gains an insight into the process.

AN: Successful communication is the key if we are to change the way that we do things with the backing of community, government and industry. Regardless of style or audience, communication should always be clear, simple and transparent.

3 / Pilot Projects

- Exemplar pilot projects initiated by Government could be used to set the benchmark.

AN: The private sector may be reluctant to try new housing models, and may struggle to gain funding

where there are not comparable commercial prototypes already in the market. The lending practices of banks have a major influence on which projects proceed, however their decisions are mostly based on perceived risk, not innovation or quality outcomes. The best way to start the discussion about alternative housing typologies may be to lead by example through targeted pilot projects.

4 / Review of Planning Controls

- Review and test the planning controls, including zoning mix, in order to avoid unintended consequences of existing settings and to promote innovative responses;
- If there was a mandatory inclusion of affordable housing, how should the percentage be determined and how is it funded/incentivised?

AN: Planning controls also need to contain a mix of quantitative and qualitative rules to both make clear the intent and to enable flexibility.

5 / Value Capture

- Through flexibility in planning controls, such as zoning, FSR and height, authorities have enormous capacity to share in value capture on land.



Exhibitions can illustrate ideas in ways the public can understand and easily engage with. Image credit: Jeffrey Shumaker, micro apartments project, New York

AN: Successfully leveraged, value capture could allow for the funding of new and improved Public Space, and can assist in the negotiation for inclusion of less profitable uses that benefit the community. Private development can be used to fund and build public infrastructure where land values are increased though planning changes.

tax rules like Negative Gearing, tax concessions for provision of affordable housing, or ensuring that Public Transport is cheaper than private transport. With the reduced affordability of housing in the major cities, greater security of tenure for tenants should be considered a priority.

6/ The Legal Issues and Government Policy

- Precinct improvements that lead to value uplift should not also be responsible for pushing out existing low income tenants or businesses – how do you preserve a diverse mix?

AN: Legal policy could direct encourage certain types of development and the speed of development – such as through

7/ Arguing the Case for Higher Density

- What does increased density look like in the Sydney context? Is it knitted into the existing neighbourhood? does it involve mass clearing? how are heritage items/precincts and scale variations handled?
- The emphasis on the private motor car needs to change
- Not so long ago many Politicians argued against density from an ideological position – the need for

density must now be a bipartisan issue if it is to be popularly supported as density outcomes require long-term planning beyond the election cycle.

at all scales and for all demographics. Sydney is more than just the harbour and the beaches – it is also culture, community, urban fabric and the suburbs.

AN: Urban designers have long been sold on the benefits of increased density, however it has been poorly sold to the community. Even the distinctions between high, medium and low density are not well defined. What does ‘good’ or appropriate density look like? Arguing the case for good density, along with improved public infrastructure, is perhaps the most important and necessary change that can occur in Sydney.

9 / Precedent Study

AN: Precedent studies that compare how different cities deal with similar issues is an important part of understanding how living in NSW can be improved.

8/ City Pride

- How is City Pride encouraged? Can having pride in the city be leveraged as an important part of improving how we live?
- City Pride exists at both neighbourhood scale and city scale (often more actively contributory at the neighbourhood scale). Example – New York is seen as having city pride, because of a series of neighbourhoods with local pride which together equate to city pride.

AN: Sydney should be promoted as one of the great cities of the world. However, ‘city pride’ needs to be nurtured across the whole city,

The emphasis on the private motor vehicle needs to change, suggested transport hierarchy:

- ① Pedestrians
- ② Cyclists
- ③ Public transport
- ④ Private transport



Above - The Commons Apartments (see forum primer) is a potential precedent study in different models of residential development delivery. Image credit: Andrew Wuttke, courtesy Breathe Architecture



Left - Upper House, Carlton for Piccolo Developments (see forum primer) Understanding the potential for positive outcomes as a result of higher density is important to arguing the case. Image credit: John Gollings, courtesy Jackson Clements Burrow

Key lessons for New South Wales

ANDREW NIMMO, LAHZNIMMO ARCHITECTS

While the themes that emerged in this forum are not surprising, they are a reminder of the issues that need to be addressed when considering “How do we live”. The themes are a kind of checklist, though certainly not an exhaustive one. Sometimes restating what seems obvious can in itself be insightful.

What did emerge as an issue that many urban designers take for granted, yet many in the community are not convinced about, is the potential benefit of higher density living and densification of the existing urban fabric.

As one panel member said, “Really, we (have) arrived at the point that in Sydney we just don’t do density very well, we’re frightened to talk about it, let alone live in it or advocate for other people living in it. I think that when you look at Sydney and that push at the edges which is primarily residential, it’s a crisis in my mind that we just don’t talk about.”

Sydney is at an important tipping point where its footprint is at the limits of sustainable travel distances, yet we know that it will continue to grow in population. As noted in the Introduction, “...an extra 664,000 new homes over the next 20 years alone, just to keep pace with demand.” Therefore increased density has become a necessity. However, arguing the case for density, and

arguing that it can be positive, has not been prosecuted successfully to date. This is not just a Sydney problem. The discussion about density is occurring in every large city around the world and there are still many who argue passionately against the impacts of density.

However the benefits of good density can help to address some of the other themes which arose in the discussion, such as housing affordability; and can encompass many of the other themes, such as value capture, pilot projects, planning review, government policy and city pride. This is why higher density has been highlighted in this summary statement as an area of policy development that could be pursued by the OGA.

At present there is a perception that high density means tall buildings. The extra height often sought by developers is more about getting better views for high value apartments, than higher yield. Decoupling ‘high rise’ and ‘high density’ is an important part of the debate.

There is also a distinction between ‘good high density’ and just ‘high density’. To achieve good density a number of other urban outcomes need to also occur, such as; improved public transport infrastructure, high quality urban design and mixed uses.

There is a need to define a range of what is considered appropriate density, as development can be 'too dense'. It's all too easy for a sensible discussion about the value of high density to be lost with unfavourable comparisons to overseas examples. If current or new developments overreach in their quest for high density, then they may be setting back the sound arguments for sensible increases in density in the mind of the public.

It is interesting to note that the argument for and against higher density sometimes overlap. A quick scan of articles, essays and the like available through an internet search reveals the following common perceived problems with density:

- Less open space, less 'nature'
- More crime
- More pollution
- More noise
- Worse traffic
- Lack of privacy
- Lack of sunlight
- No garden
- Cannot have pets
- Apartments are un-Australian – the great Aussie House.
- Too crowded
- The 'slums of the future'
- Being 'forced on us'
- Destruction of heritage, which is usually low density
- Lacking human scale
- No place for children to grow up
- Less healthy
- Lack of community.

A similar scan for common arguments promoting density reveals:

- More accessible and better accessibility
- An active, artistic, innovative, diverse community
- Bicycle-friendly
- Less pollution due to reduced reliance on private transport
- Promotes community
- Convenient / convenience
- Economically productive and efficient
- Efficient (shared infrastructure)
- Pedestrian-oriented and walkable between destinations
- Safer with better surveillance and less crime
- Facilitating more affordable housing choices
- Facilitating better standards of public space
- Curbing the negative impacts of sprawl
- Mitigating climate change
- Dramatically decreasing energy costs
- Making rapid and efficient public transport viable
- Making walking, biking and transit more inviting
- Improving public health
- Preserves productive land.

The Urban Land Institute in Chicago, a non-profit research and education organization, has produced two reports titled 'Density: Drivers, Dividends and Debates' and 'The Density Dividend: solutions for growing and shrinking cities', which are useful primers in the discussion about density for cities. They list the characteristics of good and bad density and these are quoted in full below as they are a useful executive summary when considering density.

They define the characteristics of good density as:

- **Mixed use of land.** Combining residential, commercial, retail, transport and green space creates a vibrant urban landscape which is used at all times of day and by different groups.
 - **Connected.** Includes high volume reliable public transport and leverages existing infrastructure. 80% of ULI members surveyed identified good infrastructure as an essential component of successful density.
 - **Planned in advance and incremental in pace.** Good density is the product of an overarching strategic vision about placemaking and specific/explicit project choices.
 - **Cohesive.** Meets social needs as well as economic needs. The aim of good density is not just to create capital assets but to serve people who live and work in the city.
 - **Liveable.** Enhances quality of life and liveability for residents. Good density mitigates the liveability stresses caused by concentration and takes advantage of the opportunities it creates to enhance public services and quality of life.
- **Spacious.** Good density provides public and open spaces for citizens to decompress regardless of their income.
 - **Has flexibility.** Good density can be increased or added to incrementally.
 - **Has design built into it.** High density does not always have to mean high rise, but should always mean high quality urban design.
 - **Green.** Has an environmental benefit and uses energy, waste, water and transport systems more efficiently. Encourages shared facilities and services.
 - **Appropriate.** Minimises impact on existing settled neighbourhoods and places. Good density reflects and accentuates the local character of existing neighbourhoods. Planners take measures to accommodate and provide for existing residents.



The award winning Platform Apartments (see forum primer) demonstrating good quality medium density and affordable housing. Image credit: City West Housing

They define the characteristics of bad density as:

- **Monotonous.** Dense, single land use appears to prevent the advantages of density from being leveraged and fosters negative externalities instead.
- **Isolated.** Without transport infrastructure density is not able to fulfil its key role of facilitating access, and can lead to unmanageable traffic challenges.
- **Occurs at a rapid and unmanaged pace.** Places and people become overwhelmed by rapid density which prevents assimilation and the investment needed to make density work.
- **The concentration of single income populations (whether high income or low income) or single ethnic groups.** If density is combined with income or ethnic segregation, it can have the unintended effect on increasing 'ghettoisation' or spatial inequality.
- **Unliveable.** Without good public and private services density can become monolithic, scary, and imprisoning.
- **Bad density can breed crime and insecurity, making dense spaces fearsome and unattractive.**
- **Absence of public and open space / connectivity.** Without the space to decompress density can become oppressive and feel crowded.
- **Lack of adaptability to changing economic and social circumstances.** Dense buildings that are inflexible can prevent a whole district or neighbourhood from adapting. It can have a blighting effect.
- **The absence of good urban design.** Density can be created in ways which are perceived to be ugly.
- **Polluting.** Traffic congestion and heat island effects stemming from poorly planned density can be detrimental to the environment.
- **Conspicuous and inappropriate to existing scale of buildings and character of city scape.** The blend of buildings in the same neighbourhood is key, each city or district has its own vernacular or narrative that dense buildings need to be in tune with.

Who makes decisions about density and who promotes it work hand in hand with how successful the outcomes are, and how successful they are perceived to be. Decisions about what good density looks like need to be made in a transparent and consultative way. Whether accurate or not, the current popular public perception is that it is more about driving profits rather than the public interest.

Given that Sydney needs to achieve a higher density of residential development going forward if it is to grow in a sustainable way, then the OGA can have an important role to play as the policy leaders and should be:

- Promoting the benefits of higher density;
- Defining what is an appropriate density;
- Being clear about what else needs to occur in order to achieve ‘good density’.

Sydney is already one of the most economically vibrant and livable cities in the world and the benefits of higher density living and densification of the existing urban fabric should be a part of that continuing success.

Andrew Nimmo is a director of lahznimmo architects and an Adjunct Professor at the Faculty of Architecture, Design and Planning, University of Sydney.

Keynote & Panel

Keynote / Jeffrey Shumaker

Jeffrey is the Chief Urban Designer and Director of Urban Design for New York City. He has worked on a number of city-wide initiatives and neighbourhood projects across New York. Jeffrey believes in the transformative role of urban design in making cities both more liveable and sustainable. He is interested in whether a radical approach to living can provide us with a sustainable approach to densification and whether high density development can ensure equitable access to public and shared space as well as good quality housing.

Facilitator / Olivia Hyde

Olivia is Director of Design Excellence for the NSW Government Architect. Olivia is an architect and urban designer and has worked on a wide range of award winning projects across Australia and around the world, with a focus on public infrastructure. She has taught extensively in both Sydney and the USA.

Heather Nesbitt

Heather is the Social Commissioner for the Greater Sydney Commission. She has over 30 years' experience in social sustainability, social housing, community infrastructure planning and social impact assessment. She has primarily worked on

major greenfield and urban renewal projects, including public/social housing for government, non-profit and the private sector.

Vicente Guallart

Vicente leads Guallart Architects and was the Chief Architect of Barcelona (2011-2015), a city which has undergone massive transformation over the last 30 years to become economically stable. Vicente is interested in how design-led approaches identify opportunities for beneficial outcomes for the community assisted by new approaches to governance, procurement, design and delivery.

Bob Perry

Bob is a Director of Scott Carver, an interdisciplinary design

practice based in Sydney. He is also Chair of Place Leaders Asia Pacific. Bob has been a director in private practice in Sydney for 40 years and has been involved in several transformative waves of development including Australia's Bicentenary, the Sydney 2000 Olympic Games and recent and current transformations to the Sydney Opera House.

David Tickle

David is the leader of Urban Design at HASSELL. He works with HASSELL's global urban design team to design and deliver great urban places. David has experience leading a range of master planning and urban design projects, including whole-of-city visions, major urban renewal projects and mixed use

developments. David also leads HASSELL's Urban Futures initiative, a program of research and design speculation focused on the challenges of urbanisation.

Brendan Edgeworth

Brendan is currently Director of Postgraduate Studies in the UNSW Law School. His research and publications cover the areas of law and social theory, and legal history. His research is also directed to the reform of housing law and property law. He has been engaged as a consultant to the New South Wales Law Reform Commission (1996), and was a member of the Board of the Tenants' Union of New South Wales from 2004-12.

Shaping our futures since 1816

In 1816, Governor Lachlan Macquarie appointed architect, stonemason and convicted forger Francis Greenway as civil architect and assistant engineer to the colony of New South Wales.

The appointment established the role of NSW Government Architect which has endured unbroken for 200 years.

The bicentenary takes place at a time of momentous change as NSW, like the rest of Australia and indeed the world, faces the challenge of creating a sustainable future, particularly in the cities and towns where most of us work, live, learn and play. What sort of places do we want our cities and towns to be? How can we achieve that?

Recent research shows that Australians want good design and understand the consequences of a poorly designed built environment. How do we honour that?

To give shape to this debate, the NSW Office of the Government Architect (NSW OGA) is launching GA200+, a program of forums, discussions and keynotes in Sydney and regional NSW for government, industry, researchers and the public about how we can collectively deliver a great built environment for the public good in the years ahead.

Strategic themes brought to light at GA200+ will be presented in discussion papers to inform an inaugural, draft Policy for Architecture and Urban Design in NSW.