Urban Ideas

May 2014

A PUBLIC INTEREST MAGAZINE FROM THE URBAN TASKFORCE AUSTRALIA

SYDNEY 2050!

Visions for Sydney's future by leading architects

// Francis-Jones Morehen Thorp
// Bates Smart
// fitzpatrick+partners

Sydney 2014

Number One City in the Asia Pacific Region?

Urban Taskforce
AUSTRALIA

Sydney must aspire to being a leading Asia Pacific city in 2050

The symbol of a global city has become the high rise tower. Hong Kong has super tall towers in the form of the International Finance Centre and the International Commerce Centre. Shanghai has its World Finance Centre at 492m and Tianjin is building Goldin Finance 117 at 117 storeys. These buildings present each city as a financial hub connected to the flow of capital around the world and they do this through height.

WILL SYDNEY ALWAYS BE AUSTRALIA'S GLOBAL CITY

Currently Sydney claims to be Australia's only global city and the centre of financial transactions but Melbourne and Brisbane are beginning to challenge this position. Already both of our neighbouring cities have higher buildings than Sydney and fast forward to 2050 and both Melbourne and Brisbane could become the global financial hubs that Sydney is now. So the Urban Taskforce challenged three of Sydney's top architects to develop proposals for Sydney in 2050 on the assumption that we remain the global financial centre for Australia.

VISIONS OF THREE ARCHITECTS

The three architects Francis-Jones Morehen Thorp, Bates Smart and fitzpatrick+partners each responded in different ways but all with a generational jump in the height of Sydney's centre. Their images make us wonder if this could be possible but the same reaction must have occurred in 1882 when the Farmers building set a new height record of 27 metres at 6 storeys. For 20 years the 1939 AWA tower at 112 metres was the highest building in Sydney. Just as these buildings in their day seemed to have set a new standard that most people assumed would never be beaten so in today's world the current high rise towers of Sydney will be dominated by taller buildings.

SUPERTALL AND MEGATALL TOWERS

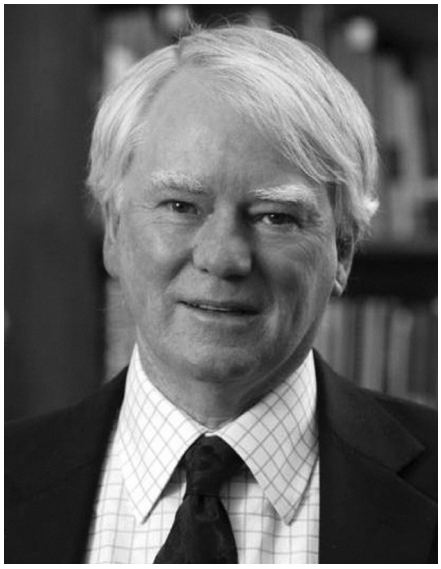
The tallest building in Sydney is Sydney Tower which reaches 309 metres at the very top of its spire. It isn't really a building in the sense that it has occupied floors all the way up so the building that comes next in Sydney would be World Tower at 230 metres and 73 floors. Sydney therefore does not even have one supertall tower above 300 metres let alone a megatall above 600 metres. These are the new definitions used around the world to describe the new breed of skyscrapers. There are around a dozen megatall towers planned or under construction around the world and many dozens of supertall planned or built.

SYDNEY IS THE IDEAL CITY FOR SKYSCRAPERS

Sydney's main centre is a relatively narrow peninsular bounded by Darling Harbour on the west, gardens on the east and the harbour on the north. This leads to spectacular views of the city across the water from Pyrmont, North Sydney and up the harbour to the east. The drama of the tall skyscrapers coming down to a natural edge of park or water provides a very special urban character. New York has a similar drama being located on a peninsular surrounded by water but it has ten times the land area of Sydney.

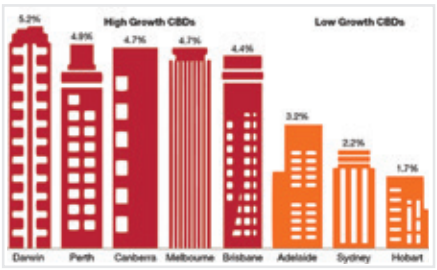
HEIGHT IS A METAPHOR FOR A SUSTAINABLE CITY

While this issue of Urban Ideas focuses on the business centre of Sydney, the message about height is equally applicable across other centres and transport nodes across the city. Clearly the Sydney City and North Sydney precincts will have the highest heights but a similar approach with lesser heights, could occur in Parramatta, Chatswood, Liverpool, Penrith, Hurstville and the many town and city centres across Metropolitan Sydney. American Professor Vishaan Chakrabarti from Columbia University in his book "A Country of Cities - A Manifesto for an Urban America" encourages citizens to build tall rather than sprawl. The same manifesto could apply to Sydney's new development.



The Urban Taskforce is keen to have responses to the proposals illustrated in this issue of URBAN IDEAS and we welcome comments to **admin@urbantaskforce.com.au**

Chris Johnson AM
Chief Executive Officer
Urban Taskforce Australia

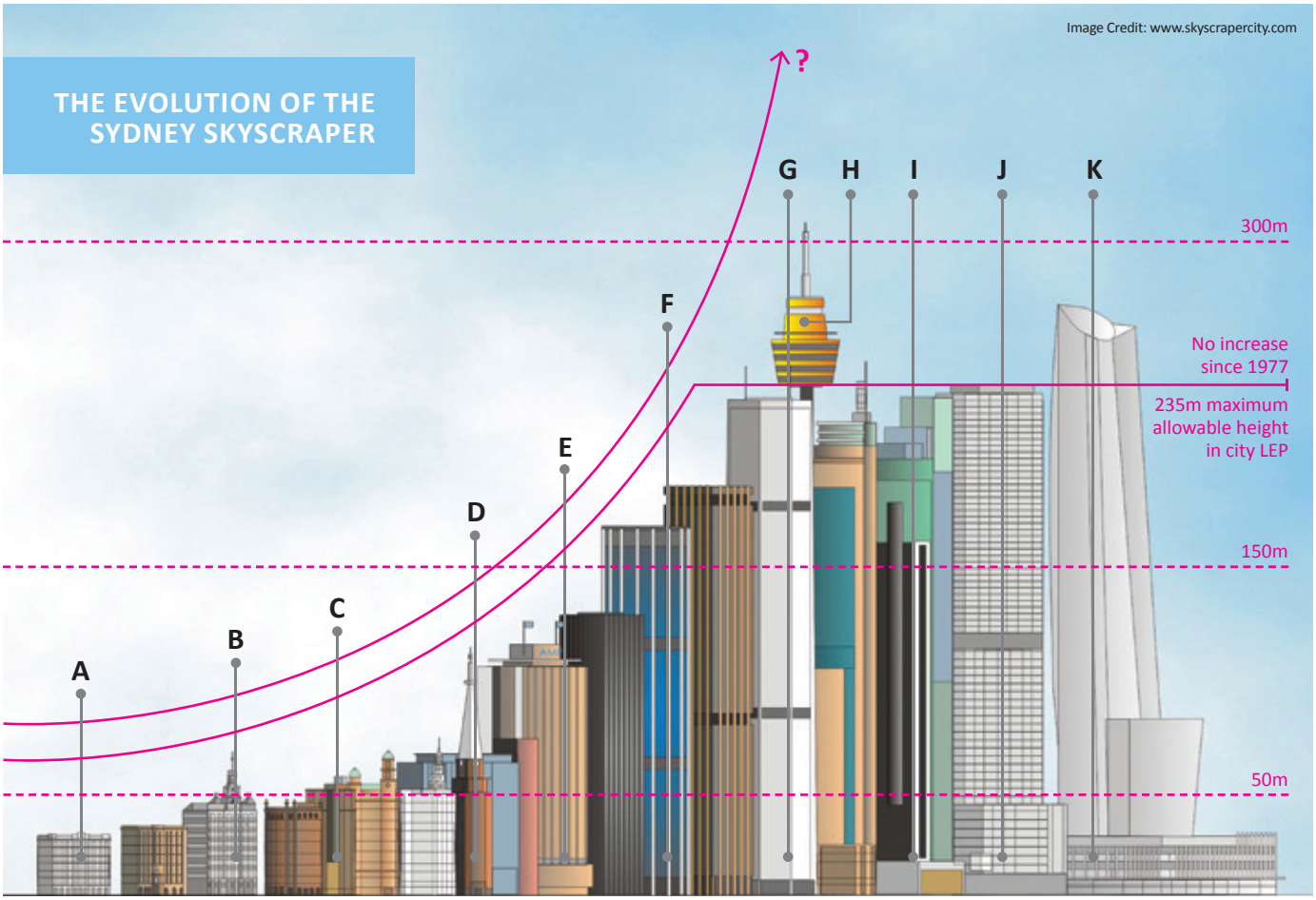


Annual growth rate for CBDs 2000/01–2012/13

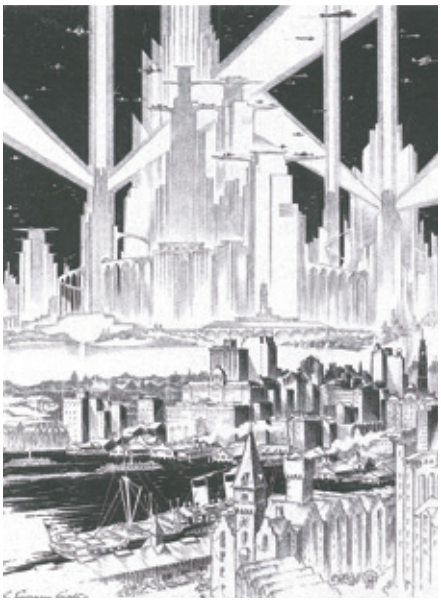
Sydney is measured as a low growth economic output CBD by a recent PwC study while Melbourne and Brisbane were measured as high growth CBDs.

Diagram Source: PwC Geospatial Economic Model (GEM), March 2014
The cover image of this issue is by Bates Smart.

Sydney should keep on growing like other global cities



- **A 1882, Farmers Building**
  6 storeys, 27 metres
- **B 1891, Australia Hotel**
  8 storeys, 55 metres
- **C 1912, Culwulla Chambers**
  12 storeys, 48 metres
- **D 1939, AWA Tower**
  14 storeys, 112 metres
- **E 1962, AMP Building**
  26 storeys, 115 metres
- **F 1967, Australia Square**
  45 storeys, 170 metres
- **G 1977, MLC Centre**
  60 storeys, 228 metres
- **H 1981, Sydney Tower**
  309 metres
- **I 2004, World Tower**
  73 storeys, 230 metres
- **J 2016 Greenland Centre**
  70 storeys, 235 metres
- **K 2018, Crown Casino**
  70 storeys, 275 metres

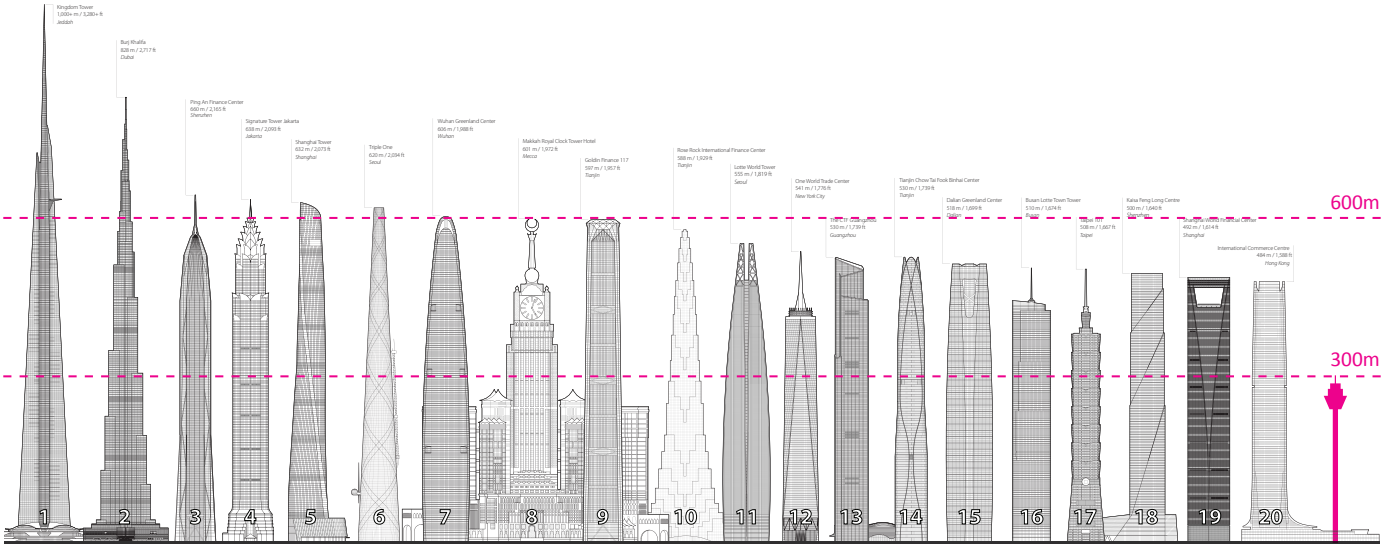


Robert Emerson Curtis's, 'Old Circular Quay with Sydney in the year 2000' (c1930s)

The current Sydney City planning rules ensure that Sydney Tower which is 309m to the top of its spire and 235m to the underside of the viewing floors controls the heights of all other buildings in the city. Sydney Tower was designed in the 1970s and completed in 1981. Sydney must not let 1970s attitudes control the future form of the city. Since the 1970s other world cities have adopted much higher skyscrapers.

A visionary drawing of what Sydney could look like in the year 2000 drawn by Robert Emerson Curtis in the 1930s. Most Sydney buildings were 8 storeys high with a few at 12 in the 1930s. The 1977 MLC tower at 60 storeys and the 2004 World Tower at 73 storeys are close to Emerson Curtis's vision.

The tallest buildings in the world are now double the height of Sydney Tower. Melbourne and Brisbane have taller buildings than Sydney



© Council on Tall Buildings and Urban Habitat

Future tallest skylines in 2020, in comparison with Sydney's Centrepoint tower

The boom in tall skyscrapers around the world has led to the establishment of a council of experts, special websites and congresses, all focussed on taller and taller towers. The key organisation that runs all of this is the Council of Tall Buildings and Urban Habitats (CTBUH) www.ctbuh.org. The rate of change is evident in reading from a CTBUH statement in 2012.

"As we started the 21st century, just 11 short years ago, the Petronas Towers held the title of "The World's Tallest" at 452 meters in height. Taipei took the title in 2004, at 508 meters. Then, at the end of the decade, the Burj Khalifa set new standards at 828 meters. Now with work set to start in 2012 for Jeddah's 1,000+ meter Kingdom Tower we can expect that in a mere two decades (2000 –2020) the height of the "World's Tallest Building" will have more than doubled.

The CTBUH now uses the term SUPERTALL for towers up to 300 meters and MEGATALL for towers over 600 meters tall. The graphic depiction of the predicted world's 20 tallest towers in the year 2020 (above) demonstrates where high rise is going. The Sydney Tower is shown at the same scale to demonstrate that Sydney's skyscrapers are much lower that many others in global cities.

1 **BRISBANE** – The Infinity Tower by Meriton is 80 storeys high.

2 **MELBOURNE** – The Eureka Tower is 91 storeys high.

3 **PARRAMATTA** – The proposed Aspire Tower is 90 storeys high.

4 **NEW YORK** – The Empire State Building is 103 storeys 381 meters high and 443 meters to the top of the spire. It was built in 1931.

5 **LONDON** – The Shard is 87 storeys and 306 meters high.

USEFUL WEBSITES ON SUPER HIGHRISE

www.ctbuh.org
www.skyscrapercity.com
www.skyscrapercenter.com
www.emporis.com
www.skyscraperpage.com

Three visions for Sydney 2050 by three leading architects

Urban Ideas asked three leading Sydney architects to develop their own vision for what Sydney could look like in 2050. Our brief was to think laterally and not be constrained by the current planning rules for the CBD of Sydney. The architects are fully aware of what is happening in the world of high rise towers and each has designed their own high rise buildings. We workshopped the ideas and the potential but left it to each architect to come up with their own concept.

With the help of computer generated images it is somewhat easier to develop some dramatic concepts than in the days of Emerson Curtis who painstakingly drew every line in his vision of the 1930s. Importantly each architect had an underlying concept about public infrastructure, transport and the public domain that underpinned their designs. It is important that viewers see these designs as being conceptual and not resolved in detail. Their purpose, like those in earlier years by visionary architects and planners, is to stimulate discussion about the ideas and to challenge today's thinking by fast forwarding to 2050.

Behind these three visions is a question of where we all see Sydney into the future. These designs clearly support strong growth in Sydney as a leading city in the Asia Pacific region. They see Sydney as a place of confidence in the future and as a place that supports an urban lifestyle.

Richard Francis-Jones has used the solar access planes from green areas to define where tall buildings can be built. Philip Vivian funds a new metro system by clustering height around new stations and James Fitzpatrick disburses the future city to five specialist centres linked by a circle line metro.

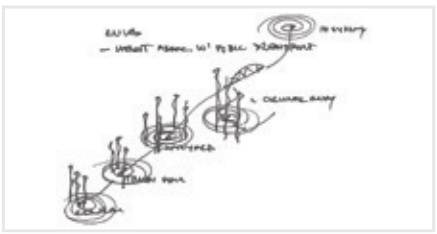
FRANCIS-JONES MOREHEN THORP
RICHARD FRANCIS-JONES

GREEN NETWORK DEFINES AREAS OF GROWTH

ANZ Tower, Sydney

BATES SMART
PHILIP VIVIAN

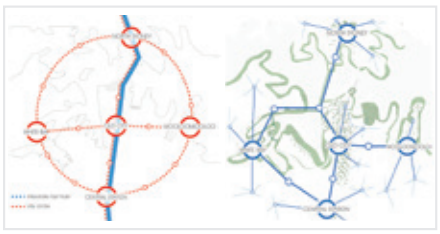
NEW METRO STATIONS AS A FOCUS FOR SUPER TALL TOWERS



Tower of Culture, China

FITZPATRICK+PARTNERS
JAMES FITZPATRICK

FIVE SPECIALIST CENTRES WITH METRO LINKS



33 Bligh, Sydney

Francis-Jones Morehen Thorp
Richard Francis-Jones

GREEN NETWORK DEFINES AREAS OF GROWTH

For the City to grow, so too must its public open and green spaces. An extended rich green network of public open space coupled with increases in buildings heights, can create a balance of open space and density that makes a great City.

Our vision is a strengthening of the east and west green edges of the city together with a new central green spine that extends over the Harbour Bridge and Bradfield Highway.

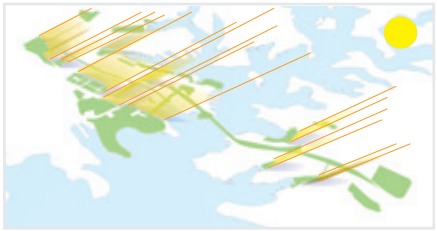
This network will be in the form of suspended green decks over the existing roadways to create new parkland. Green spaces will weave an extended city together by encouraging recreation, movement, markets and other community events.

It is the projected winter sun access planes from these green public open spaces that become the primary limiter of building heights. While released from an overriding height limit it is the amenity of the spaces that must be maintained with generous winter sun and protection from winds ensured.

The growth in height and density enables and supports the extension of the green network, creating the symbiotic balance of a great city.

An extended and enhanced Prince Alfred Park supporting growth in the South

An extension of the green network of public space



Winter sun access planes from green spaces

Built form and tower heights limited by winter sun

www.fjmt.com.au

To view this architect's full presentation click here

A suspended green deck over the Harbour Bridge will form one of the world's greatest public spaces

A green parkland deck above the Bradfield Highway supporting the growth of North Sydney

Bates Smart
Philip Vivian

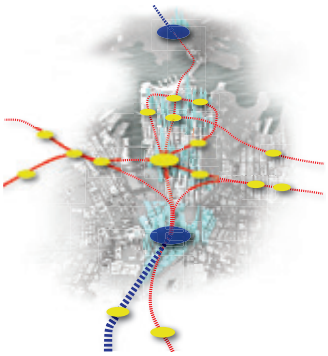
NEW METRO STATIONS AS A FOCUS FOR SUPER TALL TOWERS

Our vision is based on balancing sustainability and economic development. For Sydney to sustainably increase density it needs a fully integrated transport system. Bates Smart's proposal is for future supertall development in the city to fund a sustainable transport system.

A new Metro system is proposed that services the inner ring suburbs of Sydney, while the existing heavy rail network will service outer ring suburbs then go express through the inner ring to the city centre. To directly link supertall development to a sustainable transport network, supertall buildings are allowed within 200m of a Metro station in the city centre.

The economic uplift of additional floor space for supertall developments is directly linked to the provision of sustainable transport, through the purchase of supertall floor space area from the State Government.

These principles have been quantified in a parametric model to create a future vision of Sydney. The concept allows for significant additional floor space. Using the current value of Heritage Floor Space as a benchmark, and compounding its value over 35 years Bates Smart estimates this realizes $7.1 Billion to fund a sustainable transport network.



Heavy Rail and Metro Nodes

www.batessmart.com.au

To view this architect's full presentation click here

fitzpatrick+partners
James Fitzpatrick

FIVE SPECIALIST CENTRES WITH METRO LINKS

Sydney enjoys its relationship to the water and the landscape. The city centre we know is also strangled by these elements on three sides, permitting only a small dribble of growth to the south over the rail interchange lands.

We enjoy our city with its contained streets and hidden lanes, our narrow shafts of sunlight into our open courts, parks and plazas, yet our already stretched transportation systems continue to erode these spaces and the experiences they offer.

To grow we must intensify what we already have, and put under even more pressure what we hold to be precious. This is not an option, so we must simply jump these blockages to the spaces beyond. Resolving our transportation model is therefore our pathway to the future.

Sydney is a city of centres. For Sydney to grow we must add new centres, and then seed them all with an idea or a trait. Time and process will allow them to develop their own distinctive personalities and moods, as they grow to their full potential. The linking of these centres by foot, ferry, bike, light rail and metro must be functional, but also allow for exploration and enjoyment. It ensures success.

We are a new nation placed upon an old land. We can learn from others, but then should instil this knowledge with our 'genius loci' or spirit of place. We should lift experiences from the centres of Hong Kong, New York, London or Madrid, we should create the people spaces of Zurich, Prague, San Francisco or Copenhagen, and then use our unique geography and relationship to our harbour to infuse the magic that we know marks Sydney above the rest.

The idea of the linked centres will allow our city to grow. Perhaps North Sydney as our services centre, White Bay the new financial wharf, Woolloomooloo our creative village, and Sydney Old Town our corporate and retail heart.

This proposal is not enlightening, it is logical. Sydney 2054 can be a city of centres held together with our green fingers and wrapped tightly by our watery edge. We can create a pattern for growth through minimisation – keeping, restoring and creating what we enjoy and removing the rest.

City circle and interstate train

Buses, lightrail, pedestrian link

www.fitzpatrickpartners.com

To view this architect's full presentation click here

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PROMOTING TALL BUILDINGS AND A VISION FOR SYDNEY

The Urban Taskforce thanks the three architectural firms who developed the visions in this document. The electronic flip book version of Urban Ideas is on the Urban Taskforce website and there are direct links to further information on each project.

We would like to thank the three sponsoring members Mirvac, Brookfield Multiplex and Leighton Properties for supporting this project. Each of these companies has produced impressive high rise buildings across Australia.
The illustrations on this back cover are of high rise buildings by the three sponsoring members of the Urban Taskforce.

Brookfield Multiplex
Macquarie Bank Building, Sydney
Architect, fitzpatrick+partners
www.brookfieldmultiplex.com

Leighton Properties
177 Pacific Highway Tower, North Sydney
Architect, Bates Smart
www.leightonproperties.com.au

Mirvac
200 George Street Tower, Sydney
Architect, FJMT
www.mirvac.com

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LEIGHTON PROPERTIES

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