PIA Seminar
Housing Density & Design

Presentation by Tim Redway
June 2008
Housing Density

• What if we were to think about people density?

• How much has the amount of personal space within the home changed over the past 80 years?
People density within the home

- In 1933 the average Australian had 31 square meters of personal space within the home.
People density within the home

- In 2007 the average Australian has 91.2 square metres of personal space within the house.
- Three times the amount of space as our grandparents!
People density within the home

• How has this rapid increase in space occurred?

• Over the past three decades Australian homes have continually expanded in overall size. Since the early 1970s, the average Australian home has grown in size by almost 100 square metres, or around 70 per cent. In 1973 a new home was on average 135 square metres.

• In 2007 the average size of a new home in Australia was 254 square metres.
More space and fewer people

4. As the graph below shows, house size has increased gradually but consistently over this time.
5. Despite the fact that our living space has been steadily increasing, the number of people inhabiting Australian homes is decreasing. The graph below demonstrates the steady decrease in the number of inhabitants per dwelling.
More space and fewer people

6. In 1933 there was an average of 4.23 inhabitants per dwelling. In 2003, a typical house had just, 2.5 people living in it.

7. The graph below demonstrates this drop in household size.
What households are taking up this space?

- The typical Australian new home (McMansion) is of often blamed for wasting space.

- ABS research into housing type and occupant composition indicates it may actually be medium + higher density dwellings that are fuelling the growth in personal space at home.
The ABS used the Canadian National Occupancy Standard as a guideline for assessing household family composition and dwelling size.

The number of bedrooms in a dwelling compared to the number of occupants was the basis for this comparison.
“The McMansion” and Occupancy Standards.

- Couples with dependant children were more likely to build a new home.
- The household was likely to have 4.1 occupants.
“The McMansion” and Occupancy Standards.

• The average number of rooms in a new home was likely to be 3.5.

• Therefore, in suburban Australia, the average new home was likely to have more people than bedrooms.

• 4.1 people for 3.5 bedrooms.
Medium & high density + occupancy.

- Lone person and couple only households were more likely to live in townhouse and apartment dwellings.

- Lone people were likely to have 2.4 bedrooms in their dwelling.

  \[1 : 2.4\]
Medium & high density + occupancy.

- Couples without children were likely to have 3.0 bedrooms in their dwelling. 2.0 : 3.0

- Ironically the ABS research indicates that it is the medium + high density dwellings where “spare rooms” are more likely to occur.
Medium & high density + occupancy.

- Using the Canadian Occupancy Standards this indicates that “The McMansion” is more likely to be overcrowded.

- This is not to suggest that we think suburban homes should get bigger.
Higher density homes expand

1. From 2000 to 2007 the average floor space of medium density homes, including townhouses and low rise apartments, increased by 8.5 per cent to 153.7 square metres.

2. Meanwhile, the size of an average high density apartment (greater than four levels high), has increased in that time by 7.2 per cent to 137.3 square metres.

3. The average floor area of new Australian homes now stands at 254 square metres up 15.59% in the same period.

4. “Higher density is starting to mean more bedrooms, bathrooms and living space as well.”
Higher density homes expand

5. Historically, detached homes have contained 3.3 bedrooms on average, while flats units and apartments have had 1.8. Townhouses and other medium density homes have averaged 2.4 bedrooms per dwelling.

6. In higher-density homes built recently, there has been a noticeable trend towards more bedrooms. Sixty-eight per cent of those built in the three years to 2003-4 featured three or more bedrooms, compared with only 38 per cent of similar, existing homes.
Medium density growth outpaces ‘traditional’ homes

1. New research shows demand for medium density homes and townhouses in Australia’s capital cities has more than doubled traditional housing.

2. Data analysed by AVJennings shows that during the past 10 years, the number of people living in semi-detached houses has risen by 39.6 per cent compared with detached homes increasing by 17.5 percent.

3. Medium density home sales are increasing not only in inner-city locations but also in middle and outer ring suburbs where they offer a better lifestyle solution than high-rise apartments.
Housing Occupancy and Density

- Higher density dwellings are contributing to the growth in personal space at home.

- And when contrasted with occupancy standards are accelerating the growth in space more than “The McMansion”.
What is the impact?

• We believe the typical Australian home is too large – Average 254m$^2$.

• We believe medium and high density dwellings are probably too large – Average 150 m$^2$ in Australia.
What is the impact?

- The size and growing occupancy standards of dwellings is detracting from the focus on sustainable housing.

- Australian’s have a cultural alignment to home ownership and high occupancy standards.
What is the impact?

• So what is going to change?
What is the impact?

- AVJennings has been part of suburban Australia and development for 75 years.

- We think that the insatiable demand for larger homes originated in the early 20th century, with the idea of the garden suburb.
The Garden Suburb, Early 20th Century.

In 1913 journalist Albert Goldie described the first garden suburbs, as ‘a community of interests by which every individual enters into an implied contract to contribute to in the planning of his home life to a scheme of beautification.’ The early suburbs gave rise to a sense of collective community responsibility for the appearance of suburban streets and neighborhoods.
The Garden Suburb, Early 20\textsuperscript{th} Century.

- This was a valid planning approach but is not sustainable in today’s metropolitan areas.

- If we were to re-write this quotation today, it might say something more like -
Sustainability Vision

• “A community of interests by which every individual enters into an implied contract to contribute to the planning of his dwelling to a scheme of sustainability.”
Sustainability Vision

• So how could we make this happen?

• If we leave it to consumers to decide by themselves then it won’t happen.

• AVJennings research and involvement in this area stretches back nearly 20 years.
Sustainability Vision

• Our first foray commercially was with the Regent Gardens/Northfield housing project in 1992.

• Even then, customers preferred larger allotments and larger homes.

• Smaller allotments and homes were hard to sell, except to those with affordability considerations.
Sustainability Vision

• Many of the measures in sustainable suburbs like this were unprofitable for builders & developers, particularly if consumers had a choice to avoid paying for them.
Where to next?

- The gradual introduction of state based energy efficiency regulations goes part of the way.

- But there needs to be more done.
Where to next?

- AVJennings would support national initiatives from the Federal Government to uniformly and more adequately institute sustainability measures on housing and residential development.
The Future

• For consumers to be able to afford this, there will need to be a reduction in dwelling size.

• And therefore a reduced expectation on occupancy standards.
The Future

• This may increase our living densities, but will add to our sustainability.

• AVJennings considers that sustainability controls be placed on existing housing stock as well.
The Future

• At present new housing only accounts for 10% of all residential property transactions.

• There’s about 1 million established transactions a year that avoid any sustainability assessment.
The Future

• If we are serious about reducing the environmental impacts of housing, we really do need to be

“A community of interests”