AHO SUPPLY AND DEMAND MODEL
Why develop the Model?

• Census data has been used to understand demand for Aboriginal housing in NSW

• Yet, this does not consider other drivers for housing need

• The AHO has developed a Supply and Demand Model to address this gap
AHO Supply & Demand Model

helicopter view

Examines the demand for houses compared to the supply of houses projected to 2031

- Demand
- Hidden Demand*
- Supply
Definitions

- We adopt a broader definition of need
- Include newly arising need through household formation
- **Demand** = already existing household
- **Hidden demand** = people predicted to form a new household if they could afford to –
  - Every additional family in a household; and
  - Individuals over 20 years of age in a household
- **Supply** = current supply of dwellings and planned dwelling builds
Population projections for Model build

- Develop population projections – fertility, mortality and migration

- Based on the Estimated Resident Population (ERPs) – re-working of the Census (adjusts for error)

- Aboriginal population was projected to 2031

- These projections have been used by a range of agencies
The Role of Income

The Supply and Demand Model predicts the current maximum demand that can be expected, the current supply of dwellings and the additional dwellings needed (the gap between demand and supply). This is then projected each year until 2031, for:

**Band A**
- social housing (income from $0-$45,000)

**Band B**
- assisted private rental and affordable housing (income from $45,001 to $90,000)

**Band C**
- affordable housing and housing purchase (income from $90,001 to $135,000)

**Band D**
- housing purchase (Income over $135)

This information is available for each LGA, FACS district and AHO region.
What does the current Model tell us?

- The model tells us there is an undersupply of housing for the Aboriginal Community for **ALL** income bands.

And

- The undersupply will increase into the future if current conditions prevail.
Total under supply for Aboriginal people

- The total undersupply of housing for the Aboriginal Community is estimated to be 36,025 dwellings in 2017.
- This is forecasted to increase to 90,901 in 2031 if current conditions prevail.
- The undersupply is greater for Income Bands A and B.

<table>
<thead>
<tr>
<th>Income Band</th>
<th>June 2017</th>
<th>June 2031</th>
</tr>
</thead>
<tbody>
<tr>
<td>Band A &lt;45k ($2015) per year</td>
<td>10,855</td>
<td>30,124</td>
</tr>
<tr>
<td>Band B 45k-90k ($2015) per year</td>
<td>13,506</td>
<td>34,924</td>
</tr>
<tr>
<td>Band C 90k-135k ($2015) per year</td>
<td>3,487</td>
<td>8,720</td>
</tr>
<tr>
<td>Band D 135k+ ($2015) per year</td>
<td>6,160</td>
<td>15,101</td>
</tr>
<tr>
<td>TOTAL</td>
<td>36,025</td>
<td>90,901</td>
</tr>
</tbody>
</table>
Total under supply of housing for Aboriginal people

<table>
<thead>
<tr>
<th>Income Band</th>
<th>Percentage Increase 2017 to 2031</th>
</tr>
</thead>
<tbody>
<tr>
<td>Band A 0. &lt;45k ($2015) per year</td>
<td>177.5%</td>
</tr>
<tr>
<td>Band B 45k-90k ($2015) per year</td>
<td>158.6%</td>
</tr>
<tr>
<td>Band C 90k-135k ($2015) per year</td>
<td>150.1%</td>
</tr>
<tr>
<td>Band D 135k+ ($2015) per year</td>
<td>145.1%</td>
</tr>
</tbody>
</table>

The undersupply is increasing more rapidly for Band A.
Total under supply of housing for Aboriginal people
The undersupply is larger in LGAs located in major metropolitan and in inner regional areas.

The following four LGAs have the largest undersupply -

- Blacktown (C)
- Greater Taree (C)
- Newcastle (C)
- Campbelltown (C)

The supply of housing is not uniform throughout the State.
The following LGAs have an oversupply of housing -
- Great Lakes (A)
- Cooma-Monaro (A)
- Tumbarumba (A)
- Greater Hume Shire (A)
THEMATIC MAP SHOWING PROJECTED BAND A SUPPLY GAP LEVELS ACROSS NSW LGAs to June 2017

Key:
- Blue = highest predicted undersupply

Band A  0. <45k per year

Produced by: Research & Analysis
Business Unit: Policy, Planning & Design
Innovation
Date: Feb, 2017
Sources: NSW LGAs 2011 (ABS 2011; GIS layer)
The AG Demand and Supply Model V1 (Progenies SANCAS)

Legend:
- White = no data available
- Black = above 577 (1)
- Dark blue = 489 to 577 (1)
- Light blue = 381 to 390 (2)
- Medium blue = 312 to 351 (3)
- Dark purple = 273 to 312 (3)
- Light purple = 234 to 273 (3)
- Medium purple = 195 to 234 (6)
- Dark green = 156 to 195 (3)
- Medium green = 117 to 156 (6)
- Light green = 79 to 117 (24)
- Yellow = 0 to 79 (19)
- Red = 0 to 0 (6)

Scale: 1:5,561,000

0 100 kilometers
General utility of the Model

- Advances robust housing need assessment in Australia
- Provides a baseline understanding of population and demand for housing across the entire housing sector
- Includes demand for social and affordable housing
- Allow planning for housing assistance budgets
How the AHO will use the Model

- Informs AHO’s capital program – i.e., how and where to grow the portfolio to best meet demand and unlock opportunities for Aboriginal people

- Guides the building of 200 new houses to December 2019

- Identify housing supply targets to meet need
What is next in the Model’s development?

• Validating the model with 2016 Census data

• Further development with updated Census data will improve model

• Overlay of employment opportunities (infrastructure projects, NDIS)

• The role of economic conditions in housing formation
Contact us

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