WHY IS AFFORDABLE HOUSING SO HARD TO ACHIEVE?
Over the last 10 years, Sydney has experienced an unprecedented housing boom, where the costs of both purchasing and renting housing has skyrocketed to unfathomable levels. In 2018, the median house price hit 1 million dollars, as of January 2018, Sydney was ranked 2nd to Hong Kong as the most unaffordable housing market, and housing prices are now 13 times higher than median income (ABC News report, 2018). Numerous strategies have been proposed and implemented over the years to help provide relief, however, they all face similar challenges including:

- reliance on public funding to cover the high costs of land acquisition and construction costs, which is financially unsustainable. The amount of housing deliverable is restricted by the amount of funding available
- reliance of public subsidies to cover the gap between revenue generated by low income housing and the real costs of maintaining housing. Reduced public funding over the years has impacted on regular maintenance of and the gradual degradation of public housing stock.
- reliance on inclusionary planning strategies to mandate the private sector deliver a portion of private housing development as affordable housing. However, the percentage of affordable housing delivered as a portion of private housing is extremely low and not adequate to meet demand. Affordable housing is priced at 20-25% below market rental prices. Even if a discount, this may still not be affordable in inner city areas with sky high rents.
- most strategies focus on affordable ‘rental’ strategies but there are no clear affordable long term ownership models to allow families to achieve long term housing security. Without an end to having to pay rent, families are not able to accumulate wealth and improve their standard of living.
- the value of public land is liquidated through private sale or public private partnerships to develop affordable housing. However, the little public land available is lost forever after the sale. This is also extremely unsustainable as there is only a finite amount of public land available and land sold can never be repurchased at the same price in the future.

WHAT IS THE EQUITY HOUSING MODEL?
The Equity Housing Model is a further development of existing affordable housing development strategies, such as the Tripod Model, Nightgale Housing Model and community housing, further tailored to the Sydney housing market.

Its aim is to deliver truly affordable housing stock in a range of financial arrangements that focuses on long term housing and housing security instead of profit and asset generation. The model also proposes a viable financial model that minimises the need for government subsidies to ensure long term economic viability. Most importantly the model allows for housing development on public land without the need for government subsidies to ensure long term economic viability.

The financial model also takes into account that the housing stock developed will be retained as leasehold ownership as it is not required to cover maintenance costs of both affordable and social housing stock of the development.

WHAT ARE THE BENEFITS OF THE EQUITY HOUSING MODEL?
- Does not rely on government financial subsidy as all development and ongoing maintenance costs are covered in the financial model.
- Land that is provided by the government is only leased, not sold, and ownership is retained in public hands in perpetuity. After the end of the lease period, the government is able to repurpose the land for other uses as suits the needs of the time.
- Delivers housing at truly affordable prices as leasing and rental price points are set against median income and not subject to market manipulation or volatility.
- Delivers housing for anyone who needs housing, not just the very low incomes.
- Provides long term housing security through lifelong leaseholds rather than renting without end, which will help improve the long term financial health of young families.
- Is financially viable, repeatable and scalable to deliver large quantities of affordable housing very quickly, depending on amount of land available and current planning restrictions.
- It encourages low income residents to increase their income without fear of losing their eligibility for affordable housing. Their rents are adjusted accordingly and the increased revenue can be used to develop future housing.
- Housing developed cannot be used for speculative development, investment, inheritance or other forms of wealth accumulation so will not contribute to the worsening affordability of housing. The focus is on providing housing, not generating the greatest financial return.
- The low prices of housing developed will act as a damper on the private market as it provides a lower cost and higher quality alternative in the housing market, incentivising private housing developers to provide better private housing through market forces.

WHAT IS ‘LEASEHOLD OWNERSHIP’?
Affordable Leasehold Ownership Housing is an innovative housing model proposed by us that lies at the heart of the financing strategy of the Equity Housing Model.

Under a Leasehold Ownership, housing is purchased just like normal private sales. However, the sale is only for a ‘life time lease agreement’ for the housing, and not perpetual ownership. At the end of the lease, ownership of the housing reverts back to public hands. Land upon which housing is leased to the building corporation, with the lease ending at the same time as the Leasehold Ownership agreements.

Housing will be priced at 5 times median household annual income, which is considered the upper limit for housing affordability, which is approximately half the price compared to current market sales prices for 2 bed room apartments. In this way, families are able to have long term ownership and security of housing but do not own, and cannot financially leverage the property. This is to avoid residents taking advantage of the low price of housing and leveraging the property for investment purposes. Elderly residents also cannot pass on the housing as inheritance which is to avoid perpetuating wealth accumulation and inequality across generations.

However, this model is unheard of in Australia and is not aligned to current social norms of housing ownership and perceptions surrounding housing and home. In testing with focus groups, it was identified that some consider owner their home and being able to pass it onto their children as a key concern. Others believe having housing security to be a bigger concern. Further testing and consultation is required to determine legality and viability this model.
### Equity Housing Model

The following is a theoretical demonstration of how the model can be applied to develop housing in real world conditions, and demonstrate how the different components of the model work together to achieve a viable financial model. This is also compared to the costs of Market Sales Model and the Tripod Model which the Equity Housing Model improves upon.

**Disclaimer:** The costs illustrated below are drawn from a case study, research and accepted industry practices. However, they are estimates only and may not accurately reflect true costs or consider other factors unique to each individual project.

#### Demonstration Scope:

To develop 30 x 2 bed room apartment units, with 1 x level of basement parking within a 1000m² site in the City of Sydney. The land has a 2.5:1 FSR planning control and 6 storey height control. The apartments will achieve a medium quality finish.

#### Historical Summary

- **Land Purchase (DA Approved)**: $27,600,000
- **Construction Costs**: $9,200,000
- **Government Fees and Charges**: $4,500,000
- **Equity Housing Model**: $6,750,000
- **Equity Housing Model 3**: $9,000,000
- **Equity Housing Model 4 (Reduced costs)**: $9,000,000

#### Key Aspects

- **2.5:1 FSR planning control and 6 storey height control.**

### Table: Net Rental Income/YEAR

<table>
<thead>
<tr>
<th>Calculation Method</th>
<th>Market Sales</th>
<th>%</th>
<th>Tripod Model</th>
<th>%</th>
<th>Equity Housing Model 1</th>
<th>%</th>
<th>Equity Housing Model 2</th>
<th>%</th>
<th>Equity Housing Model 3</th>
<th>%</th>
<th>Equity Housing Model 4</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30 x Market Sales</td>
<td>10 x Market Sales</td>
<td>10 x Affordable Rental</td>
<td>10 x Social Rental</td>
<td>10 x Leasehold</td>
<td>10 x Affordable Rental</td>
<td>10 x Social Rental</td>
<td>15 x Leasehold</td>
<td>5 x Affordable Rental</td>
<td>5 x Social Rental</td>
<td>20 x Leasehold</td>
<td>5 x Affordable Rental</td>
</tr>
<tr>
<td><strong>LAND PURCHASE</strong></td>
<td>$27,600,000</td>
<td>40%</td>
<td>$8,700,000</td>
<td>89%</td>
<td>$7,000,000</td>
<td>89%</td>
<td>$8,700,000</td>
<td>89%</td>
<td>$8,700,000</td>
<td>89%</td>
<td>$7,000,000</td>
<td>89%</td>
</tr>
<tr>
<td><strong>CONSTRUCTION COSTS</strong></td>
<td>$2,000 x 30 units</td>
<td>$8,700,000</td>
<td>$8,700,000</td>
<td>$8,700,000</td>
<td>$8,700,000</td>
<td>$8,700,000</td>
<td>$8,700,000</td>
<td>$8,700,000</td>
<td>$8,700,000</td>
<td>$8,700,000</td>
<td>$8,700,000</td>
<td>$8,700,000</td>
</tr>
<tr>
<td><strong>GOVERNMENT FEES AND CHARGES</strong></td>
<td>$1,330,000</td>
<td>6%</td>
<td>$454,500</td>
<td>&lt;1%</td>
<td>$454,500</td>
<td>&lt;1%</td>
<td>$454,500</td>
<td>&lt;1%</td>
<td>$454,500</td>
<td>&lt;1%</td>
<td>$454,500</td>
<td>&lt;1%</td>
</tr>
<tr>
<td><strong>PROFESSIONAL FEES</strong></td>
<td>$609,000</td>
<td>3%</td>
<td>$609,000</td>
<td>6%</td>
<td>$609,000</td>
<td>6%</td>
<td>$609,000</td>
<td>6%</td>
<td>$609,000</td>
<td>6%</td>
<td>$609,000</td>
<td>6%</td>
</tr>
<tr>
<td><strong>MARKETING FEES</strong></td>
<td>$1,380,000</td>
<td>7%</td>
<td>$435,000</td>
<td>4%</td>
<td>$435,000</td>
<td>4%</td>
<td>$435,000</td>
<td>4%</td>
<td>$435,000</td>
<td>4%</td>
<td>$435,000</td>
<td>4%</td>
</tr>
<tr>
<td><strong>NET COSTS</strong></td>
<td>$20,754,000</td>
<td>100%</td>
<td>$9,789,450</td>
<td>100%</td>
<td>$9,789,450</td>
<td>100%</td>
<td>$9,789,450</td>
<td>100%</td>
<td>$9,789,450</td>
<td>100%</td>
<td>$7,885,450</td>
<td>100%</td>
</tr>
<tr>
<td><strong>INVESTOR PROFITS</strong></td>
<td>10% of net costs</td>
<td>-</td>
<td>$978,945</td>
<td>-</td>
<td>$978,945</td>
<td>-</td>
<td>$978,945</td>
<td>-</td>
<td>$978,945</td>
<td>-</td>
<td>$788,545</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL COSTS</strong></td>
<td>-</td>
<td>-</td>
<td>$10,768,395</td>
<td>-</td>
<td>$10,768,395</td>
<td>-</td>
<td>$10,768,395</td>
<td>-</td>
<td>$10,768,395</td>
<td>-</td>
<td>$8,673,995</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Additional Information

1. Costs calculated based on project scope and parameters from real-world housing projects.
2. Costs calculated based on project scope and parameters from case study.
3. Costs calculated based on information sourced from a case study.
4. Based on estimation from government websites. Includes DA fees and Development Contributions, Long Service Levy, & Land Tax over 4 years.
5. Initial estimation was based on 30% median household weekly income, but that came out to be $534 which is similar to market rental income in the area. So the definition of 75% of market rental was used instead.
6. Source: "Do strata rates get more expensive near the Sydney CBD?" 37propertygroup.com.au
7. Taking inspiration from the Nightingale model, socially minded investors are sought to invest in the development costs of the project, with a guaranteed 10% ROI.
9. Taking inspiration from the Tripod model where income from different housing models are combined to balance costs of procurement.
10. Taking inspiration from the Nightingale model, construction costs are minimised through direct consultation with residents and deliberative design.

#### Table: REVENUE

<table>
<thead>
<tr>
<th>Calculation Method</th>
<th>Market Sales</th>
<th>%</th>
<th>Leasehold Agreement</th>
<th>%</th>
<th>Total Revenue</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$27,600,000</td>
<td>100%</td>
<td>$9,200,000</td>
<td>100%</td>
<td>$36,800,000</td>
<td>100%</td>
</tr>
</tbody>
</table>

#### Table: PROFIT/LOSS

<table>
<thead>
<tr>
<th>Calculation Method</th>
<th>Market Rental</th>
<th>%</th>
<th>Affordable Rental</th>
<th>%</th>
<th>Social Rental</th>
<th>%</th>
<th>Total Rental Income/Year</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$540 per week x 52</td>
<td>-</td>
<td>$225,000</td>
<td>-</td>
<td>$69,160</td>
<td>-</td>
<td>$294,160</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Table: RENTAL INCOME/YEAR

<table>
<thead>
<tr>
<th>Calculation Method</th>
<th>Strategic Rent</th>
<th>%</th>
<th>Affordable Rent</th>
<th>%</th>
<th>Social Rent</th>
<th>%</th>
<th>Total Rental Income/Year</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$4000/unit/year</td>
<td>-</td>
<td>$80,000</td>
<td>-</td>
<td>$60,000</td>
<td>-</td>
<td>$40,000</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Table: MAINTENANCE COSTS

<table>
<thead>
<tr>
<th>Calculation Method</th>
<th>Net Rental Income/YEAR</th>
<th>%</th>
<th>Years to Recoup Costs</th>
<th>%</th>
<th>Total Maintenance Costs</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$214,160</td>
<td>-</td>
<td>7.3 years</td>
<td>-</td>
<td>$107,080</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Table: MAINTENANCE COSTS

<table>
<thead>
<tr>
<th>Calculation Method</th>
<th>Total Maintenance Costs</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$107,080</td>
<td>-</td>
</tr>
</tbody>
</table>

### Notes

1. Costs calculated based on a similar case study project located within City of Sydney Council, Alexandria, NSW currently under construction.
2. DA fee quote from City of Sydney obtained in March 2019 based on estimated construction costs.
3. Based on estimation from government websites. Includes Stamp Duty, Development Contributions, Long Service Levy, & Land Tax over 4 years.
4. The apartments will achieve a medium quality finish.
5. Estimation based on information sourced from Desyne Developments website.
6. Calculation based on project scope and parameters from real-world housing projects.
7. Initial estimation was based on 30% median household weekly income, but that came out to be $534 which is similar to market rental income in the area. So the definition of 75% of market rental was used instead.
9. Source: "Do strata rates get more expensive near the Sydney CBD?" 37propertygroup.com.au
10. Taking inspiration from the Nightingale model, socially minded investors are sought to invest in the development costs of the project, with a guaranteed 10% ROI.
11. Taking inspiration from the Tripod model where income from different housing models are combined to balance costs of procurement.
12. Taking inspiration from the Nightingale model, construction costs are minimised through direct consultation with residents and deliberative design.
**Equity Housing Model**

**WE WERE INSPIRED BY...**

Nightingale Housing Model

Nightingale was conceived in 2014 by Jeremy McLeod of Breathe Architecture as a means to combat speculative housing development and create better, cheaper, more sustainable forms of housing. It was embodied in their very first project, Nightingale 1, completed in 2018. The model creates affordable housing through captured investor profits, deliberative and collaborative design with a pre-selected group of buyers, and removing unnecessary features and processes in the building procurement process. This results in housing that is delivered cheaper than market rates, and the savings are passed on through legal mechanisms to future buyers who sign on at purchase.

We were inspired by their deliberative design model, which resulted in lower construction and maintenance costs and a more meaningful, and livable housing environment designed in collaboration with actual residents. Community development is paramount. This forms a crucial part of our financing model, together with pre-selected buyers to attract impact investors who will be taking a lower risk investment with a cap on investment returns. This model however, only delivers private housing on a more affordable level, but may still not be affordable for lower income communities.

**WHAT ARE SOME OF THE POSSIBLE CONCERNS WITH THE MODEL?**

Although the Equity Housing Model has great potential to bring relief to the development on the other hand, it is not a perfect model, and like all innovative ideas, there are certain aspects that may concern you:

- although the model is developed with the principle of never selling public land, it does require public land to be used to develop housing upon, and cannot be used by the public for 99 years. This also means that the amount of housing that can be developed over time is limited due to the availability of public land available for development. However, most community housing models follow the same principle of leasing public land to reduce housing development costs.
- the financing of the construction costs are proposed to be financed by social impact investors who want to help ease the housing crisis, and invest their money in a meaningful way. The majority of the profits generated by the developer are capped. There may be a few of these types of investors as the majority of property development investors are after the high, high return on investment model of the property development. However, cases like the Nightingale Model have shown that more investors are turning towards meaningful and lower risk investments in their portfolios.

- The model predominantly delivers Leasehold Ownership housing, at 60%, with affordable rental and social rental housing making up the remaining 40%. With the current extensive public housing waiting list, it may seem that this ratio is inadequate to solve the immediate need to reduce the waiting list and deliver more social housing. However, social housing eligibility is predicated on income, and only serve the lower income. For most working Australian’s it is still not affordable to purchase a home. There is little to no ability to generate the revenue we need to build more affordable and social housing.

- As a mixed income development model, it will likely be subject to the risks associated with all mixed income housing models, and that is how residents from different income levels will live together and avoid conflict and discrimination. In research papers that we have reviewed, discussions are often being held to determine which type of tenant each resident is, whether private, affordable or social. Research shows that as long as residents are integrated together and mixed in a way that does not outwardly differentiate by tenure, the issue of discrimination can be greatly mitigated. Our housing model does just that as all housing with the development will be exactly the same, just how each tenant pays for their housing is different. It is also not necessary to segregate each tenancy type due to maintenance concerns as all housing will be managed under the same non-profit cooperative. As tenants income levels change, their tenancy type may change as well, but they will still be living in the same home and therefore their change in situation is kept private.

- Leasehold Ownership, which is predicated on owning housing at a more affordable price point in return for only a lifelong lease of a home rather than perpetual ownership, is unheard of in the Australian housing market. However, this model is crucial to allow adequate revenue to be generated without the sale of public land. The socially accepted norm of housing ownership, which has led to the increasing acceptance of property investment as a primary retirement income generation strategy in the general public, is one of the greatest contributors to the current housing crisis we face. To truly resolve the housing crisis, we must move away from viewing housing as investment, and move towards housing only for living. This model helps to move us along this direction. Through several small focus groups, we were able to test the initial reaction of the public towards this model. Resident however would be brought in from the waiting list as usually, making the housing less effective and integral in the Nightingale Model. Social housing residents however, would be brought in from the waiting list as usual, but they would still be given early notice and be able to attend the briefing sessions with everyone else.

- Residents should be invited to attend social events together as a way of bonding and forming social ties prior to officially moving in together, to allow new residents to feel safer and more at home in a mixed income community. Once the residents of a new project has been determined, prior to or during construction, luncheons, site visits, or community volunteer days to help build the project together could be organised. This will help to foster a sense of community and ownership. If any early signs of conflict arise, this can be dealt with swiftly, and in the worst case, new residents can be called in to replace any troublemakers.

**HOW COULD THE MODEL BE IMPROVED?**

Along with the mechanisms outlined in the model, we have begun considering additional procedures that could be integrated into the model to make it more efficient and effective, including:

- A register of interest should be created for potential residents and investors and they are giving sufficient briefing sessions to understand and buy into the ideal of this new model of housing. This is also a good way to gauge interest over time before heavily investing in a project. When the time comes to call for investment or buyers, this would make the process alot faster and less risky. This has been shown to be effective and integral in the Nightingale Model. Social housing residents however, would be brought in from the waiting list as usual, but they would still be given early notice and be able to attend the briefing sessions with everyone else.

- A system of government backed or government issues loans may be needed to assist some buyers in their purchase. Part of the model involves offering a lower cost alternative to market sales in the form of leasehold ownership. Although it is a lease and not sale, buyers should still be expected to organise their own financing for the payment, which may be in the form of a mortgage or loan. As there is no asset that can be used as collateral unlike a traditional mortgage, the legal and financial implications are unknown and it may or may not impact a buyers ability to finance the home. Although the viability of the model does not rely on the availability of government subsidy, if there are funds available that the government is willing to invest, it will surely benefit the project. The final cost to the government, a 10% investment profit. If the government was to invest in the project in place of some private investment, without asking for interest, it will help to minimise the total cost as they will not have to finance the project and by that reduce the project’s cost to public.

- We will be looking into other cost saving mechanisms such as prefabrication and innovative construction methods to create a more efficient and sustainable development. Together with a strong financial funding model, how the project will be built is also crucial to the viability of a project. In our modelling, we have allowed for costs savings that are typically available from deliberative design decisions and simplication of the development process, as shown in the Nightingale Model.

**NEXT STEPS...**

This model is only an idea at this stage and requires further development. The next steps are to:

- conduct further investigation into the legal and financial implications of this model
- conduct focus groups and market testing to determine whether the general public would be interested in purchasing and living in housing from this model
- determine potential sites for development and conduct thorough cost and feasibility studies
- contact potential government institutions and investors who are interested in financing future projects.