

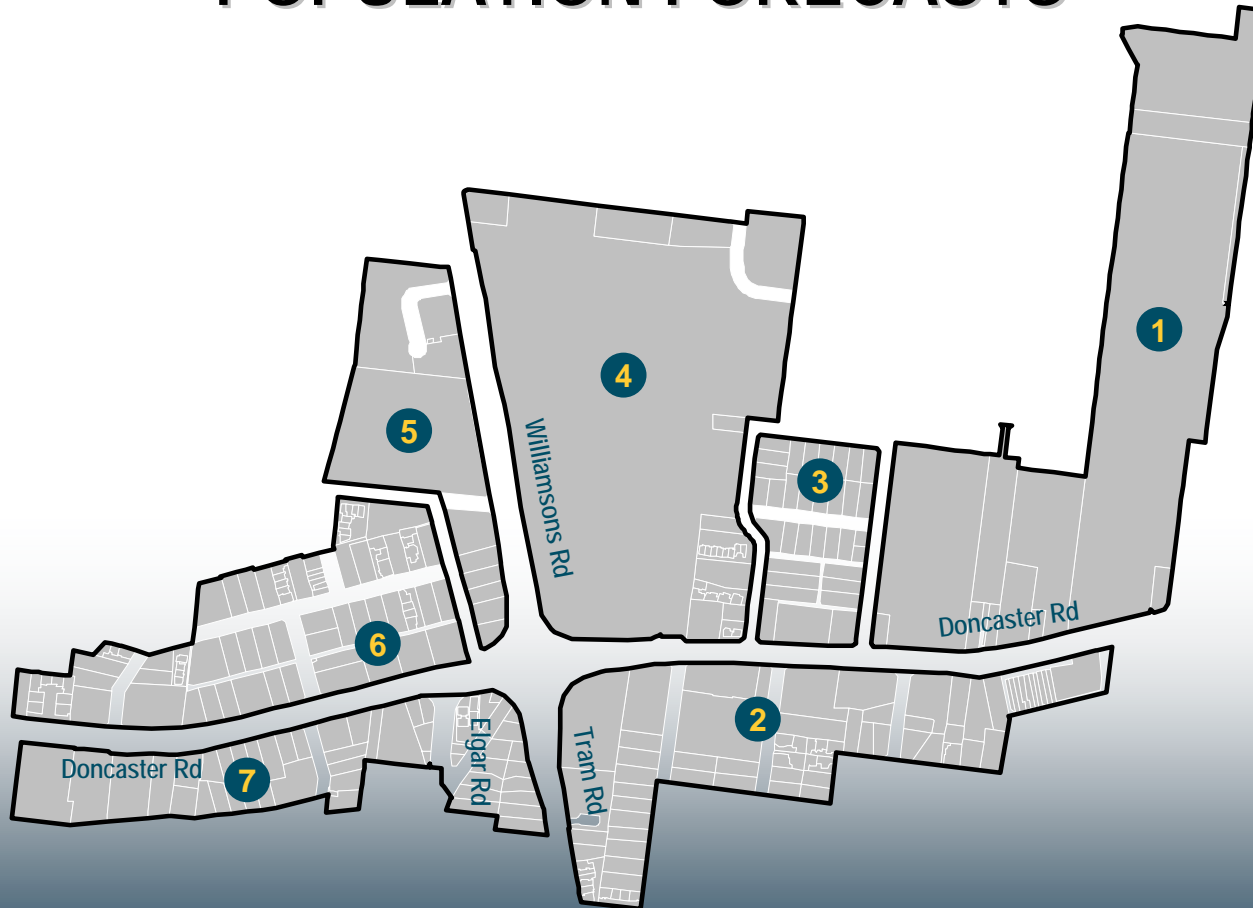


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# *City of Manningham*

## DONCASTER HILL

### POPULATION FORECASTS



Forecast  
Report and  
Presentation  
March 2002



# Contents

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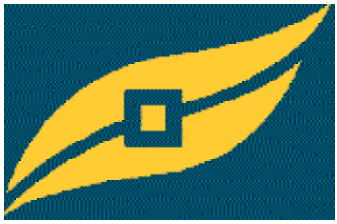
• Aims and outputs of the project	3
• Methodology	4
• Regional context	5
• Doncaster Hill base population	9
• Assumptions	11
• Results	18
• Implications and conclusions	22
• About i.d consulting	23
• References	24



# Aim and outputs of the project

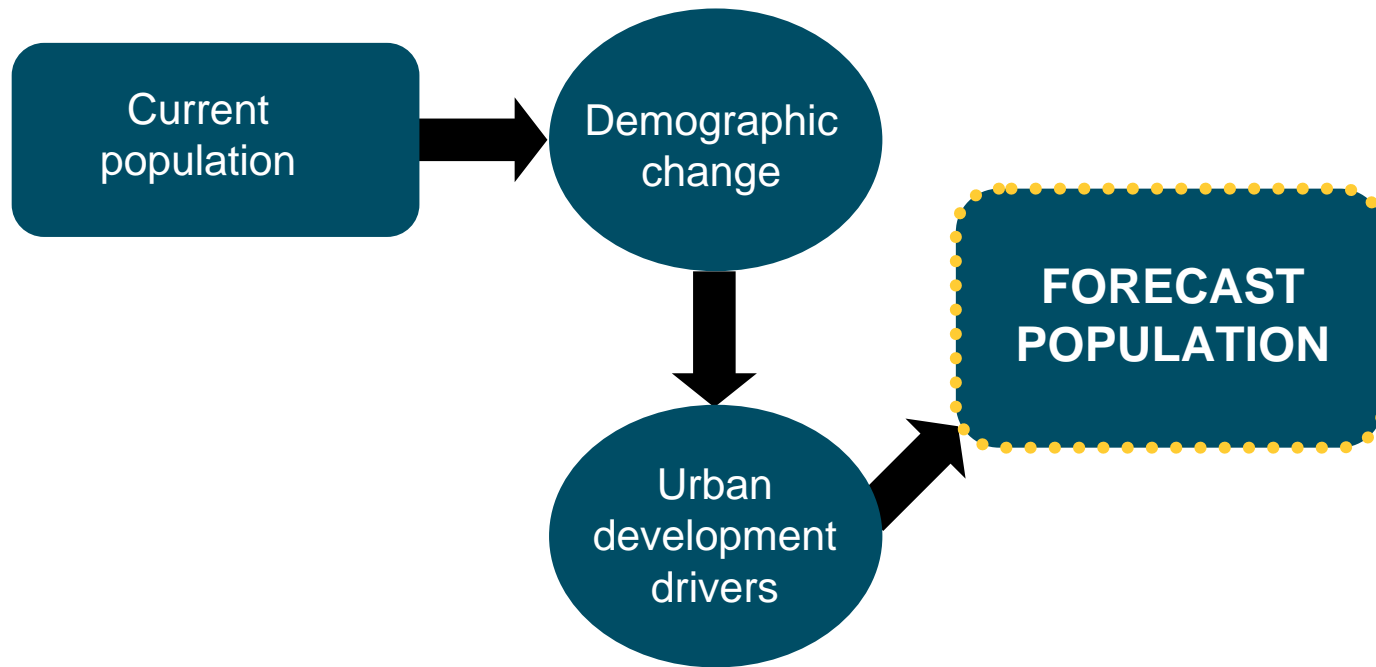
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- **i.d was engaged to produce a set of population and household forecasts for the Doncaster Hill area for 2001-2021**
- **The information is designed to inform decision-making and services planning in the area**
- **The specific outputs from the population model include:**
  - **Population by single year of age;**
  - **Population by household type**
  - **Households by type;**
  - **Average household size.**



# Methodology - approach

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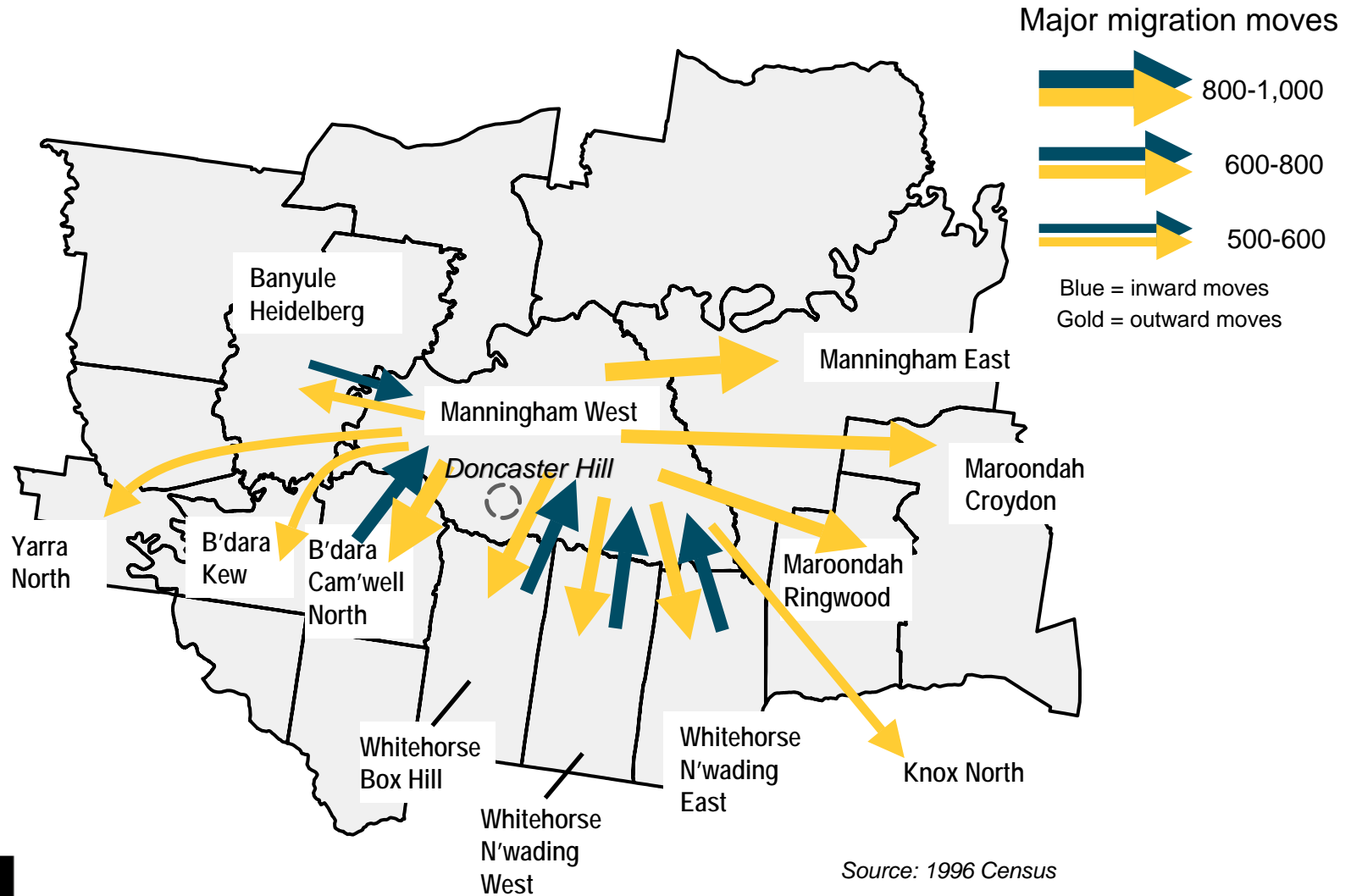


The methodology is based on a 'bottom-up' approach, with all assumptions being derived from a local perspective, but taking into account sub-regional change – City of Manningham and surrounds.



# Regional context: migration

Data based on migration movements between SLAs, 1991-1996



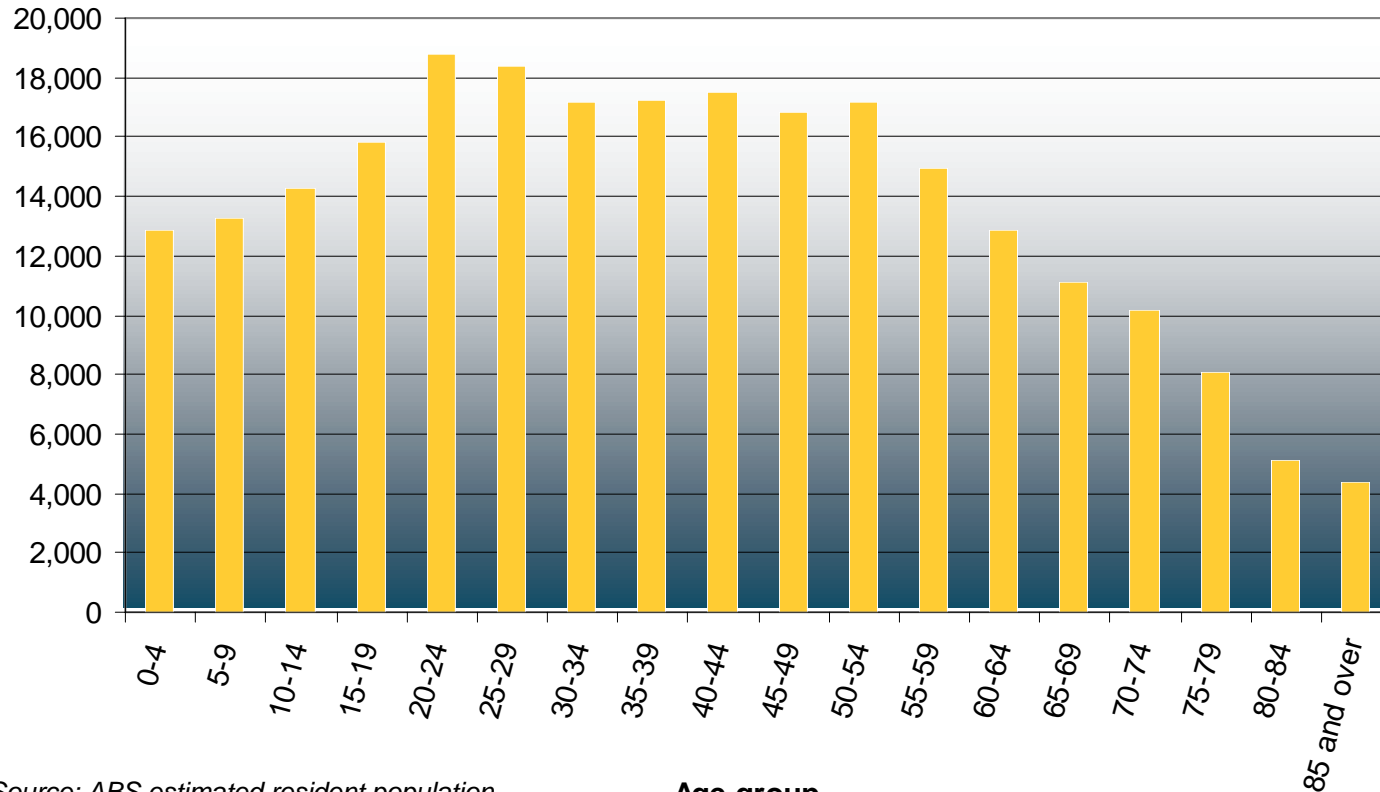
Source: 1996 Census



# Regional context: age structure

*Estimated resident population, Doncaster Hill catchment, 2000 (based on Manningham West, Boroondara Camberwell Nth, Whitehorse Box Hill and Nunawading West SLAs)*

Population



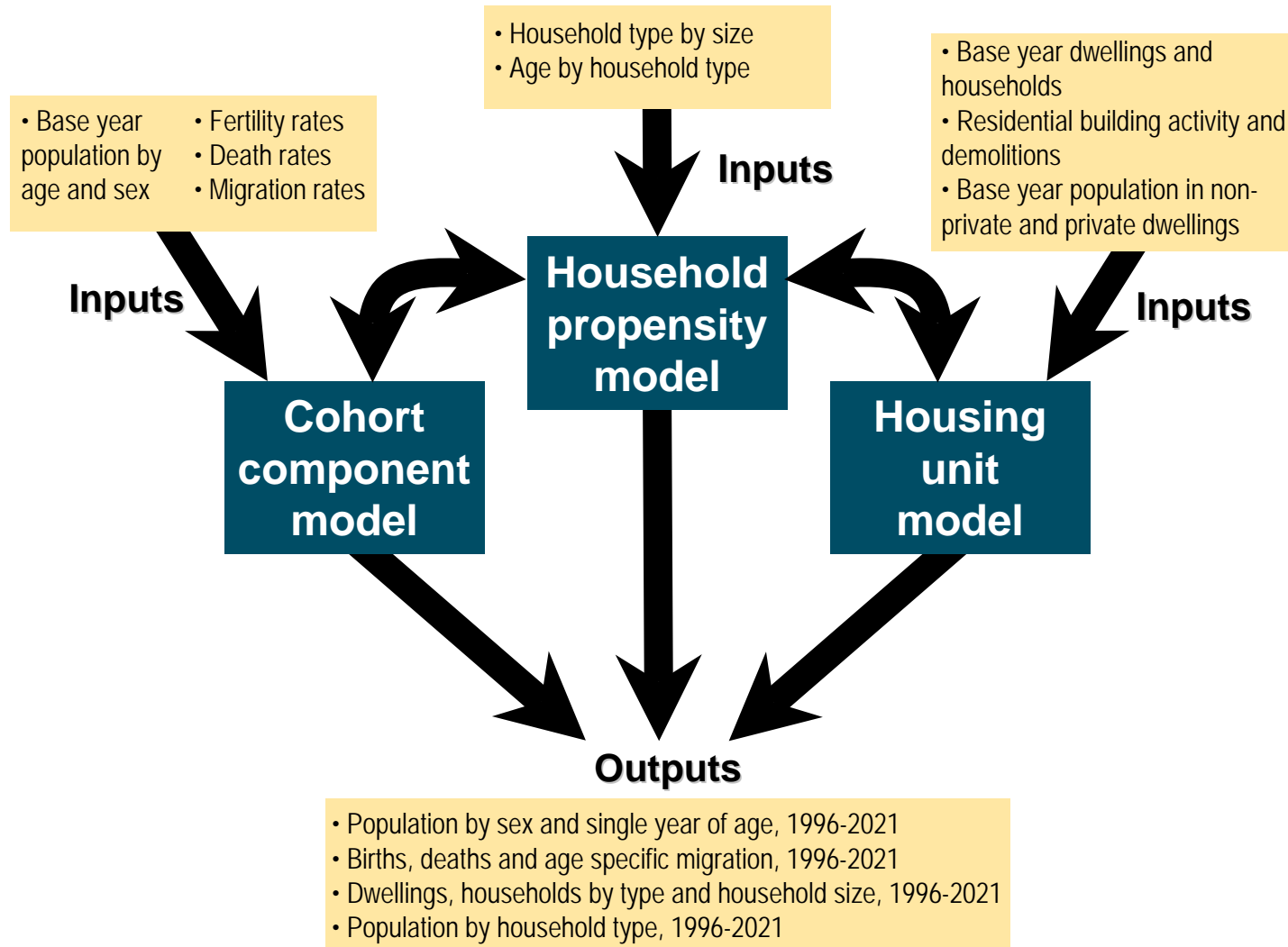
Source: ABS estimated resident population

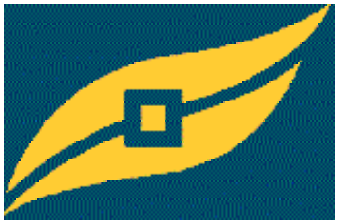
Age group

The population of the catchment around Doncaster Hill was estimated at approximately 250,000 in the year 2000. The age structure was especially concentrated in most adult age groups, notably 20-54, with fewer children and fewer elderly.



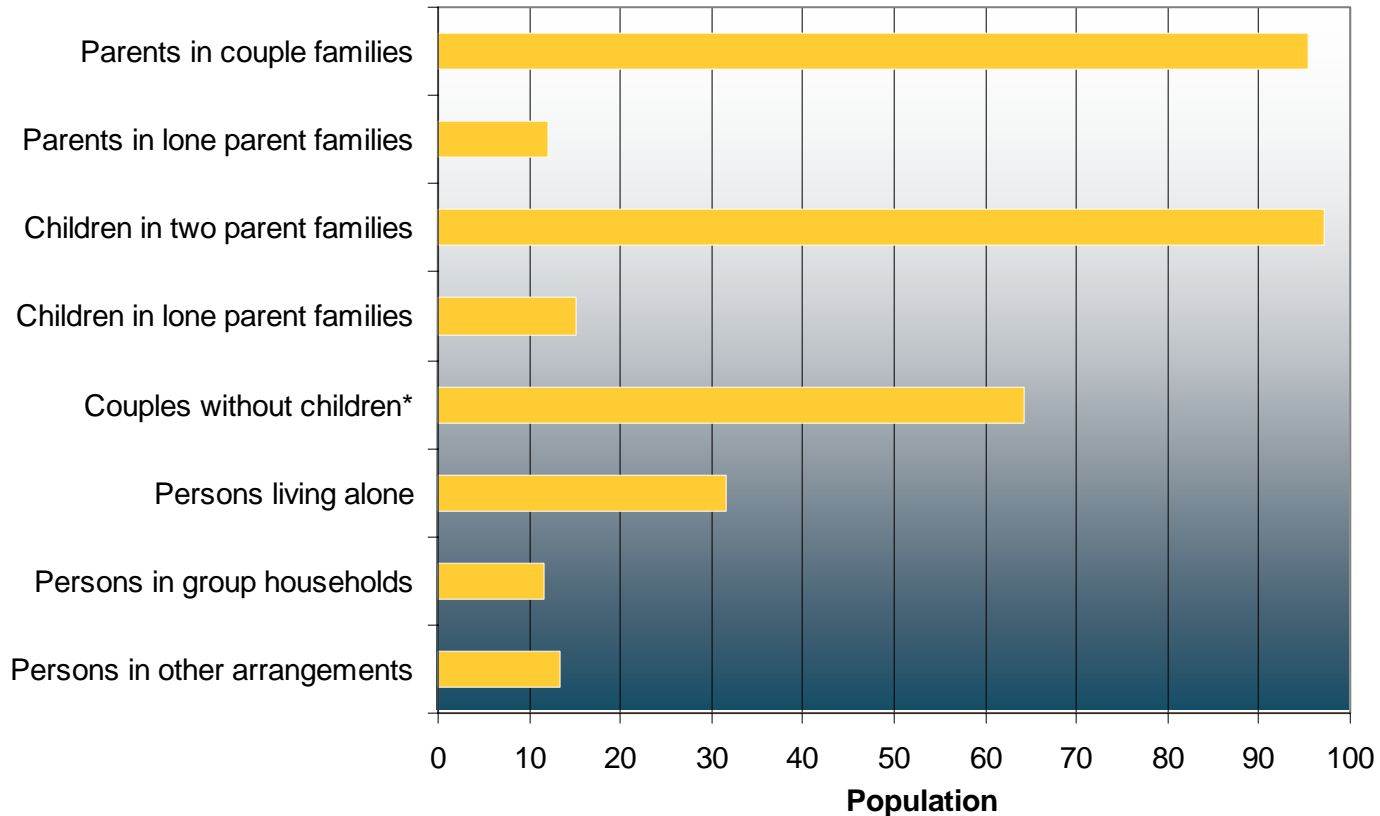
# Methodology - modelling





# Population by household type, Doncaster Hill precinct, 1996

## Household type

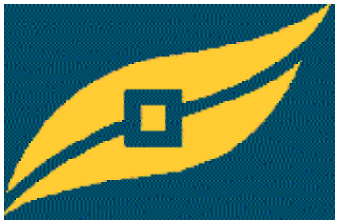


\* Couples without children include couples living with non-related adults

Source: 1996 Census

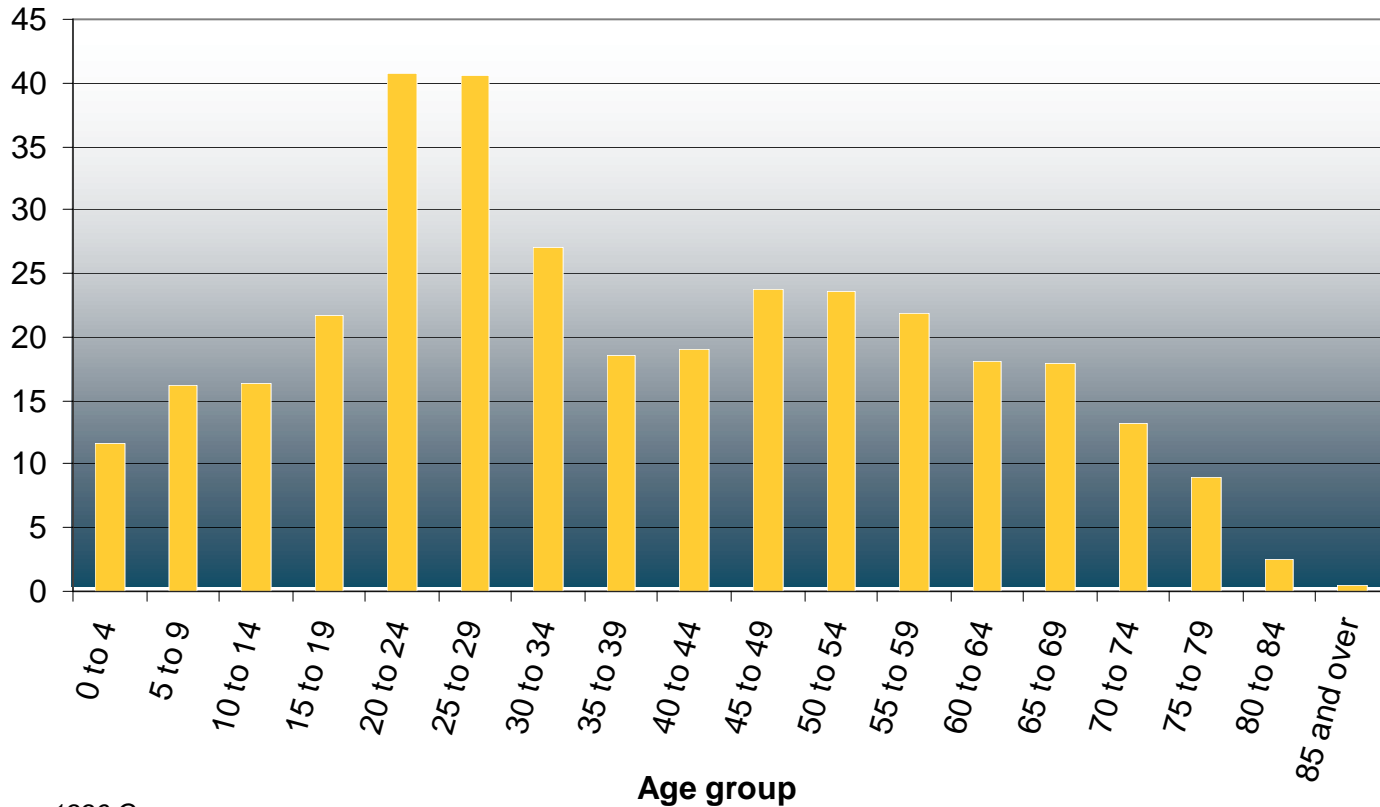
The population of the Doncaster Hill precinct in 1996 was concentrated in two parent family households and couples without children households (empty-nesters).





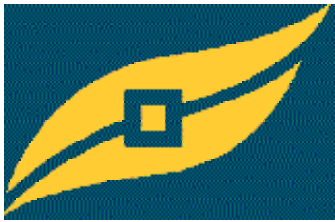
# Age structure, Doncaster Hill precinct, 1996

## Population



Source: 1996 Census

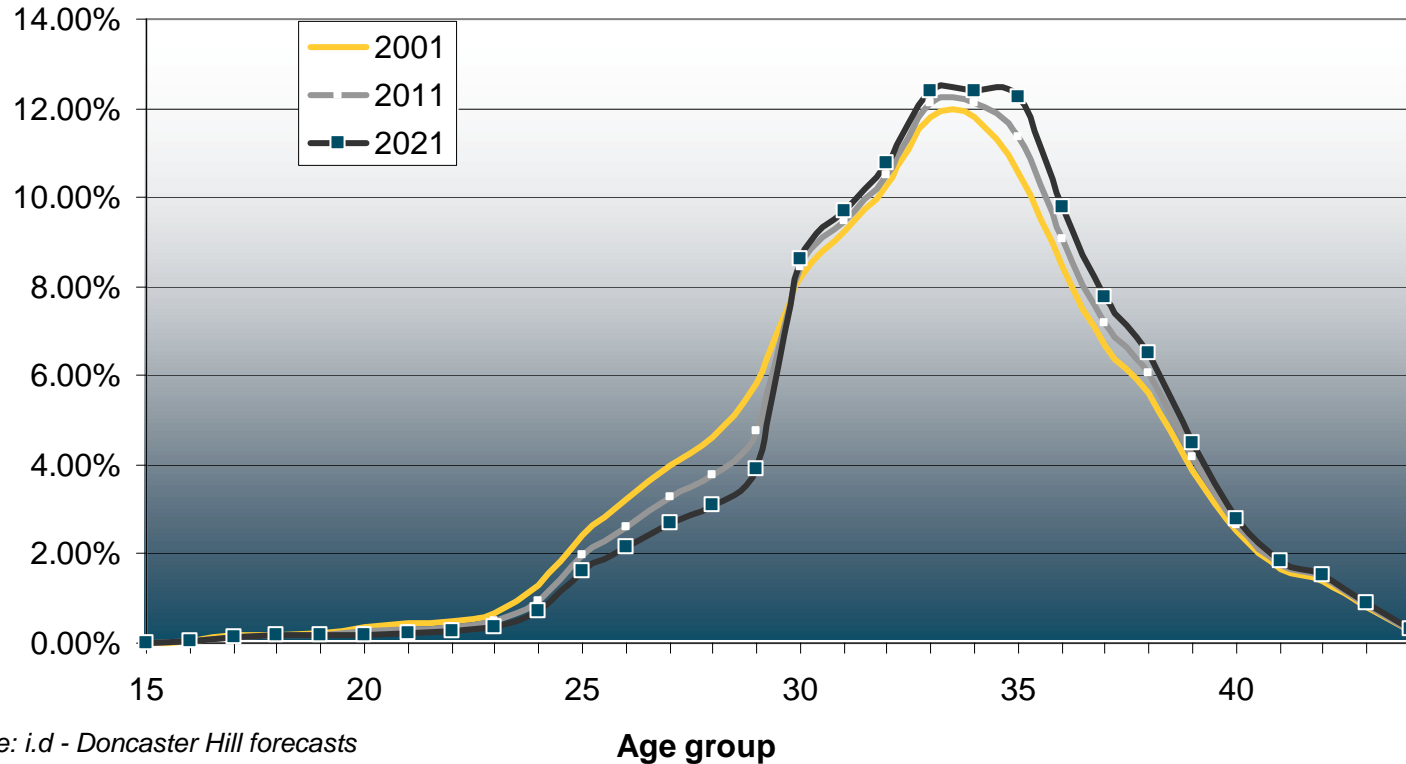
The age structure of the Doncaster Hill precinct in 1996 was especially concentrated in the age groups 20-34, many of whom were children to those aged 45-69.



# Assumptions: age specific birth rates

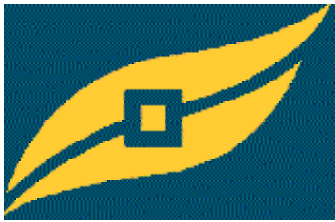
Birth rates based on Kew area, although overall Manningham also has recorded a very low fertility rate between 1991-2000.

% of female pop. giving birth



Source: i.d - Doncaster Hill forecasts

The overall fertility rate is expected to remain stable, although more children are projected to be born to mothers aged 30 and over and less to those aged 15-29.



# Assumptions: age specific death rates

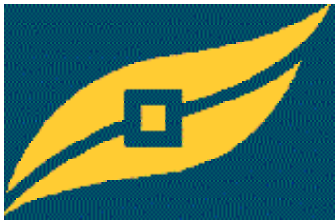
## Age specific death rates are based on historical data for Manningham

- Death rates are assumed to decrease over time in all age groups (except 85+), based on improved health and medical care (in line with trends at the broader Victorian level)
- Higher mortality rates in males as opposed to females, but this pattern is forecast to decrease marginally over time as male life expectancy increases at a slightly faster rate than female expectancy (in line with broader trends)

## Annual age specific death rates

Males	2001	2011	2021		Females	2001	2011	2021
0-14	0.06%	0.06%	0.05%		0-14	0.04%	0.04%	0.03%
15-29	0.08%	0.07%	0.06%		15-29	0.03%	0.03%	0.02%
30-44	0.09%	0.08%	0.07%		30-44	0.06%	0.05%	0.04%
45-59	0.27%	0.24%	0.21%		45-59	0.22%	0.20%	0.18%
60-74	1.57%	1.39%	1.28%		60-74	0.92%	0.85%	0.80%
75+	8.29%	9.53%	9.70%		75+	6.39%	7.36%	7.81%

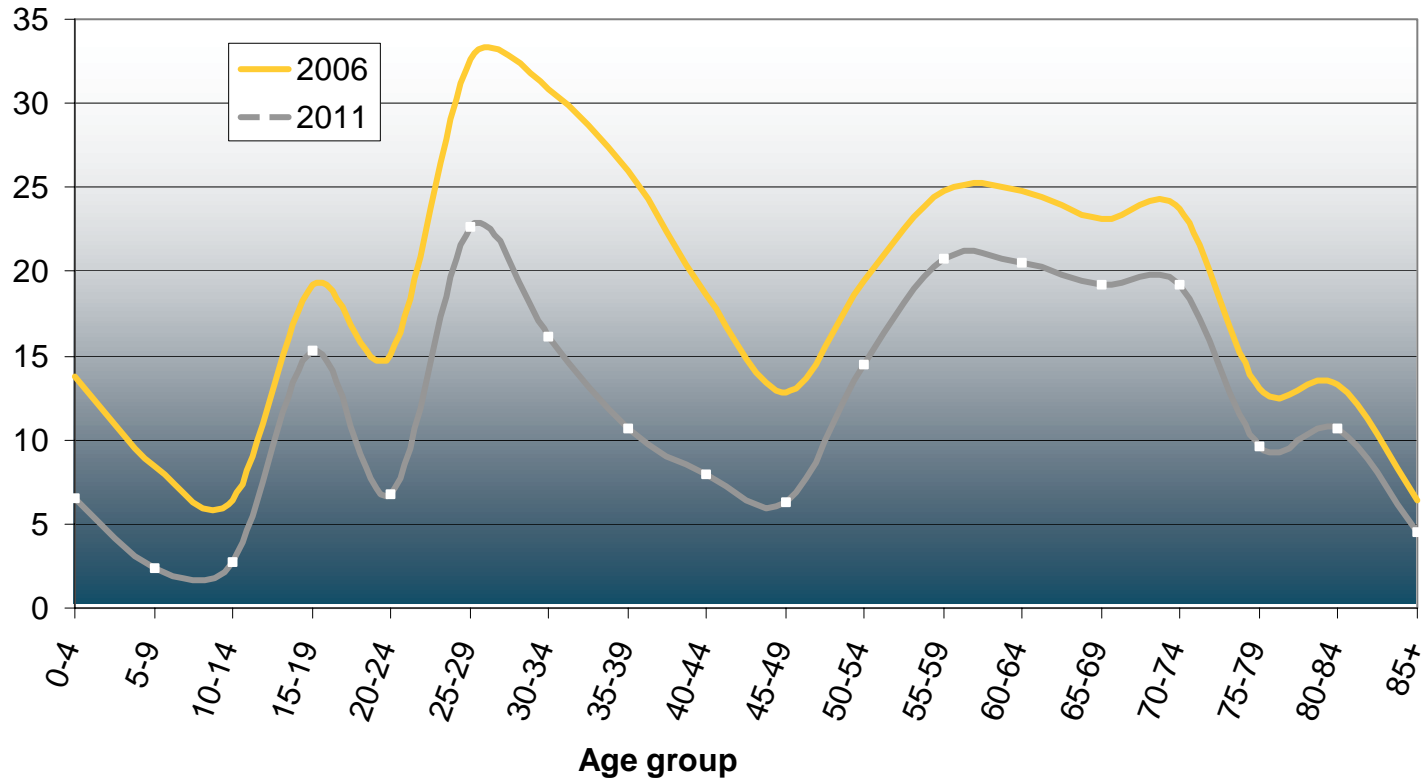
Source: i.d - Doncaster Hill forecasts



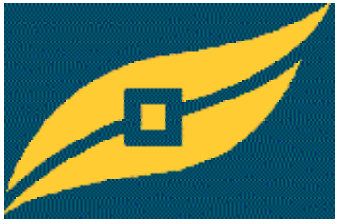
# Assumptions: net age-specific migration

Age specific migration assumptions are based on a combination of empty-nesters / elderly (50-74) and young adults (25-34) markets

Net migration



Source: i.d - Doncaster Hill forecasts



# Assumptions: household composition

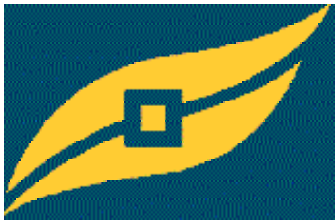
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**Household composition assumptions are based on changing housing markets in the Doncaster Hill area. As a result of ageing and low fertility rates, there will be:**

- A larger share of persons living alone in all age groups
- A greater share of persons living as couples
- A greater share of persons living in group households, as a 'new' housing opportunity is opened to twenty and thirty something year olds in the Doncaster area

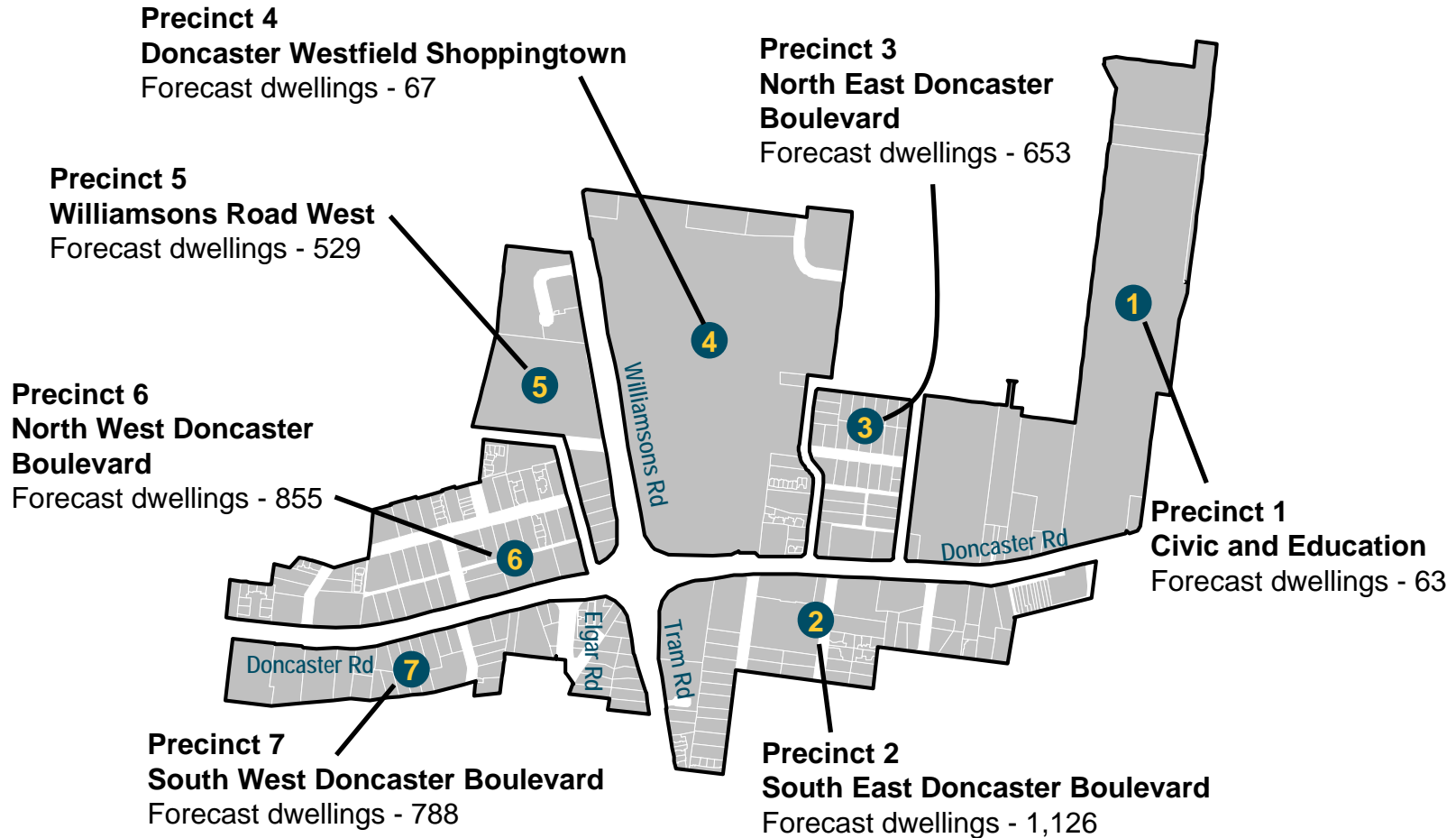
**And:**

- A decrease in the proportion of two parent and single parent families with children



# Assumptions: development by precinct

Capacities are based on Macroplan assumptions





# Assumptions: development by precinct

**Assumptions about built form are detailed here:**

Note: there may be significant pressure to have more compact form in Precinct 3 due to limitations on space based on Macroplan assumptions.

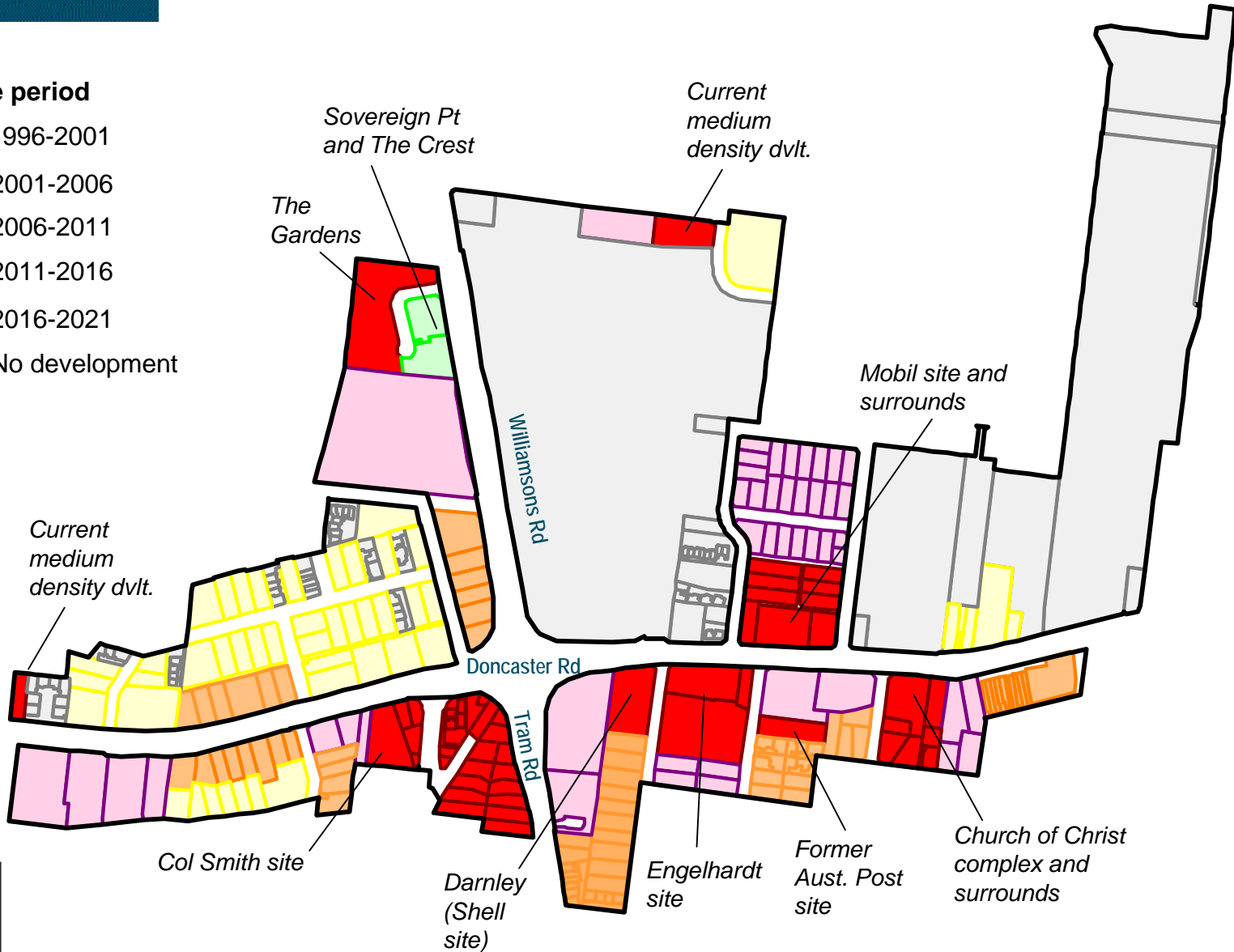
Precinct	Dwelling capacity*	Land area (sq. mt.)	Building footprint (sq. metre) 75% of land	Avg. size of land footprint per dwell	Avg. storeys needed (250 sq. metre per dwell)	Avg. storeys needed (175 sq. metre per dwell)	Avg. storeys needed (85 sq. metre per dwell)
1. Civic and Education	63	6,245	4,684	74	3.4	2.4	1.1
2. South East Donc. Blvd.	1,126	82,121	61,591	55	4.6	3.2	1.6
3. North East Donc. Blvd.	653	28,625	21,469	33	7.6	5.3	2.6
4. Donc. Westfield Shoppingtown	67	11,827	8,870	132	1.9	1.3	0.6
5. Williamsons Rd West	529	39,818	29,864	56	4.4	3.1	1.5
6. North West Donc. Blvd.	855	53,111	39,833	47	5.4	3.8	1.8
7. South West Donc. Blvd.	788	54,715	41,036	52	4.8	3.4	1.6
Doncaster Hill	4,081	276,462	207,347	51	4.9	3.4	1.7



# Assumptions: development by timing period

## Time period

- 1996-2001
- 2001-2006
- 2006-2011
- 2011-2016
- 2016-2021
- No development







# Other assumptions

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## **Market will be sustained**

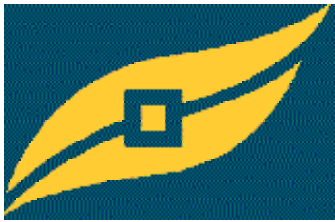
One of the key assumptions is that the market for apartment living will be sustained throughout the period. Recession is likely to have the greatest impact on the forecasts, but market cycles have not been assumed.

Based on broader population forecasts and anecdotal evidence, there is a strong market for apartment living in youth age groups (15 to 24) and a growing market for empty-nesters (55 to 69).

## **Non-private dwellings**

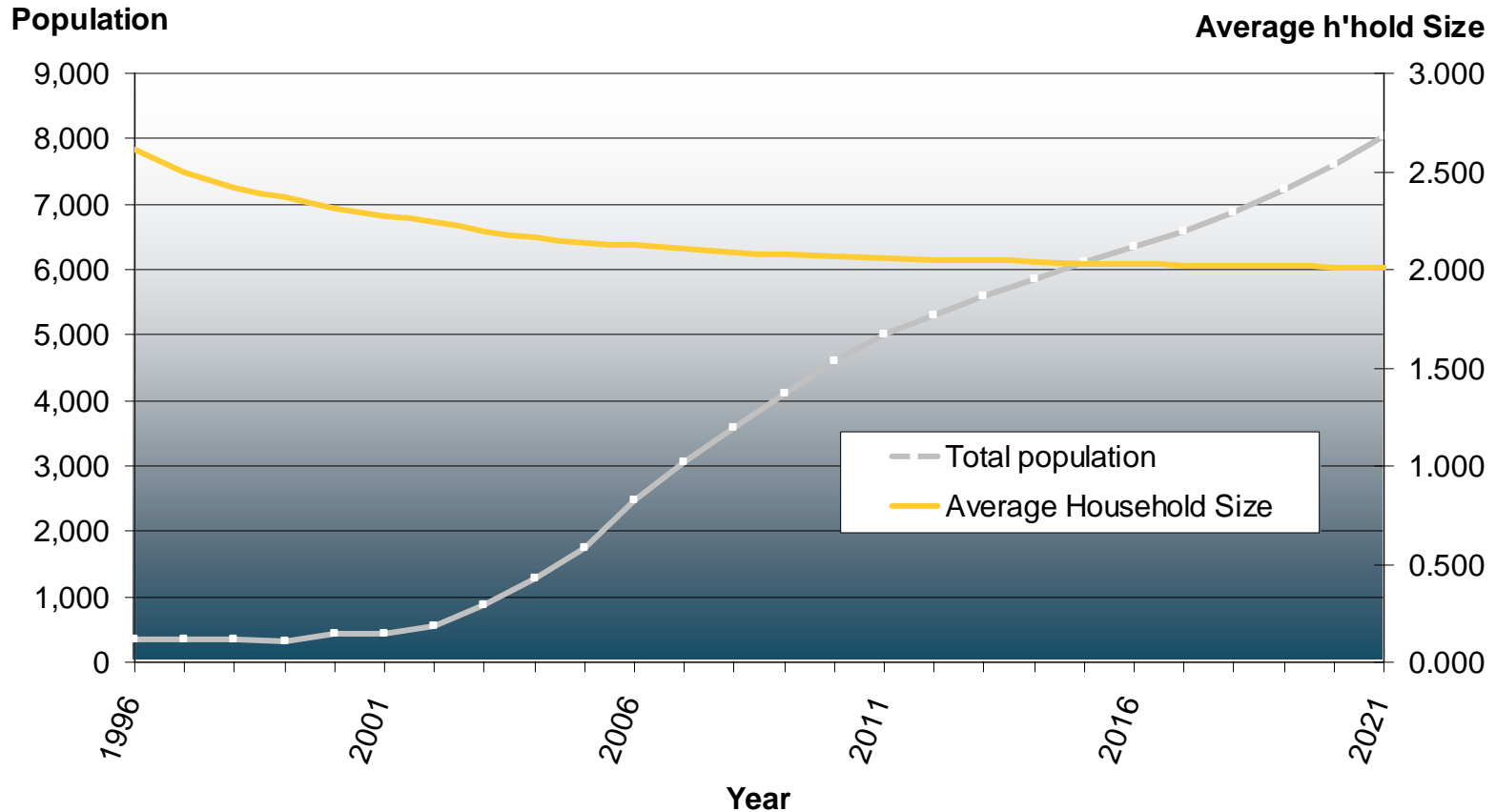
Another of the key assumptions is that the large in-migration of older people will increase the likelihood of nursing home and hostels being constructed.

i.d has assumed that by 2006 a nursing home or hostel will be in place (perhaps as a part of the Church of Christ redevelopment?) and the number of beds will continue to grow throughout the period to 2021.

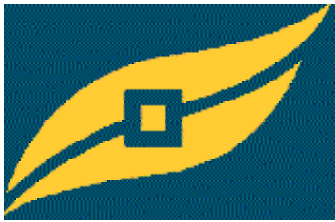


# Results: total population

The population is expected to increase to 8,000 by 2021, while on average there are expected to be about 2 persons per household by 2021.



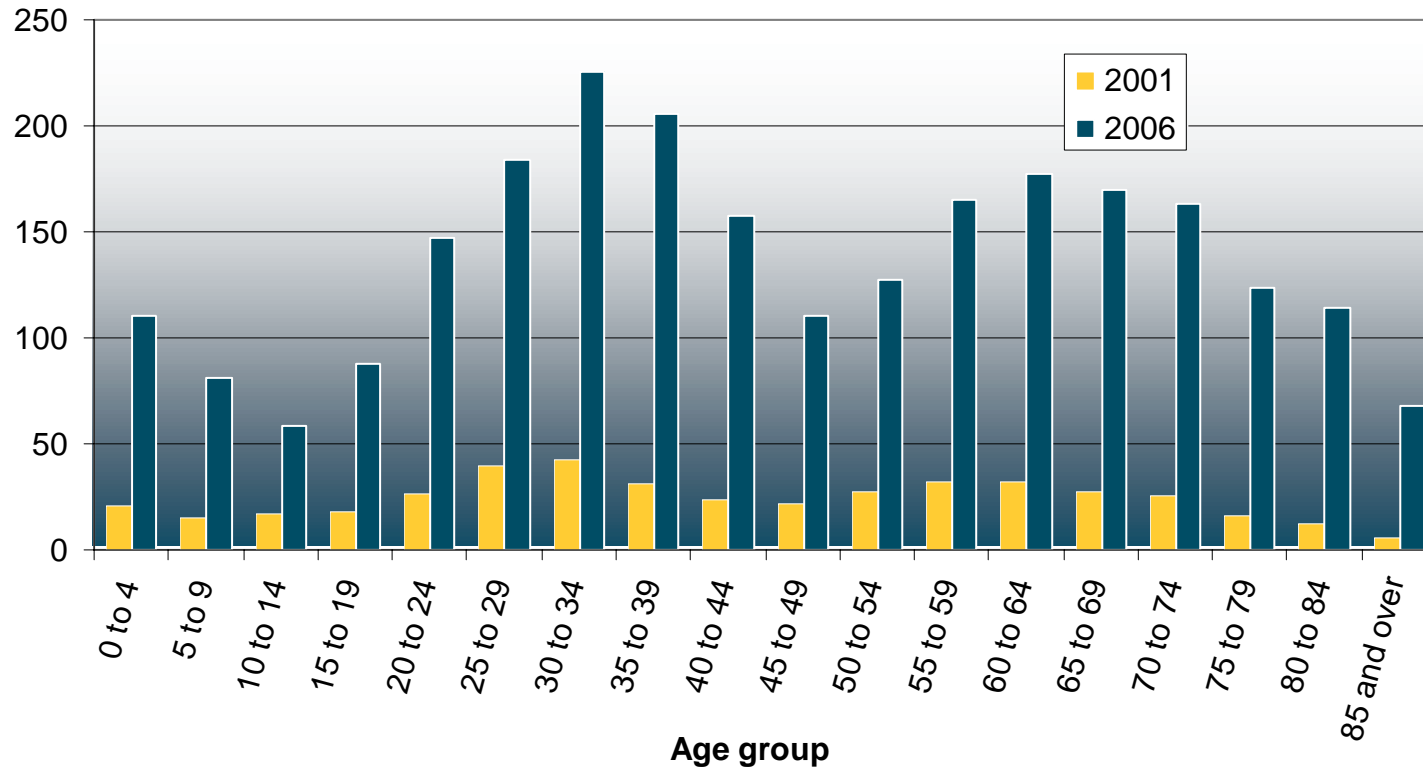
Source: i.d - Doncaster Hill forecasts



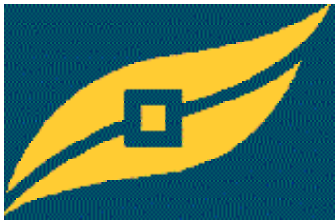
# Results: age structure, 2001-2006

The population is expected to increase in all age groups, especially 20-44 years and 55-74 years between 2001 and 2006.

## Population



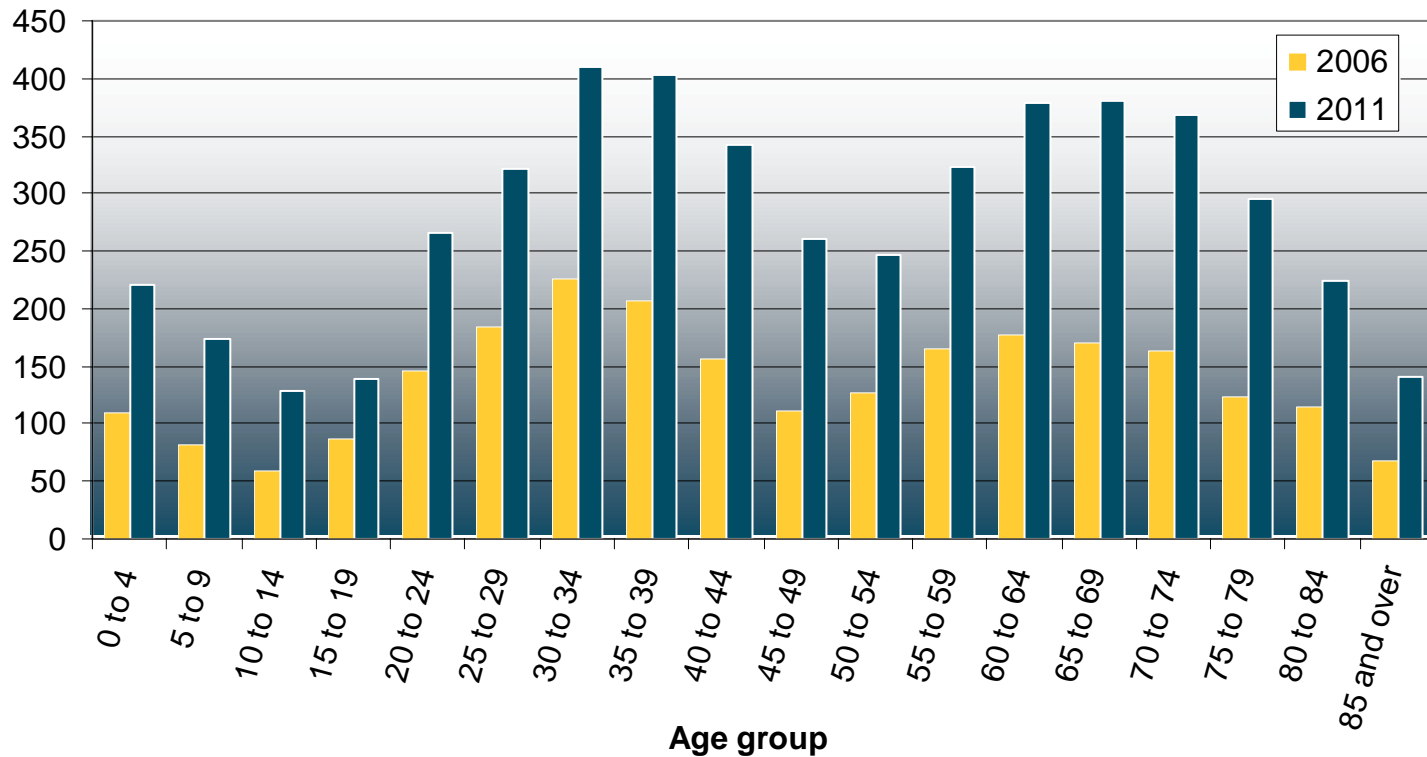
Source: i.d - Doncaster Hill forecasts



# Results: age structure, 2006-2011

The population is expected to increase in all age groups, especially 25-44 years and 55-79 years between 2006 and 2011.

## Population



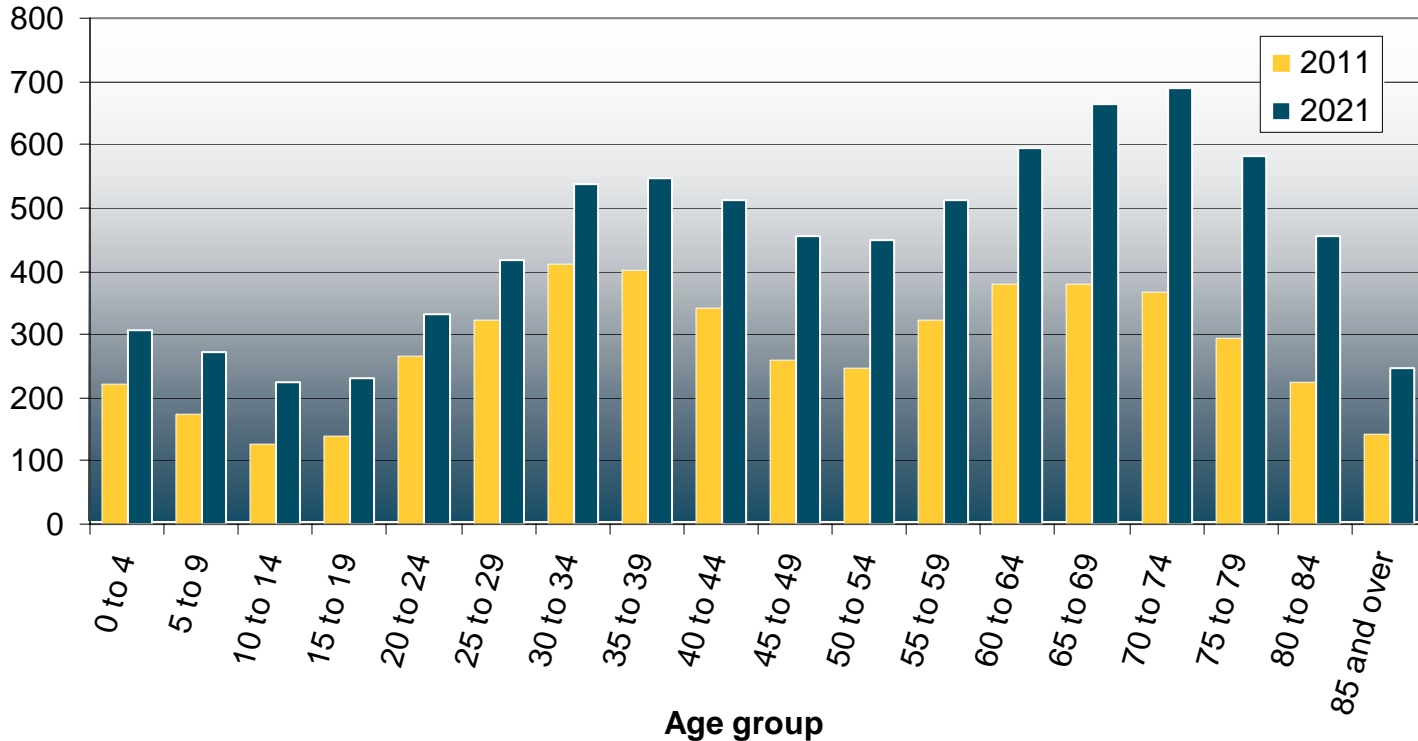
Source: i.d - Doncaster Hill forecasts



# Results: age structure, 2011-2021

The population is expected to increase in all age groups, especially ages 30 and above from 2011 to 2021.

## Population

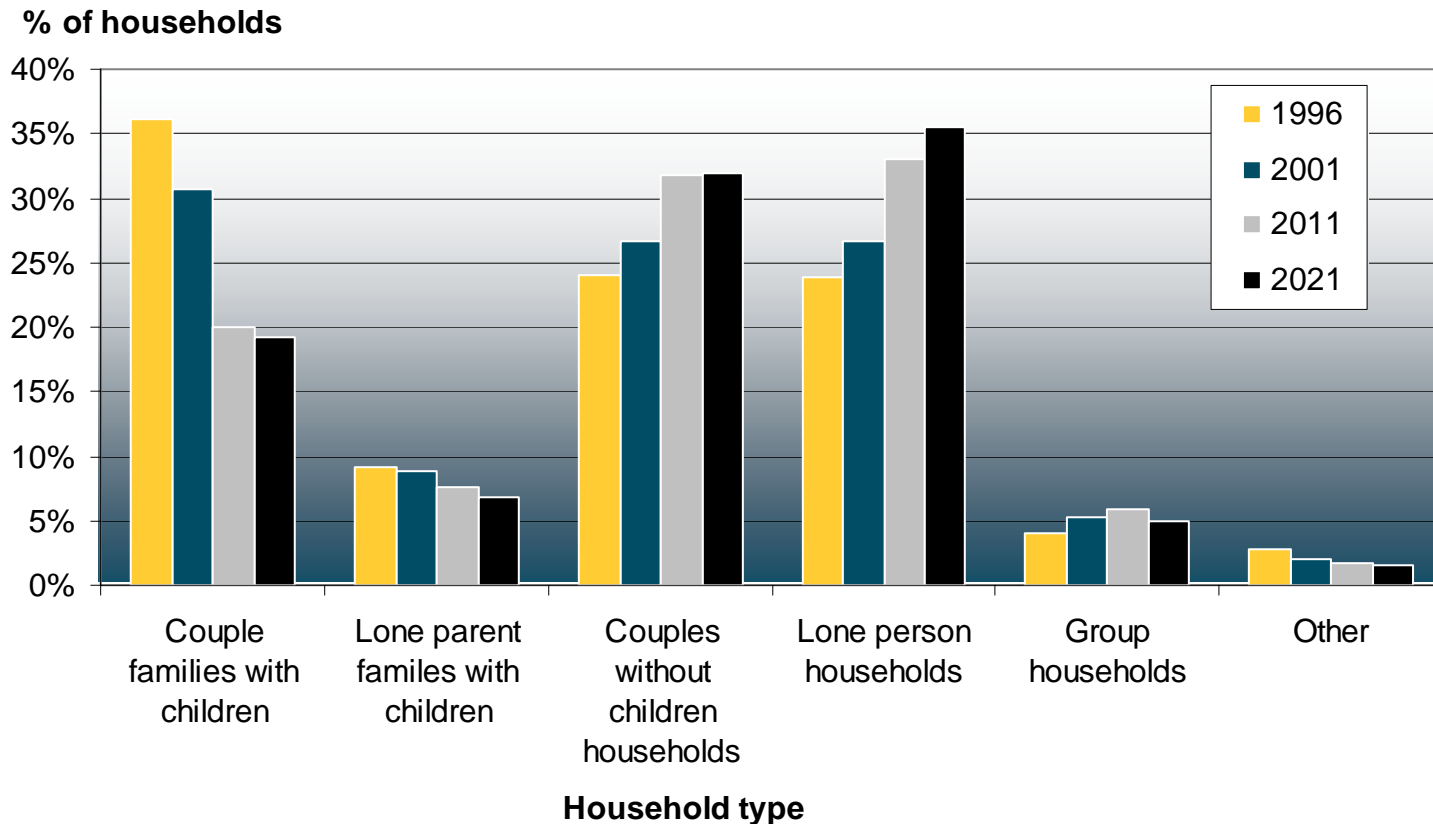


Source: i.d - Doncaster Hill forecasts



# Results: population by household type

The large increase in the share of couples without children and lone person households is a result of a significant increase in the overall population, with newer households dominating the household structure by 2011. The patterns are much more stable between 2011 and 2021, with a slight increase in the share of lone person households.



Source: i.d - Doncaster Hill forecasts



# Summary of results

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The population is expected to increase by almost 8,000 by 2021. The majority of the population is forecast to live in private dwellings, with almost 4,000 households by 2021. The average household size is expected to fall to just over 2 persons per household by 2006 and remain stable to 2021.

Results	1996	2001	2006	2011	2016	2021
Total population	347	436	2,476	5,021	6,354	8,029
<i>Population in private dwells.</i>	345	433	2,413	4,934	6,242	7,886
Total dwellings	144	229	1,286	2,610	3,359	4,276
Total households	132	191	1,137	2,392	3,079	3,920
Average household size	2.6	2.3	2.1	2.1	2.0	2.0



# Implications and conclusions

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## IMPLICATIONS OF DONCASTER HILL DEVELOPMENT

- First substantial attempt to encourage apartment development in suburban Melbourne
- More diverse housing stock in City of Manningham
- Greater opportunities for local residents to change housing types locally as people move through 'life-cycle'
- Increasing population and rate base
- Housing opportunities for people in all age groups, notably young childless singles and couples (20-34) and empty-nesters and elderly (55+)
- Much of the take up of apartments is likely to come from the local market, which means that Manningham will keep more of its residents:
  - Young people will have an alternative to the inner city
  - Older people will free up family homes in the municipality, allowing 'regeneration' in the municipality
- Reduced pressure from 'infill' development, although this is likely to continue, albeit at lower rates as the housing markets are different and the housing construction comes from very different development industry sources (small vs large developers)
- May attract assistance from the State Government in terms of public transport provision and urban design funding





## About i.d consulting

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*i.d consulting specialises in **demographic and spatial analysis.***

*i.d consulting specialises in presenting **clear and concise** spatial information as the basis for making **effective and informed decisions.***



# Glossary

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**Age specific birth rates** - the percentage of women aged 15-44 expected to bare children in a year.

**Age specific mortality rates** – the share of the population in an age group that could be expected to die an a year

**Average household size** – the average number of persons per household

**Couple (or two) parent families with children** – families comprised of two parents and child(ren)

**Couples without children** – two adults living as married or de facto without offspring (includes couples living with non-related adults)

**Elderly** – refers to older people aged 70-84.

**‘Empty-nesters’** – couples whose children have left the family home (normally aged 50-69)

**Group households** - are comprised of non-related adults (usually 2-3 persons)

**Lone (or single) parent families with children** – are families comprised of one adult and child(ren)

**Non-private dwellings** – dwellings that provide a communal type of accommodation, such as nursing homes or prisons

**Other households** – are comprised of multiple family households

**‘Regional context’** – this term is used to describe a group of Statistical Local Areas (SLAs) surrounding Doncaster Hill that have a strong connection with the area, based on proximity and migration patterns.



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