Anticipating Flat Bush:

Part 1: Building a Demographic Profile for Flat Bush 2

Prepared for Manukau City Council

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31 March 2010

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Introduction

This is the first part of a study to inform our understanding of the potential size and nature of the future Flat Bush community. The aim is to assess potential housing types, identify labour market requirements, amenity needs, and retail impacts. The focus in Part 1 is on the demographics of the community that can be expected to become established in Stage 2 of the Flat Bush project.

Survey-based Evidence

Two recent surveys of Flat Bush Stage 1 residents highlight the significance of detached housing and suggest an aversion to apartments which are associated with crowding, loss of a sense of neighbourhood, and reduced security. Residents are also concerned about the impact of traffic levels and noise (from Te Irirangi Rd) on the residential environment.

Parallel Developments

Five areas in Manukau that experienced significant growth over the ten years to 2006 – Dannemora, Flat Bush (Stage 1), Donegal Park, Totara Heights, and Randwick Park – have been analysed as precedents for Flat Bush 2 using census and building consent data.

Based on Census Area Units, these areas grew by around 28,500 residents between 1996 and 2006 based on an additional 8,200 additional occupied private dwellings (i.e. 3.5 additional residents per new home). One implication for Flat Bush 2 is that residential development is unlikely to conform to regional or national size characteristics. Provision should be made for larger households. While household size is falling as a result of population aging, this reduction may be minimised by the nature of people moving into Flat Bush.

Dwelling Stock

The private housing stock in the five areas studied is dominated by detached dwellings even more than in the rest of Manukau and Auckland. Virtually all consents issued between 2001 and 2004 were for detached houses although apartment numbers jumped in 2005 and 2006.

Consented houses in these areas have also been larger than elsewhere because more of them have four or more bedrooms. This reflects the fact that many houses cater for large families under circumstances in which smaller apartments or town houses may not be appropriate.

Multi-Unit Housing

Between 2005 and 2009 450 multi-unit dwellings were consented compared with 2,740 detached houses in the precedent areas. The unit costs of town houses were close to those of detached houses, but apartment costs were 18% higher on a square metre basis. The recent introduction of apartments to the area could foreshadow shifting preferences and new, emerging market segments. Or, it may be a response to planning signals that favour increasing densities. The issue is whether regulating for higher densities will line up with market composition and preferences.

Age Profile

The age distributions of the precedent areas is younger than Auckland region as a whole, although collectively more “middle aged” than Manukau City, with 31% of residents aged 35 to 54 years compared with 28% in Manukau.

The age profile is consistent with greenfield areas such as Flat Bush 2 attracting young and maturing families moving into a second or subsequent home. The attraction to such families with children of tertiary education and labour force entry age may reflect access to opportunities and amenities. In addition, encouraging young adults to live there may depend on providing entry level housing and good access to employment and services. Empty-nesters, people close to retirement, and retirees may be attracted by local services and amenities, and a quality environment.

Origins and Diversity

The majority of residents in Dannemora, Flat Bush and Donegal Park in 2006 were born overseas. Asian peoples are the majority in the latter two, although Donegal Park has a broader ethnic mix. Randwick Park residents are more likely to be Maori or Pacific peoples.

Housing demands in Flat Bush 2 will be diverse to the extent that they reflect different ethnic preferences. Immigrants, in particular, seek out areas where they have strong cultural ties, including links to temples, mosques, and churches. The survey research suggests that these requirements might influence the preferred style of housing, and how it meets the dual expectations of communities seeking to retain their own identity while establishing constructive links with others.

Projected Housing Market

Preliminary consideration is based on projections of household types, family types, and the age of adult occupants for Manukau City as a whole. Jointly they suggest that:

- Family households and, among them, couples with children, will continue to dominate;
- However, couples without children will be the most rapidly growing family cohort;
- Single parent households are projected to grow more than two parent households;
- Households occupied by people aged over 65 years will grow most rapidly.

There will be significant shifts in demand "at the margin" that will see a different mix of new compared with existing housing requirements over the course of the Flat Bush development cycle. Smaller households will become more important later in development.

Despite this, the population will remain relatively young: families with children will continue to be the major group, although more mature families will be a major driver of growth. Then, by the end of the Flat Bush development cycle, the retirement cohort is likely to be emerging as the most significant market segment.

Demand for dwellings to fulfill the aspirations of families with children will mark population growth in Manukau for some time to come. This will sustain demand for detached houses with yards and access to public spaces and amenities. However, the growing share of households with occupants entering partial or full retirement towards the end of the period considered here (2006 to 2031) begin to significantly change the pattern of new housing. The question is how far and when Flat Bush should also cater for a rapidly expanding demand for smaller dwellings for two or one person households as well as meeting the more traditional demand for family housing on detached sites.

Demographic Profile

Representative parameters drawn mainly from Flat Bush Stage 1 and Dannemora in 2006 have been used to describe the possible demographic character of the Flat Bush 2 community. These are shown in the table below. In summary, Flat Bush 2 is likely to be characterised by:

(1) A tendency early on to cater for larger, younger families and perhaps multi-generational families with demand for at least three and often four or more bedrooms;

Indicative Demographic Profile, Flat Bush 2

	Ten Years		At Capacity	
	Number	Share	Number	Share
Households				
Detached	3,030	79%	4,040	73%
Multi-Unit	810	21%	1,510	27%
Total	3,840	100%	5,550	100%
Tenure				
Owner Occupied	2,920	76%	4,120	74%
Rental	920	24%	1,430	26%
Total	3,840	100%	5,550	100%
Population				
0-14 Years	3,190	26%	4,100	24%
15-39 Years	4,570	37%	5,540	33%
40-64 Years	3,930	32%	6,140	36%
65+ Years	590	5%	1,210	7%
Total	12,280	100%	16,990	100%
Persons/Household	3.2		3.1	
Household Types				
Families	3,480	91%	4,900	88%
Single Person	210	5%	500	9%
Other	140	4%	150	3%
Total	3,830	100%	5,550	100%
Family Types				
Couple	970	28%	1,500	31%
Family	2,100	60%	2,800	57%
Single Family	410	12%	610	12%
Total	3,480	100%	4,910	100%
Ethnicity				
European	4,960	40%	6,860	40%
Maori	530	4%	730	4%
Pacific	380	3%	530	3%
Asian	6,070	49%	8,390	49%
Other	340	3%	470	3%
Total	12,280	100%	16,980	100%
Labour force Participation	73%		68%	
Labour Force				
Full-time Employed	3,650	55%	4,670	53%
Part-time Employed	300	5%	400	5%
Employer	1,540	23%	2,050	23%
Unemployed	1,110	17%	1,650	19%
Total	6,600	100%	8,770	100%
Journey to Work				
At Home	470	7%	620	7%
Did Not Go	640	10%	850	10%
Driver Private Vehicle	4,060	61%	5,390	61%
Passenger Private Vehicle	280	4%	370	4%
Public Transport	400	6%	530	6%
Other	760	11%	1,010	12%
Total	6,610	100%	8,770	100%
Weekly Household Income				
$20,000 or Less	390	26%	560	26%
$20,001 - $30,000	250	17%	370	17%
$30,001 - $50,000	520	34%	750	35%
$50,001 - $70,000	510	34%	730	34%
$70,001 - $100,000	660	44%	960	44%
$100,001 or More	1,510	100%	2,170	100%

Note: Indicative only. Totals vary as a result of rounding.

(2) A growing share of older families, couples without children, and single person households increasing;

(3) The growth of one and two households later in the development cycle lifting demand for multi-unit development by way of terrace housing, apartments, retirement villages, and the like;

(4) A majority of dwellings owner occupied, but a significant and increasing share of rentals reflecting the diversity of the community;

(5) A large share of immigrants, many of whom will have been in New Zealand for less than ten years and a majority of non-European residents;

(6) A high labour force participation rate relative to the rest of Manukau and generally higher household incomes in real terms;

(7) Continuing dependence on private transport for the journey to work;

(8) A relatively high level of self employment.

The uncertainty around future population composition, preferences, and behaviour means these are general tendencies that can be deduced from the numbers generated which are used to illustrate broad tendencies rather than represent actual outcomes. Actual outcomes can change as a function of detailed land use, urban design, transport, and investment decisions; changes in exogenous factors, including employment and migration; and changes in behaviour and preferences among ethnic groups or age cohorts over the period of development. Nevertheless, they provide an informed starting point for thinking about the scale and nature of the Flat Bush 2 community, for planning amenities and services, and for assessing its likely impact.

1 Objective

The aim of this study is to develop a profile of the future community of Flat Bush to inform our understanding of the likely requirements for housing and amenities in Flat Bush Stage 2 ("Flat Bush 2"). The profile is intended to underpin the Flat Bush Stage 2 Master Plan, to assess potential housing types, and to indicate labour market impacts, amenity needs, and retail requirements.

While it is impossible to make a definitive prediction about who will live in Flat Bush twenty years from now, the household composition, housing preferences, work and spending needs, guidance can be drawn from an understanding of how large greenfield communities evolve and the likely drivers of drivers of population growth, and how these might impact on residential needs and preferences.

This report therefore focuses on recent development in nearby areas of Manukau City, including Flat Bush Stage 1. It builds a picture based on five recently developing communities in the vicinity which are used to inform the assumptions about how Flat Bush 2 might evolve and what it may be like when developed to capacity.

1.1 Method

Several sources of information have been drawn upon to form a composite profile:

- Consideration of survey based and other secondary source evidence regarding housing preferences, with particular reference to detached and multi-unit housing;
- Building consents data to understand where the market's recent and current preferences lie;
- Recent census data to provide a description of the composition of recently growing communities in Manukau City, and the changes occurring within them;
- Statistics New Zealand population projections and assumptions about the underlying drivers of growth relevant to the Manukau Community

1.2 Flat Bush: A New Town

When completed, Flat Bush will be a major community – effectively a new town – established within the existing urban fabric under the provisions of the Auckland Regional Growth Strategy (Auckland Regional Council, 1999). The Strategy called for the bulk of Auckland's growth to be accommodated within the existing metropolitan area. It proposed that between 1996 and 2050 Manukau should absorb 22% of the region's projected growth, or 430,000 people. Flat Bush was identified as a future growth area in the Strategy's Growth Concept (pp34-35).

This was confirmed in the Southern Sector Agreement (2001), a Memorandum of Understanding between Manukau City and Papakura and Franklin District councils and the Auckland Regional Council (ARC). As a greenfield site Flat Bush was committed to residential, mixed use, employment, community and public open spaces, and expected to accommodate "no fewer than 40,000 people". An indicative concept suggested there would be 43,700 residents by 2020 (p10).

Consequently, the Metropolitan Urban Limit was extended to encompass this area (Variation 13 to the Manukau District Plan; Chapter 17, Operative District Plan).

In 2006 the Manukau City Council published the Flat Bush Community Plan, prepared in association with Ngai Tai ki Umupia and Ngati Paoa as Manua Whenua and based on local consultation with a wide range of individuals and groups led by the Botany Community Board. This was developed:

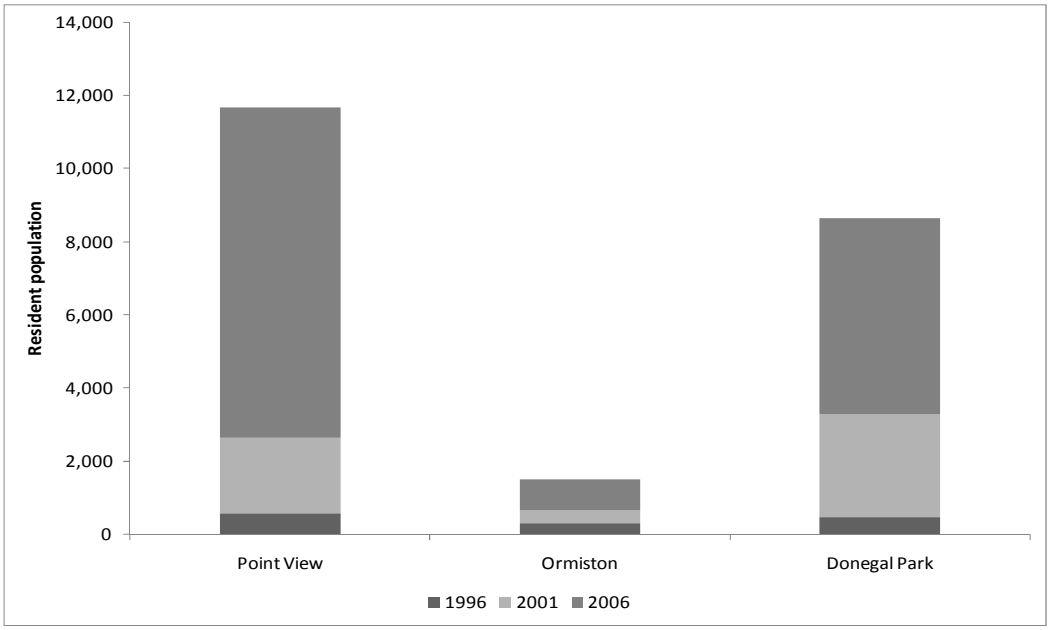
As a way for residents to express their aspirations for living in Flat Bush and become directly involved in developing their community" (p5).

It advanced a profile suggesting that the community of 40,000 will (by 2020):

- Have a "*vibrant mix of ethnicities and cultures*" – half to two thirds European, over a third from various Asian cultures, and a smaller proportion of Mãori, Pacific Peoples and others; with a third born outside new Zealand;
- Be "*living in a range of households*", with one half to a third in the next ten years couples with children;
- "*be growing up*", with an increasing number of children;
- "*have a range of spiritual needs*", with around a half affiliating with Christianity and up to 25% with other religions;
- "*have a significant number of disabled people*", as many as 8,000 covering a full range of impairments;
- "*have diverse employment needs*", with 42% to 52% working elsewhere in Manukau and 25% to 42% working north of the City (Auckland, Waitakere and North Shore).

Flat Bush Stage 1 lies mainly within three Census Area Units, Point View, Ormiston, and Donegal Park. The resident population growth in these three areas between the 2001 and 2006 Census was 10,000 people, with 6,960 in Point View, 2,530 Donegal Park, and 520 in Ormiston (Figure 1). In fact, Donegal Park was already growing strongly in its own right, with residential consents issued, for example, peaking in a998 and falling right away by 2007, and may best be omitted from consideration of the planned Flat Bush development. The majority, if not all, growth in the other two units is attributable to the Flat Bush project, however.

Figure 1 Population Growth Flat Bush Stage 1



Source: Census of Population, 2001 and 2006

Some 3,860 consents were issued for new dwellings in Point View and Ormiston between 2000 and 2009 inclusive (February years), 1,500 have been issued since 2005 with the associated new houses and population post-dating the April 2006 Census figures. On a conservative basis, if 90% dwellings were completed and occupied at an average occupancy of three persons, this would be an addition of around 10,400 people in new homes, 4,000 since the Census. In fact, the 2006 occupancy figures for these CAUs were between 3.5 and 3.6 persons per household. On these grounds, the additional population over the decade may have been closer to 12,200 of which 4,700 moved in after 2006.

Flat Bush 2, then, is building on an established but young and rapidly growing community in which the commitment to a 20ha town centre has already been made, and within which the 94ha Barry Curtis Park will be strong structural element as well as a major community facility.

An analysis has been conducted into the future capacity and population potential of the entire Flat Bush area which sets Stage 2 in context. The analysis is based on the boundaries of the development area rather than on Census Area Units used above, so gives rise to slightly different population estimates. It is based, however, on an expected long-term occupancy of In terms of 2.9 persons per household rather than currently much higher figures.

There are several stages to Flat Bush development. Stage 1 is well underway, although not fully occupied. The planned town centre will have capacity for significant residents dwelling in apartment-style homes. Following Stage 2, a smaller area to the south will be developed as Stage 3, subject to more constraints and therefore lower densities than Stage 2. Finally, there is provision for countryside living on larger peripheral lots, providing a buffer and reflecting the topography of the surrounding area.

1.3 Flat Bush Population Capacity

An analysis of the residential capacity has been conducted for the full development. [1] Total population will depend upon the development densities that can be achieved, the housing types – detached housing, units and terrace dwellings, and apartments – and household size. The area was divided for this purpose into the 155 individual blocks (200ha) committed in the Master Plan to housing, together with around 7ha associated with the five town centres parts of which are likely to be available for apartments. The densities associated with different dwelling types applied to these blocks were 13 housing units per ha for country-side living; 24 units/ha for detached housing in Stage 2, 17 units/ha in Stage 3; 42 units/ha for attached housing (terraces and the like); and 80 units/ha for apartments.

An end point average occupancy of 2.9 persons per dwelling was adopted, recognising that there is likely to be some variation around this figure in practice.

To place Stage 2 in context, the current and potential development in Stage 1 was assessed through a GIS based survey, and the likely capacity for apartment-based development in the Town Centre, countryside living, and Stage 3 development (at 17 units/ha) were also estimated (Table 1).

The results of this analysis confirm the capacity to meet the Regional Growth Strategy target of 40,000 persons. The capacity analysis indicates that over 16,000 of this total will be accommodated in Flat Bush 2. Of this total, some 37% (4,400 persons) might be housed in multi-unit dwellings.

The figures might vary if, for example, densities differ by housing type. As an illustration, if the occupancy figure in apartments is close to 2.0 persons per household and in attached housing (terrace dwellings) is 2.5, the total capacity for will be 15,100, a 17% reduction. The implication is that pursuing a greater share of higher density dwellings may not result in a proportionate increase in population as it is likely to be accompanied by smaller household sizes.

[1] Analysis by David Totman, Senior Environmental Policy Planner, Manukau City Council, March 2010

Table 1 Population Potential, Flat Bush

	Households			Population		
	Developed	**Capacity**	**Total**	**Developed**	**Capacity**	**Total**
Stage 1						
Detached	2,680	2,530	5,210	7,800	7,300	15,100
Town Centre						
Multi-Unit		1,010	1,010		2,900	2,900
Stage 2						
Detached	20	4,020	4,040	100	11,700	11,800
Multi-Unit		1,510	1,510		4,400	4,400
Stage 2 Total	***20***	***5,530***	***5,550***	***100***	***16,100***	***16,200***
Stage 3						
Detached		1,540	1,540		4,500	4,500
Countryside Living						
Detached		580	580		1,700	1,700
Total						
Detached	2,700	8,670	11,370	7,900	25,200	33,100
Multi-Unit		2520	2520		7300	7300
Total Flat Bush	***2,700***	***11,190***	***13,890***	***7,900***	***32,500***	***40,400***

Note: Based on 2.9 persons per household
Source: Manukau City Council

The analysis and discussion in the following sections is intended to provide insight into the likely demand for medium density housing and the composition and structure of the future population of Flat Bush which may help determine an appropriate mix of housing types, potentially modifying the capacity analysis.

2 Residents' Views about Housing

There have been two recent surveys of residents of Flat Bush; a qualitative analysis conducted by Hand Consultancy and a door-to-door questionnaire survey conducted by Gravitas Consultants. These are summarised below with an emphasis on perceptions and values that might be influenced by or reflected in housing preferences.

2.1 Focus Group Research

Hand Consultants conducted nine focus groups and spoke with an unspecified number of other interested persons. [2] The research covered 70 people of "*varied ethnicity, interests, age and length of residence*" (p2). It included non-English speaking groups facilitated by translators.

As in all such exercises, a variety of views was reported about the existing Flat Bush environment. By and large they were positive, with many comments relating to the openness and diversity of the community, and a sense of wanting to belong and make connections with people of other cultures.

Not surprisingly few people had lived for long in the area. However, the report documents an attachment to and enthusiasm for Flat Bush. Those that have dwelt there for some time remain enthusiastic even in the face of substantial change, and appeared open to building relationships with new communities (p3).

The negatives were as much to do with the unfinished nature of the area – the lack of intermediate or high school, unfinished roads, and limited public transport options – as reflecting any more fundamental dissatisfaction. Community amenities still appear deficient. There was some concern expressed about noise from nearby Irirangi Road and a diminishing sense of security as more young people and people from out of the area appeared on the streets at night.

Insecurity appears to have been significant for Indian residents. Among the factors they found worrying was:

"*More people moving into the area leading to difficulty in identifying actual residents, overcrowding in the apartments, apartments making the area too crowded, failure to take proper care of residences, drinking problems, and lack of enforcement of traffic regulations*". (p6)

Most people had moved from nearby and were attracted by the availability of new and for them affordable housing, the feeling of space, recreational facilities, and proximity to Manukau City Centre and Botany Downs. They appreciated their back yards – although some expressed disappointment with the smaller sections that they encountered and a number felt that the quality of finished homes was poor.

While Flat Bush was described as a friendly place, there was a sense that this could change for the worse - "*under conditions of decay of poorly built homes, overcrowded apartments, a more transient population living in poorer housing or renting apartments…*" (p13).

2.2 Questionnaire Survey of Residents

Gravitas surveyed 250 residents in 2008 through face-to-face interviews. [3] A number of questions asked were open-ended and subsequently coded so that the survey as a whole provides a sense of weight to issues covered. The survey response rate and bias were not reported so that the results

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[2] Hand Consultants (June 2008) *Community Research in Flatbush, Report of Research with the Residents of Flatbush to Inform the Planning of Services and Facilities by Manukau City Council and Other Agencies*

[3] Gravitas Research and Strategy Ltd (2008) *Community Research in Flat Bush: Survey of Residents*, prepared for Manukau City Council

cannot be extrapolated beyond the 250 people interviewed. Significant differences were evident in the responses of different subsamples, though, and can be used to suggest differences in preferences and perceptions according to demographic characteristics.

The results reflect and reinforce the focus group findings. A better or newer house was cited as a basis for moving by 34% of respondents, the same share as citing educational opportunities. Flat Bush was seen as positive because it is a new or upcoming area with good housing and good amenities. It was cited as a good area to bring up children by a quarter of respondents.

94% of respondents lived in a "single house on a section" and 3% in a terraced house. 85% had previously lived in a detached house, the implication being that the move to Flat Bush enables slightly more people to achieve this housing outcome. Some 65% of respondents' houses were owned with a mortgage, 16% without, and 19% were rented. 34% said that a new and better home played an important part in their move to Flat Bush; 14% cited the need for a bigger home and 11% mentioned housing g affordability. 34% mentioned educational facilities and 24% proximity to work. Other reasons cited included liking the area, proximity to families, and shopping facilities.

Housing and neighbourhood character – friendly, nice neighbours – were among the things people like about living in Flat Bush. Although not high on the list (with only 10% of respondents nominating it) one of the negatives cited was the move towards more dense housing (apartment-style) and consequent crowding.

Both original surveys underscore the significance of housing to new residents, their interest in detached dwellings with yards, and some aversion to apartments. The latter is associated with crowding, with a loss of the sense of neighbourhood, and the increased insecurity which comes from knowing fewer people on the street. The implication is that newcomers to new developments are likely to favour detached housing ahead of apartment and terrace housing.

2.3 Demand for Intensive Housing

Resistance to multi-unit housing – flats, apartments, and terraces – has frustrated plans to intensify dwelling densities. A report prepared as part of the Auckland Sustainable Cities programme highlighted differences between planner and the community expectations in a number of areas, largely as a result of concerns over poor design, low quality, and low amenity, with intensification seen as a risk to the character and heritage of existing neighbourhoods (p2).[4] The report also reported divergent views among residents about the quality of high density neighbourhoods and the sense of community. Another concern among commentators cited is that high intensity living contributes to social segregation. It was suggested that to the extent that it is associated with poverty higher density living can be indirectly linked with crime and health issues.

Community resistance to high density living was the subject of a further review prepared in 2007 in support of the Auckland Regional Growth Strategy commitment to increasing residential densities. [5]

The report suggested two main product-market associations for apartment style living:

- High demand for a high quality coastal or inner city areas;
- Lower value suburban areas where expectations of lower prices results in a lower quality product, the only alternative to which might be a comprehensively developed product. The report does not indicate the level of demand for this product.

Among other things, however, it concludes that:

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4 Syme C, McGregor, V and Mead D (2005) *Social Implications of Housing Intensification in the Auckland Region*

5 Hill Young Cooper and Urban Partnerships (2004, updated 2007) *Regional Intensification: Intensive Housing Demand and Supply Issues,* prepared for the ARC

"*In inland, suburban areas the main issue is how to broaden the market for intensive housing away from investors towards owner occupiers, and to support a better quality product*."

This has to be done in an environment where there is a range of housing choices. It is concluded "*the benefits of being close to rail or a town centre are not valued highly by the market place*" (p2)

Several techniques were proposed to reduce market barriers to demand:

- A better understanding of market motivators, including liveablity, access to transport and services, and price. ;
- Restrict "*incremental infill type development*",
- Structure and concept planning to provide direction to the market and upgrade the environment in selected areas;
- Defining the benefits of intensive housing;
- Encouraging developers to respond to the needs of end users rather than investors (in the quality of apartments built);
- A redevelopment agency to facilitate necessary changes in infrastructure, land assembly and the like, reducing developer risk. (p3)

The fact that intensification has not been wide-spread in the suburbs is consistent with the preferences expressed in the Flat Bush surveys. The challenge highlighted by the 2007 study, therefore, may not be about finding the right planning techniques to bring about intensification, or countering market resistance by educating users about its merits, or encouraging developers to provide a product that the market currently views as inferior. Rather, it may be about acknowledging and accommodating consumer concerns over the urban design associated with intensification, as well as about the design of the dwelling units themselves.

Enhancing the quality and design of higher density dwelling options appears to be a necessary precondition to wider acceptance, especially in light of the perception – and the experience away from the harbour-front– that multiple units are an inferior housing product. [6]

At the same time, the 2007report demonstrates some difficulty in attaining the quality that might make higher density living more widely appealing at a cost that will make it affordable, and enable units to compete with detached houses.

To make progress in promoting high density living may mean establishing apartments and units at superior locations subject to a high degree of design and amenity input. Such locations are not likely to be those favoured by a view of urban efficiency based on promoting contiguous commercial and residential uses around individual centres or busy roads. Promoting high housing densities on arterial roads, for example, raise issues for occupants regarding noise and disruption, community severance and security.

More attention may have to be paid to the quality of the natural and built environments within which higher density housing is located, especially to access to open spaces (including the road corridor itself by way of footpaths, verge, streetscaping, and traffic calming), recreational facilities, and community amenities. The potential for private outdoor space associated with detached suburban living may need to be blended with the quest for an increased sense of community in public spaces. In favour of higher densities in Flat Bush is the likelihood that such outcomes may be most readily achieved in greenfield developments, especially with a more generous provision of open public space than associated with suburban intensification in Auckland to date.

[6] The high proportion of apartments and units in subject to leaky homes problems reinforces concerns about quality.

3 Precedents

3.1 Parallel Developments

Precedent or parallel developments can be used to further inform our understanding of the possible character of a future Flat Bush community. Such parallels can only provide approximations, sufficient to inform us about the potential path and character of development but not to predict it. They inevitably reflect a different time, different circumstances, and different drivers.

Acknowledging these limitations, five areas in Manukau that have experienced rapid growth over the ten years to 2006 were selected for profiling. These were based on groupings of contiguous Census Area Units – suburbs -- that have experienced significant greenfield growth since the mid-1990s (Table 2). The groupings of more or less contiguous CAUs have been assigned collective labels for this discussion. Members of each group have developed more or less in the same period and can be expected to share similar characteristics. Inevitably, though, the boundaries are approximations, and will include more established housing and populations within the collective and average figures on which the discussion is based, potentially masking significant local differences.

3.2 Population Growth

The first stage of Flat Bush falls predominantly into the Point View CAU although with a small area in Ormiston. (Much of Stage 2 will fall into Ormiston CAU). Dannemora and Kilkenny ("Dannemora") to the north have been longer established, with strong growth experienced between 1996 and 2001. Donegal Park, Totara Heights, and Randwick Park have expanded more steadily over the ten year period, although largely with higher rates in the first five years.

Table 2 Population Growth Areas, Manukau City 1996-2001

	Usually Resident Population			1996-2001 Shift		2001-2006 Shift	
CAU/**Suburb**	**1996**	**2001**	**2006**	**Number**	**%**	**Number**	**%**
Dannemora	108	3,309	3,969	3,201	2964%	660	20%
Kilkenny	567	2,454	2,730	1,887	333%	276	11%
Dannemora	**675**	**5,763**	**6,699**	**5,088**	**754%**	**936**	**16%**
Point View	582	2,064	9,027	1,482	255%	6,963	337%
Ormiston	303	339	855	36	12%	516	152%
Flat Bush	**885**	**2,403**	**9,882**	**1,518**	**172%**	**7,479**	**311%**
Donegal Park	**453**	**2,823**	**5,355**	**2,370**	**523%**	**2,532**	**90%**
Redoubt South	4,029	5,364	6,258	1,335	33%	894	17%
Totara Heights	1,401	2,721	4,818	1,320	94%	2,097	77%
Wairere	624	1,035	1,467	411	66%	432	42%
Totara Heights	**6,054**	**9,120**	**12,543**	**3,066**	**51%**	**3,423**	**38%**
Randwick Park	1,803	2,271	3,372	468	26%	1,101	48%
Hyperion	1,593	2,055	2,184	462	29%	129	6%
Randwick Park	**3,396**	**4,326**	**5,556**	**930**	**27%**	**1,230**	**28%**
Total Selected Areas	**11,463**	**24,435**	**40,035**	**12,972**	**113%**	**15,600**	**64%**
Rest of Manukau	242,817	258,762	288,933	15,945	7%	30,171	12%
Rest of Auckland	814,365	875,694	974,100	61,329	8%	98,406	11%

Source: Census of Population and Dwellings, Statistics New Zealand

3.3 Dwellings and Household Size

Jointly, the five chosen areas grew by around 28,500 residents over the ten years, based on an additional 8,200 additional occupied private dwellings, a 245% increase in dwelling stock (Table 3).

Table 3 Occupied Private Dwellings, 1996-2006

	Private Occupied Dwellings			1996-2001 Shift		2001-2006 Shift	
	1996	2001	2006	Number	%	Number	%
Dannemora	30	1,098	1,278	1,068	3560%	180	16%
Kilkenny	135	720	780	585	433%	60	8%
Dannemora	**165**	**1,818**	**2,058**	**1,653**	**1002%**	**240**	**13%**
Point View	183	660	2,547	477	261%	1,887	286%
Ormiston	102	114	258	12	12%	144	126%
Flat Bush	**285**	**774**	**2,805**	**489**	**172%**	**2,031**	**262%**
Donegal Park	**120**	**804**	**1,479**	**684**	**570%**	**675**	**84%**
Redoubt South	1,215	1,563	1,770	348	29%	207	13%
Totara Heights	414	906	1,491	492	119%	585	65%
Wairere	192	303	438	111	58%	135	45%
Totara Heights	**1,821**	**2,772**	**3,699**	**951**	**52%**	**927**	**33%**
Randwick Park	477	630	900	153	32%	270	43%
Hyperion	426	570	567	144	34%	-3	-1%
Randwick Park	**903**	**1,200**	**1,467**	**297**	**33%**	**267**	**22%**
Selected Areas	**3,294**	**7,368**	**11,508**	**4,074**	**124%**	**4,140**	**56%**
Rest of Manukau	71,070	76,224	83,442	5,154	7%	7,218	9%
Rest of Auckland	280,995	309,672	343,038	28,677	10%	33,366	11%

Source: Census of Population and Dwellings, Statistics New Zealand

These figures indicate declining household size in the first five years followed by a slight recovery through to 2006. This is most evident in the later growing areas, such as Flat Bush, where household size was significantly larger in 2006 than in 1996 (Table 4). The new, incoming community had a quite different in age structure from the smaller, older community. On the other hand, there has been a significant fall in household size in the earlier developed Dannemora as the community of the 1990s has stabilised and matured.

The marginal shifts in household size (associated with additional population and households) clearly confirm a tendency for households larger than the norm to have been moving into these areas.

Table 4 Residents per Dwelling

	Residents/Dwelling				
	1996	2001	2006	1996-01	2001-06
Dannemora	3.60	3.01	3.11	3.00	3.67
Kilkenny	4.20	3.41	3.50	3.23	4.60
Dannemora	**4.09**	**3.17**	**3.26**	**3.08**	**3.90**
Point View	3.18	3.13	3.54	3.11	3.69
Ormiston	2.97	2.97	3.31	3.00	3.58
Flat Bush	**3.11**	**3.10**	**3.52**	**3.10**	**3.68**
Donegal Park	**3.78**	**3.51**	**3.62**	**3.46**	**3.75**
Redoubt South	3.32	3.43	3.54	3.84	4.32
Totara Heights	3.38	3.00	3.23	2.68	3.58
Wairere	3.25	3.42	3.35	3.70	3.20
Totara Heights	**3.32**	**3.29**	**3.39**	**3.22**	**3.69**
Randwick Park	3.78	3.60	3.75	3.06	4.08
Hyperion	3.74	3.61	3.85	3.21	n.a.
Randwick Park	**3.76**	**3.61**	**3.79**	**3.13**	**4.61**
Selected Areas	**3.48**	**3.32**	**3.48**	**3.18**	**3.77**
Rest of Manukau	**3.42**	**3.39**	**3.46**	**3.09**	**4.18**
Rest of Auckland	**2.90**	**2.83**	**2.84**	**2.14**	**2.95**

Note: Last two columns show changes at the margin: average size of additional dwellings
Source: Census of Population and Dwellings, Statistics New Zealand

Statistics New Zealand in 2007 projected a return to declining national average household size, from 2.6 in 2006 to 2.4 in 2031, an 8% reduction, as household numbers grow faster than population.

The occupancy figures used here (Table 5) are based on the usually resident population divided by the number of private occupied dwellings. To the extent there are people usually resident in non-private dwellings (institutions of different sorts) they may slightly exaggerate household size. Nevertheless, they indicate that the areas in question have significantly larger households than the national and regional norms and gains in population over the past five years have been associated with an increase in average household size.

It follows that a new residential area in this vicinity is unlikely to conform to regional or national household size characteristics and trends and that provision should be made for larger households. While a gradual decline in size is inevitable as a result of population ageing, this may be deferred by the nature of people moving into Flat Bush. An 8% reduction from 2006 is a possibility – Dannemora experienced a 14% shift in household size between 1996 and 2006 – but a lower level is more likely.

3.4 Dwelling Stock

According to the 2006 Census, the private housing stock is dominated by detached dwellings in the selected areas (Table 5). Again, the longer-established Dannemora is the exception. Otherwise, the level of apartment or terrace house living in the precedent areas is well below the rest of the city and the region outside Manukau City.

Table 5 Housing Stock 2006

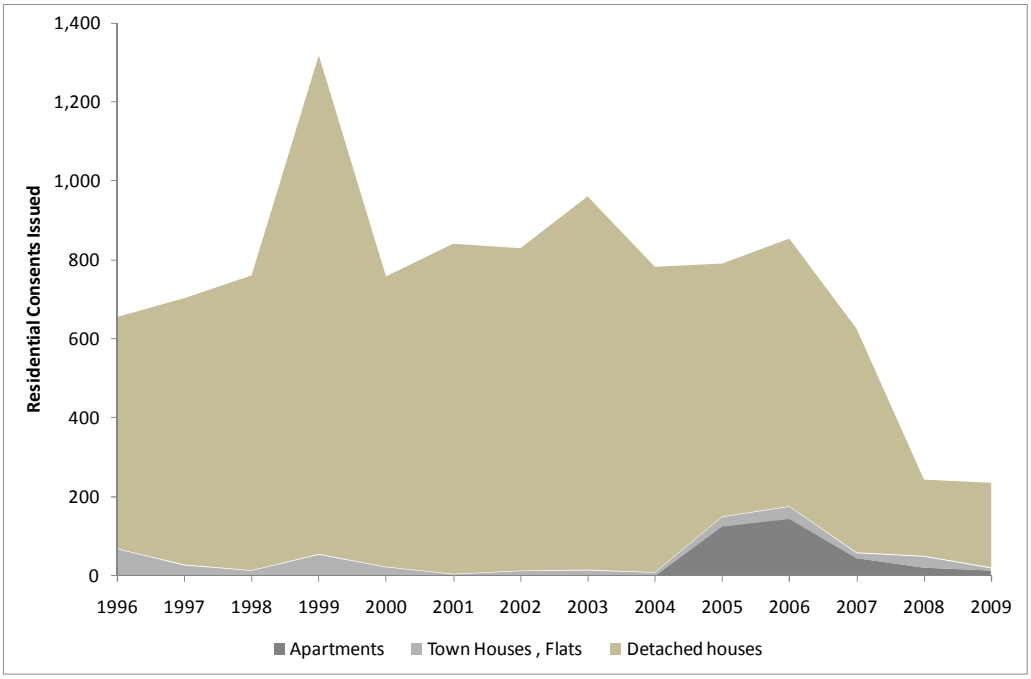
	Detached	Multiple Units	Other	Total
Dannemora	1,020	240	0	1,260
Kilkenny	730	40	0	770
Dannemora	**1,750**	**280**	**0**	**2,030**
Point View	2,410	90	0	2,500
Ormiston	220	20	0	240
Flat Bush	**2,630**	**110**	**0**	**2,740**
Donegal Park	**1,080**	**290**	**120**	**1,490**
Redoubt South	1,560	90	10	1,660
Totara Heights	1,360	90	0	1,450
Wairere	380	40	0	420
Totara Heights	**3,300**	**220**	**10**	**3,530**
Randwick Park	780	40	0	820
Hyperion	470	30	0	500
Randwick Park	**1,250**	**70**	**0**	**1,320**
Selected Centres	**10,010**	**970**	**130**	**11,110**
Rest of Manukau	62,590	14,530	6,310	83,430
Rest of Auckland	238,520	82,960	21,560	343,040

Source: Census of Population and Dwellings, Statistics New Zealand

Consistent with this, almost all consents issued between 2001 and 2004 were for detached houses (0). However, there was a boost in apartment numbers in 2005 and 2006. Coupled with slower housing growth and the post-2007 downturn this means that they have been a more important component of growth later in the period. Over the five years to 2009, apartments increased to 16% of residential consents compared with 3% between 1996 and 2004.

The current hiatus in new construction may see a lift in the share of dwellings that comprise multiple-units when growth recommences. The bigger question is whether a recovery in house construction driven in part by a focus on increased affordability, This would see a more significant and enduring shift in the mix.

Figure 2 Dwelling Consents, Selected Areas 1996-2009



Source: Statistics New Zealand, calendar years

3.4.1 The Nature of Detached Housing

The character of detached housing has been assessed from building consents data. While the value attached to individual consents may vary from the final expenditure, and while a small share of the consents issued might not proceed, the series provides a profile of the sort of development activity taking place in the precedent areas relative to the rest of the city and region.

Activity in Dannemora slowed down later in the period, with only a few large houses. These stand out as the exception among the selected areas. Nevertheless, houses were generally larger in the precedent areas than the norms for Manukau and Auckland. They did vary significantly among areas, however, from the smaller, lower cost housing of Randwick Park to the relatively larger and more expensive houses of Totara Heights and Flat Bush Stage 1.

Table 6 Nature of Detached Houses Consented, 1996-2009

	1996-2004					2005-2009				
	Number	% Value	Av. Sqm	Av. Value	Av. $/Sqm	Number	% Value	Av. Sqm	Av. Value	$/Sqm
Dannemora	1,614	96%	220	$176,500	$803	11	99%	408	$568,400	$1,395
Flat Bush	2,360	99%	220	$190,006	$865	2,007	91%	241	$257,612	$1,067
Donegal Park	1,255	98%	142	$112,760	$792	273	44%	173	$181,225	$1,045
Totara Heights	1,822	98%	214	$181,092	$845	379	95%	239	$261,161	$1,094
Randwick Park	564	98%	138	$115,157	$837	74	100%	170	$151,744	$895
Selected areas	7,615	98%	200	$166,774	$835	2,744	89%	236	$252,299	$1,069
Rest of Manukau	12,737	86%	174	$146,915	$843	3,194	86%	220	$254,129	$1,153
Rest of Auckland	68,765	70%	198	$181,872	$921	22,407	72%	227	$289,113	$1,274

Source: Statistics New Zealand

There has been a significant increase in house size over the period, with houses consented in the second five years some 18% bigger than in the first. More generally, the data indicate:

(1) An overwhelming market preference for detached homes;

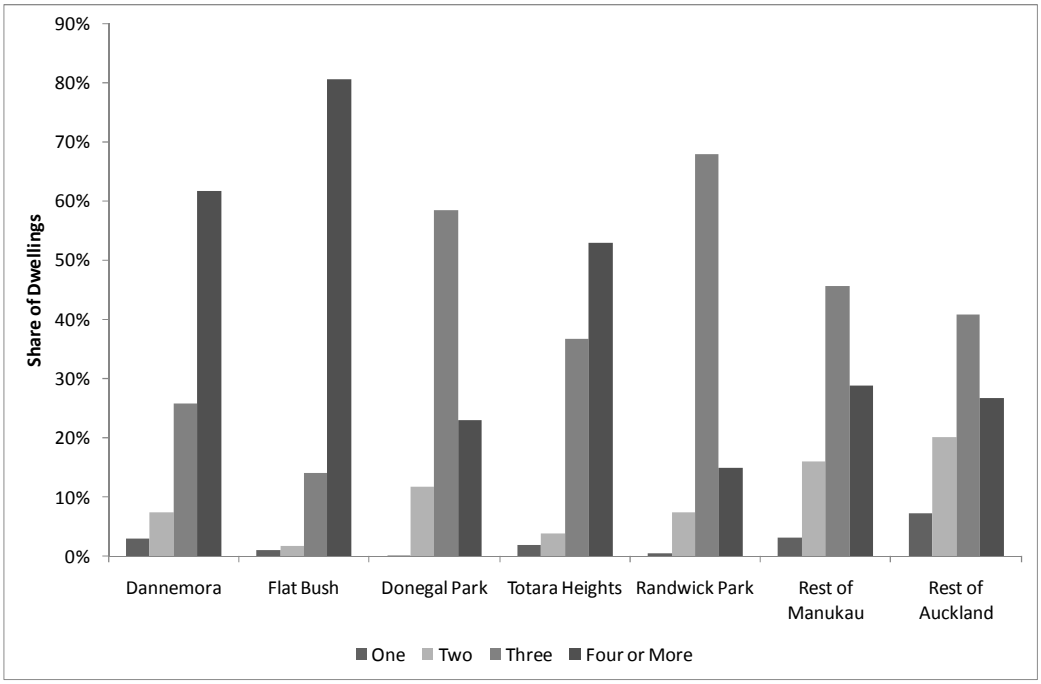
(2) A variety of house sizes, tending towards an average of 230m^2 (excluding Dannemora);

(3) Low unit (per square metre) construction costs keeping house costs relatively low;

(4) Donegal and Randwick Parks as areas of affordable housing, with Donegal Park marked by the level of multi-unit dwellings (66% by value of new consents issued between 2001 and 2006).

The fact that houses in the selected areas tend to be larger than elsewhere in Manukau City and Auckland Region reflects a tendency towards more bedrooms rather than greater utility by way of spacious design. In Flat Bush, Dannemora, and Totara Park the majority of homes have four or more bedrooms, a reflection of larger family size, and a strong contrast with the three bedroom modal size for the rest of Manukau and Auckland (Figure 3).

Figure 3 House Size – Number of Bedrooms 2006



Source: Census of Population and Dwellings, Statistics New Zealand

The implication of this analysis is that the family orientation of the selected areas is reflected in the nature of more intensively utilized housing stock which while only marginally larger than the regional average tends to house more people. The houses are oriented towards families under circumstances in which smaller apartments or town houses could be considered inappropriate.

3.4.2 The Nature of Multi-Unit Housing

Between 2005 and 2009 450 multi-unit dwellings were consented compared with 2,740 detached houses, mainly in Flat Bush, Donegal Park and Totara North (Table 7). The unit costs of town houses were close to those of detached houses, but apartment costs were 18% more expensive per square metre. The average cost per apartment dwelling was lower only because apartments and townhouses are much smaller than detached dwellings. The implication is that apartments have been catering for a distinctive sub-market of smaller households.

Table 7 Multi-Unit Dwellings Consented, 2005 - 2009

	Units, Townhouses					Apartments				
	Number	% Value	Av. Area	Av. Value	Av. $/Sqm	Number	% Value	Av. Area	Av. Value	Av. $/Sqm
Dannemora	1	9%	60	$70,000	$1,167	0				
Flat Bush	55	3%	175	$166,836	$952	204	10%	132	$163,333	$1,238
Donegal Park	25	9%	117	$117,200	$1,001	133	49%	139	$177,944	$1,280
Totara North	20	5%	110	$166,340	$1,514	12	3%	92	$116,667	$1,273
Randwick Park	1	1%	67	$60,000	$896	0				
Selected areas	102	4%	146	$152,576	$1,045	349	13%	133	$168,464	$1,264
Rest of Manukau	241	8%	98	$103,830	$1,064	633	20%	119	$150,448	$1,269
Rest of Auckland	1,426	6%	158	$194,310	$1,230	6,568	29%	110	$205,483	$1,862

Source: Statistics New Zealand

The recent introduction of apartments to the area could be the forerunner of a shift in household composition and housing preferences, at least among some market segments. It may also be a response to planning signals that favour increasing housing densities and to growing affordability issues. One question that arises, however, is whether the prescription favouring higher density living is lining up with the market preferences. Another is whether it is cost effective in terms of the costs of per person housed in a new housing environment that may continue to be dominated by large families for some time.

4 Demographic Profile

4.1 Age

For this review, residents have been grouped into age categories which broadly reflect life-stage as it relates to the demand for services and facilities and which can be described in terms of typical (but by no means universal) transitions. Children and young people are divided into:

- 0-4 Pre-school;
- 5-14 Primary and early secondary education;
- 15-24 Young adult: advanced secondary and tertiary education, or work force entry.

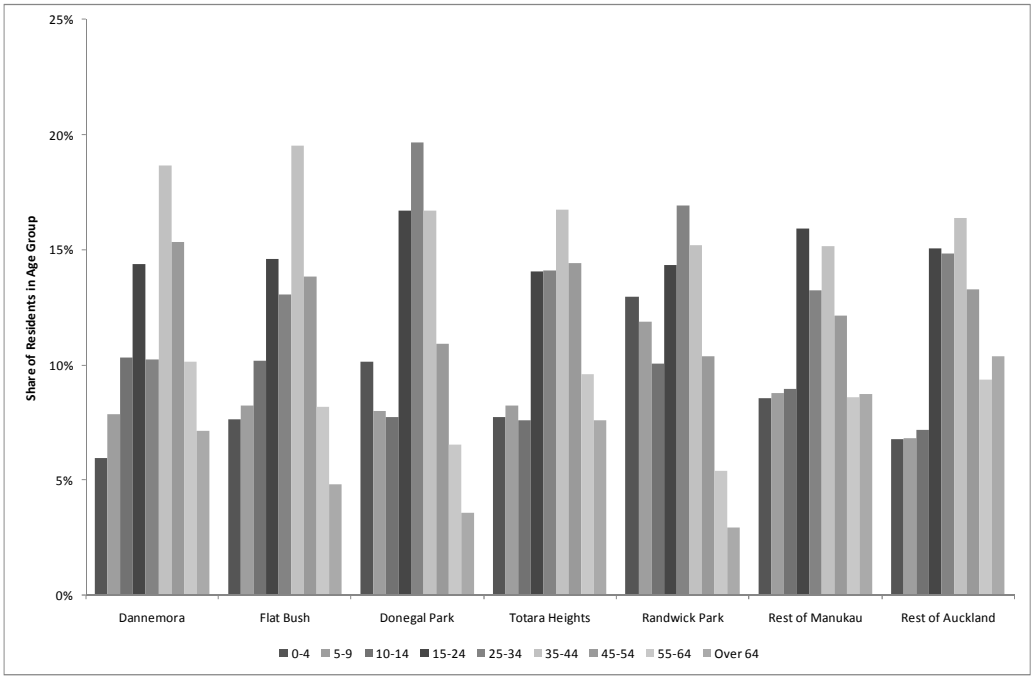
Adults and older people are divided into:

- 25-34 Career development and household formation;
- 35-44 Growing family, career consolidation;
- 45-54 Mature family, career consolidation;
- 55-64 Empty nester, pre-retirement;
- 65+ Full or partial retirement, diminishing independence (at later ages).

The alignment of age structure with lifestage and lifestyle favours broad, generalised groupings, rather than more detailed subcategories and is inevitably imprecise. There is, for example, an increasing propensity for people to change careers, to work until they are older, and for children to stay at home longer. Household formation and family development may occur at later stages among some groups, and earlier among others. These trends, though, may reflect a specific set of circumstances, and may change in unexpected ways in the future.

The precedent areas have a younger population than Auckland Region but are collectively somewhat more "middle aged" than the rest of Manukau City (Figure 4). They have relatively fewer pre-school and primary age children and young adults, but more people in the family cohorts, 35 to 54 years.

Figure 4 Age Distributions, 2006



Source: Census of Population and Dwellings, Statistics New Zealand

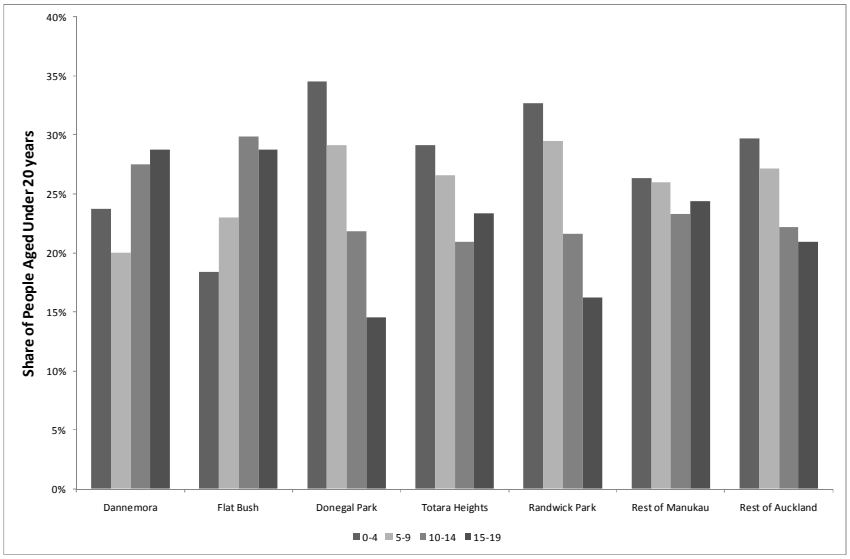
There are also contrasts among precedent areas, with Dannemora significantly older, Randwick Park significantly younger, and Flat Bush marked by maturing families (with 20% of residents aged between 35 and 44), and relatively high numbers of secondary school age children. Donegal Park has a greater share of young adults than the other areas and Auckland and Manukau – 17% of its residents are aged between 15 and 24 (for Manukau City the share is less than 16%) and 20% between 25 and 34 (Manukau is 13%).

The age profile of the selected areas resonates with the housing motivations and values identified in the surveys of residents of Flat Bush. As greenfield areas these suburbs have provided the opportunity for young or maturing households to move into larger dwellings. As they mature, the populations naturally age (e.g., Dannemora and Totara Park) but remain younger than the longer-established population of other parts of the city.

This profile reinforces the prospect that Flat Bush 2 will be populated primarily by young and maturing families, the latter perhaps predominating and moving into a second or subsequent home. Families with children might be expected to predominate, perhaps biased towards primary school age early in the period and more towards mature families (with their need for secondary and tertiary education facilities) later. The area can be expected to transition over 10 to 20 years into a mature suburb with resident households making a wide range of demands on community facilities, schools and tertiary institutions. This profile might be modified, however, by the nature, quality and price of housing stock which will influence the opportunities facing different cohorts.

The precedent areas display significant differences in the age distributions of people aged less than twenty years. Pre-schoolers are particularly significant, still, in Donegal and Randwick Parks and Totara Heights (Figure 5). Donegal and Randwick Park also stand out for the share of children of primary and secondary school age. Young adults of an age for tertiary education or workforce entry are more significant in Flat Bush and Dannemora, and also important in Totara Heights.

Figure 5 Age Distribution, People Under 20 years 2006



Source: Census of Population and Dwellings, Statistics New Zealand

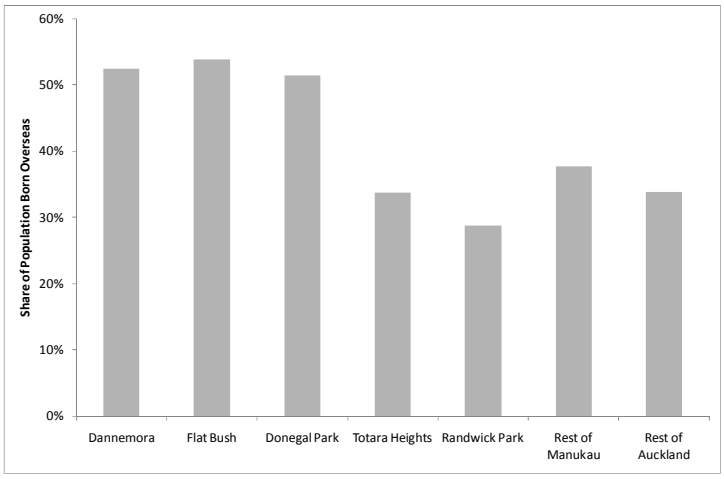
The attraction of older families to Flat Bush 2 with children of tertiary education and labour force entry age may depend upon the relevant opportunities and amenities provided. Encouraging young adults to live in the area may depend on entry level housing and affordable rental accommodation, including multi-unit development, and easy access to employment. Empty-nesters, people close to retirement, and retirees may be attracted by local services and amenities, the quality and character of the local environment, and the ease of local movement. Each group will have varying housing needs and preferences; for example:

- Young adults: entry level housing, two bedroom, multi-unit dwellings; proximity to commercial services, entertainment and recreation amenities, public transport;
- Young families: entry level and subsequent detached or semi-detached dwellings, three or more bedrooms, close to shops, recreation, public transport, schools and outdoor amenities;
- Mature families: detached, semi-detached, and terrace style housing, three or more bedrooms, close to amenities, public transport;
- Empty-nesters, pre- and post retirees: Multi-unit dwelling, terraces with two to three bedrooms; access to shops, possibly retirement village location.

4.2 Origins

A majority of Dannemora, Flat Bush and Donegal Park residents were born overseas, contrasting with Randwick Park, Totara Heights and, to a lesser extent, Manukau and Auckland Region (Figure 6).

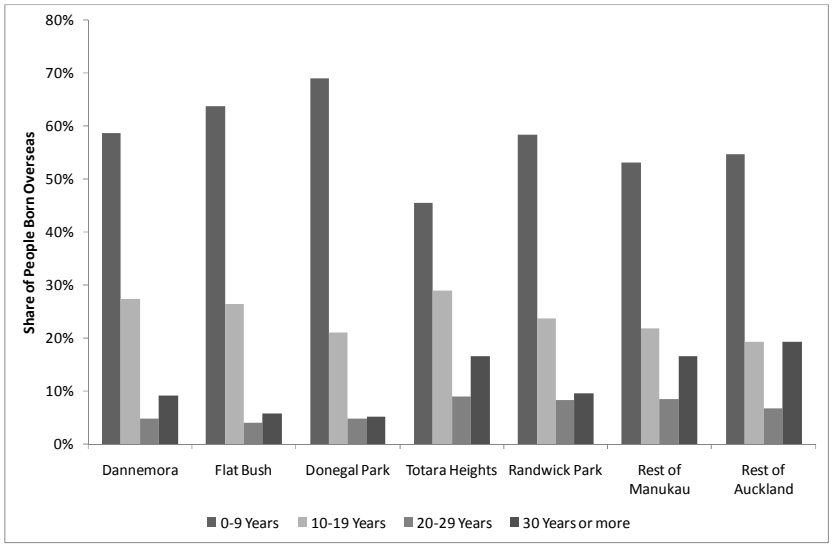
Figure 6 Share of Population Born Overseas, 2006



Source: Census of Population and Dwellings, Statistics New Zealand

Among people born overseas, the majority had been in New Zealand for less than ten years, again contrasting with Manukau City and Auckland Region (0). The selected areas, particularly Flat Bush, Dannemora and Donegal Park, stand out as destinations for recent migrants.

Figure 7 Years in New Zealand Among Persons Born Overseas, 2006



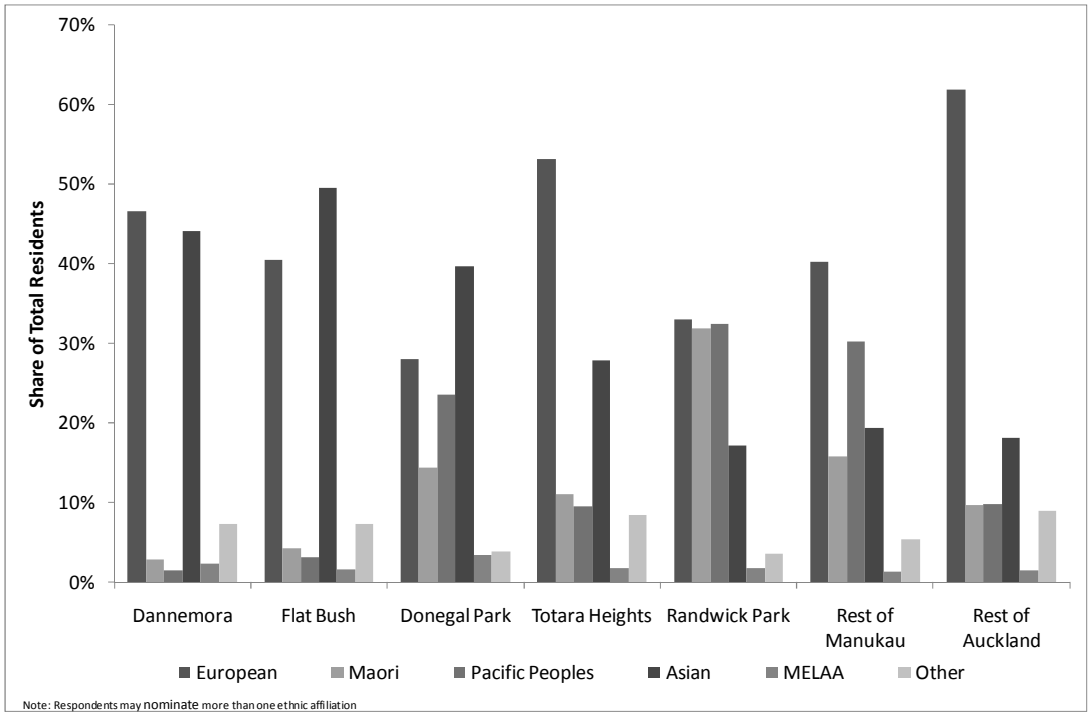
Source: Census of Population and Dwellings, Statistics New Zealand

4.3 Ethnicity

All the areas considered are more ethnically diverse than the city and region (Figure 8). People of European origin comprise more than 50% of residents only in Totara Park. People of Asian ethnicity are the majority in Flat Bush and Donegal Park.

Donegal Park has a broad mix of ethnicities. So, too, does Randwick Park where residents are more likely to be Maori or Pacific Peoples.

Figure 8 Ethnic Affiliations, 2006



Note: MELAA is Middle East, Latin America, or Africa

Source: Census of Population and Dwellings, Statistics New Zealand

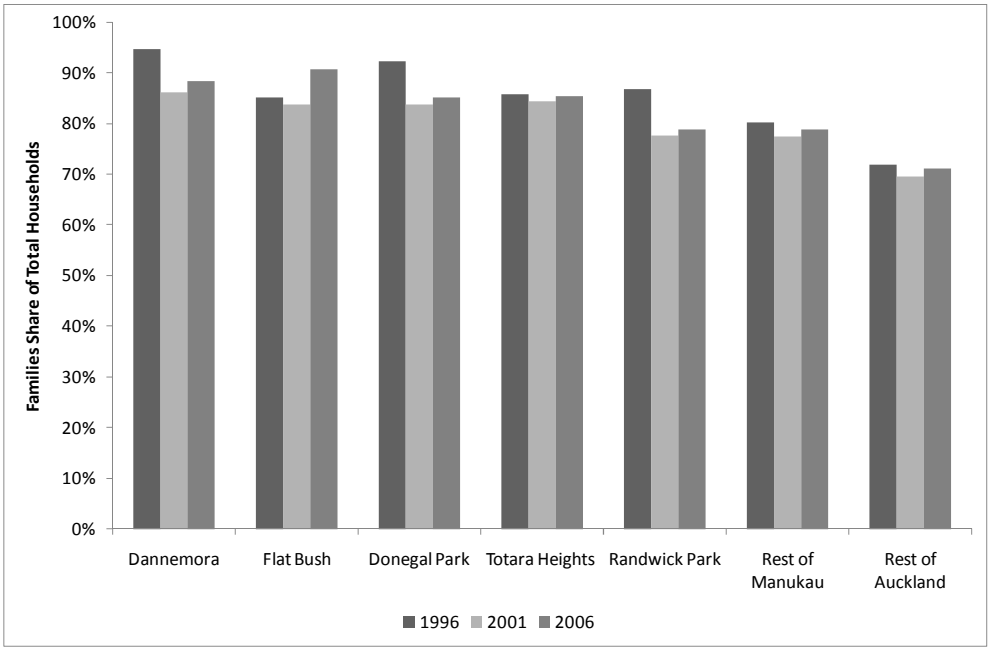
Based on this evidence of recent developments, housing demands in Flat Bush 2 are likely to be diverse to the extent that they reflect a response to opportunities for progressing through the housing chain for people from a range of ethnic backgrounds. Local diversity will be driven by a mix of immigrants, especially as migration is expected to be the major contributor to Auckland's growth.

Recent immigrants tend to seek out areas where they have strong cultural ties, including links to kin groups, as well as to cultural and religious amenities, temples, mosques, and churches. These will potentially create enclaves within an area like Flat Bush with particular expectations with respect to housing and community amenities. The survey-based research outlined in Section 2 suggests that these requirements might well influence the preferred style and uptake of housing, and how it meets the dual expectations of communities which seek to retain their own identity while also committed to establishing productive links with other immigrant groups.

4.4 Household Characteristics

Not surprisingly in light of the evidence on housing motivation in the area and the demographic profiles emerging above, families dominate households even more than elsewhere in the city or region (0). In 2006 families still accounted for over 90% of all households in Flat Bush, and 88% in Dannemora, compared with 80% in Manukau City and 73% across the region.

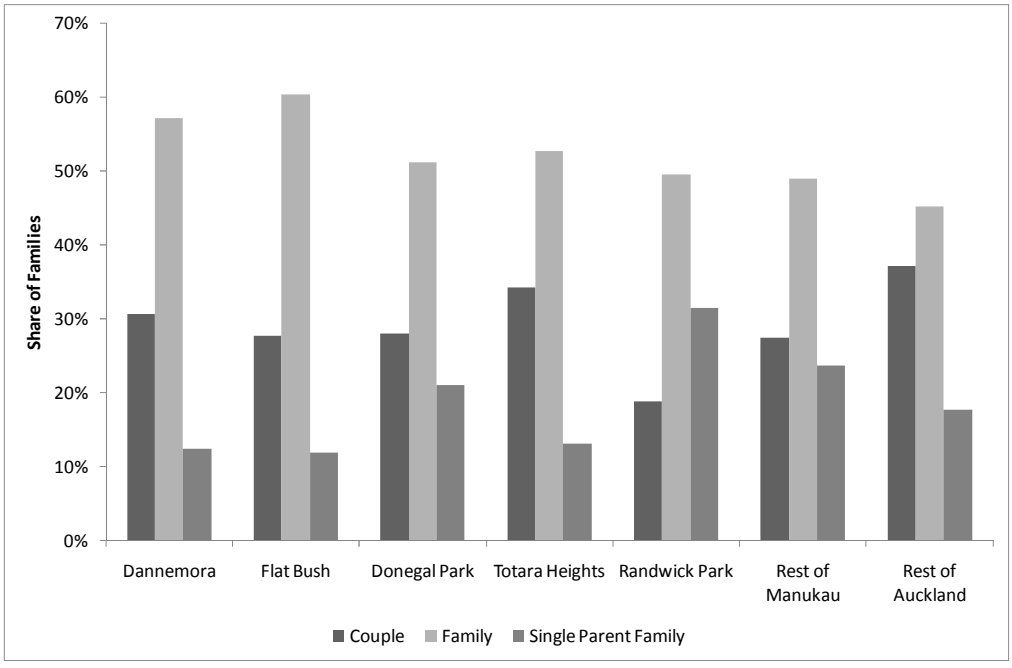
Figure 9 Family Households, 1996-2006



Source: Census of Population and Dwellings, Statistics New Zealand

Traditional two-parent families dominate across the board, most particularly in Dannemora and Flat Bush. One parent families tend to be a much smaller share than elsewhere in Manukau and Auckland, with the exception of Donegal and, especially, Randwick Park (Figure 10).

Figure 10 Family Type, 2006

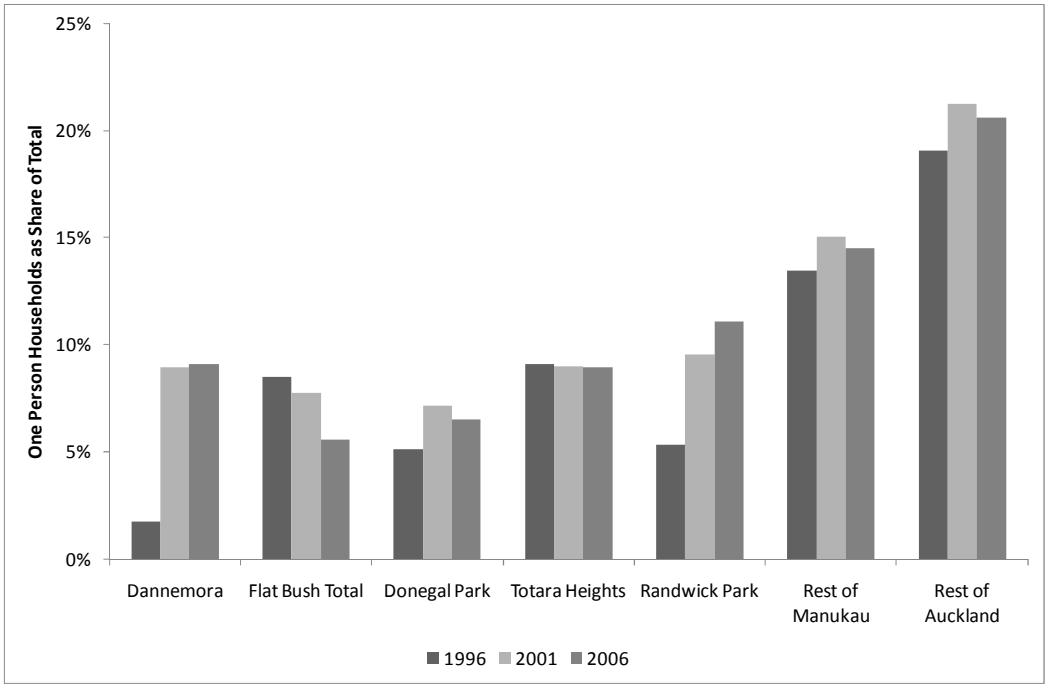


Source: Census of Population and Dwellings, Statistics New Zealand

With the exception of Randwick Park, couples without children are a more important component of families, and are particularly important in Totara Heights.

One person households are a distinct minority, the small share contrasting strongly with the rest of Manukau and the region. There has been some growth in single person households in Randwick Park, but the share has been stable, or even falling among the other precedent areas (Figure 11).

Figure 11 Single Person households, 1996-2006



Source: Census of Population and Dwellings, Statistics New Zealand

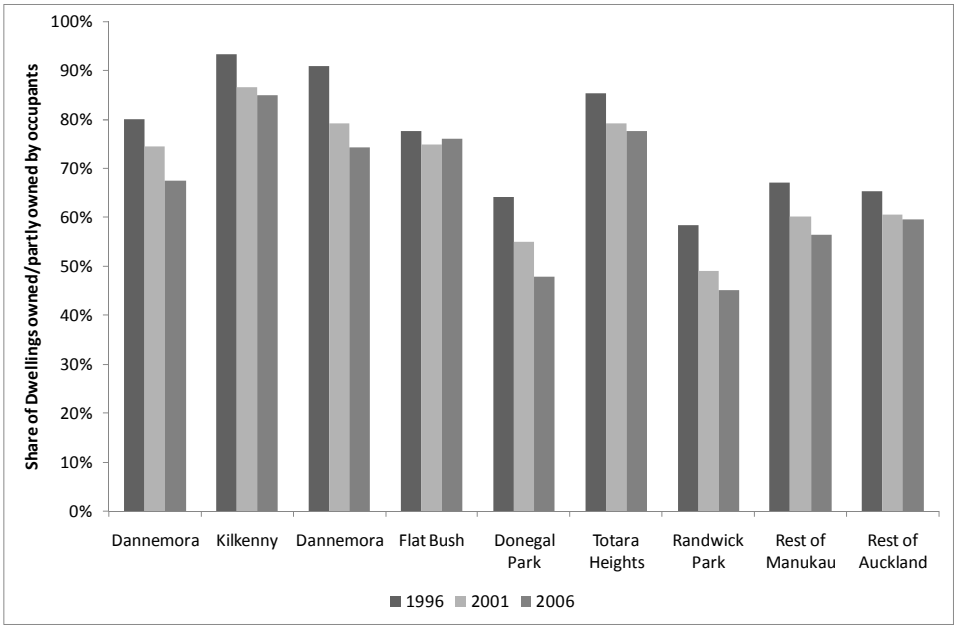
The nature of households and families in the recently developing areas of Manukau confirms the importance of traditional two-parent families with a significant but unexceptional number of single parent families. There is a relatively small share of couples. There are relatively few single-person households. The implication is that despite ethnic and cultural diversity, the areas tend towards a stable family structure. A review of past numbers does not suggest that single parent or single person households are increasing across the board.

Traditionally, this type of stability would be associated with an increasing share of dwellings owned by their occupants. This has not necessarily been the case as, in common with the rest of the region, ownership rates declined over the decade.

There is considerable variation in housing tenure among the precedent areas, though (Figure 12). The contrast is between Donegal and Randwick Park, on the one hand, with ownership levels well below the city and regional figures (down to close to 40%) and Dannemora and Flat Bush. The implication is that many more of the inhabitants of Flat Bush 2 could be living in rental accommodation compared with residents in Flat Bush Stage 1.

If, as is possible, investors are potentially significant owners in Flat Bush 2, there may a need for extra vigilance to bridge the gap between what the market may be wanting – affordable, detached housing – and what the Master Plan is seeking to achieve by way of increased population densities. Investors may have a lower degree of sensitivity to the wants of residents of both dwellings and the area than the residents themselves. Yet bridging the gap between investor and resident expectations will be important to cement in the long-term contribution of higher density suburban dwelling sought through the Regional Growth Strategy objectives generally, and the Flat Bush target in particular.

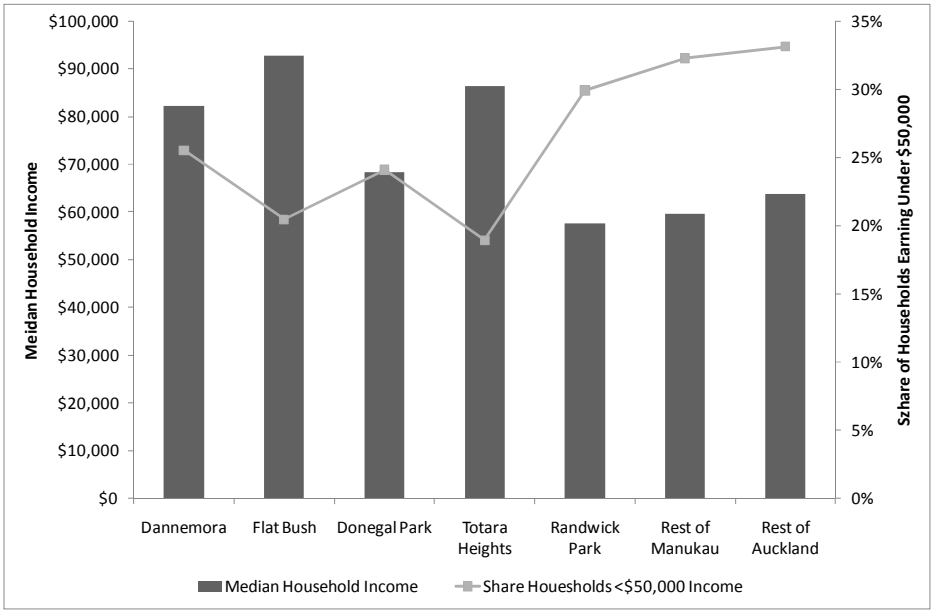
Figure 12 Housing Tenure, 1996-2006



Source: Census of Population and Dwellings, Statistics New Zealand

Ownership is reflected to some extent in household incomes, with the areas of highest occupant ownership, Totara Heights, Flat Bush and, to a lesser extent, Dannemora, having the highest income levels (Figure 13). Again, with the exception of Randwick Park, households in the precedent areas tend to have higher average incomes than households elsewhere in the city and the region.

Figure 13 Household Incomes, 2006



Source: Census of Population and Dwellings, Statistics New Zealand

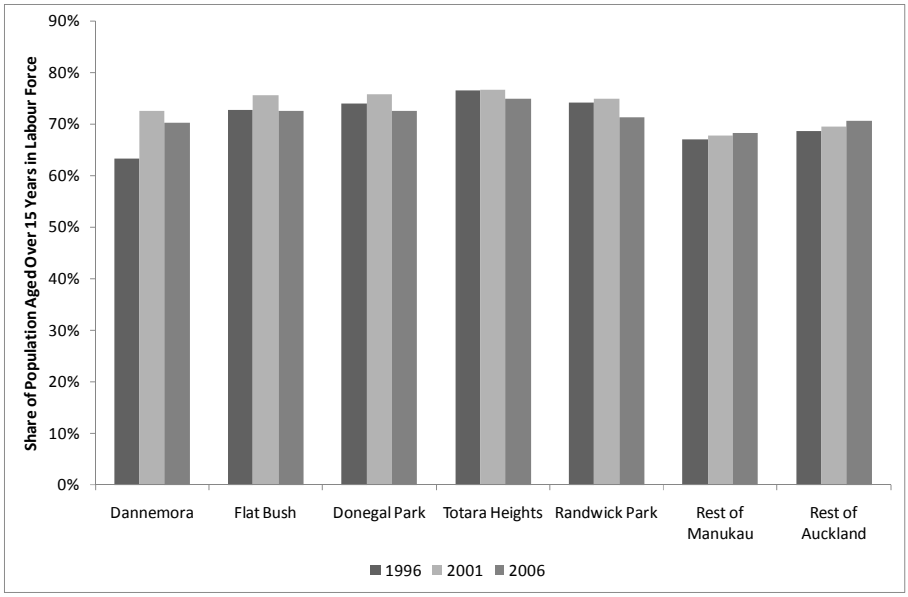
The analysis of household characteristics points to a significant contrast between the precedent areas, with Randwick Park emerging as a lower income, higher renting area, with slightly fewer families and more single parent families among them. Donegal Park sits at an intermediate point, with Flat Bush, Dannemora and Totara Heights providing something of a contrast. On most measures, however, all five areas sit ahead of Manukau City as a whole and Auckland Region.

4.5 The Labour Force

This section considers labour force characteristics of the precedent areas to providing a basis for extrapolating the likely labour supply characteristics of future residents of Flat Bush.

One of the characteristics of Manukau City has been a relatively low level of labour participation compared with the rest of Auckland, despite a younger population. However, the precedent areas have had higher participation than the rest of Manukau and Auckland (Figure 14). This includes those areas with relatively lower levels of household income, Randwick Park and Donegal Park.

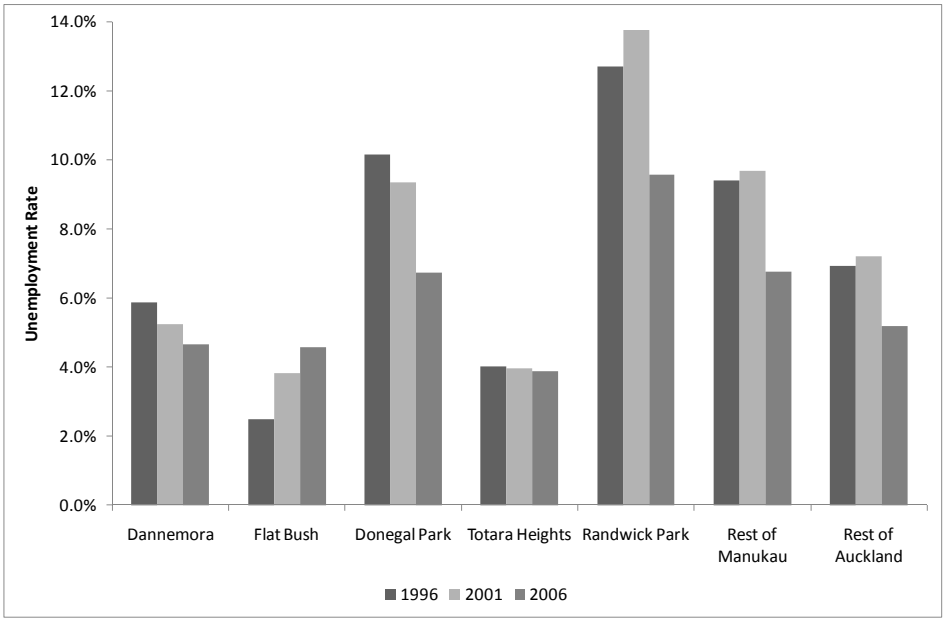
Figure 14 Participation Rates, 1996-2006



Source: Census of Population and Dwellings, Statistics New Zealand

Randwick Park has suffered from higher unemployment rates than the others and the rest of Manukau. Donegal Park more or less matches Manukau while the other areas, especially Flat Bush and Totara Heights, are marked by relatively low levels of unemployment (Figure 15).

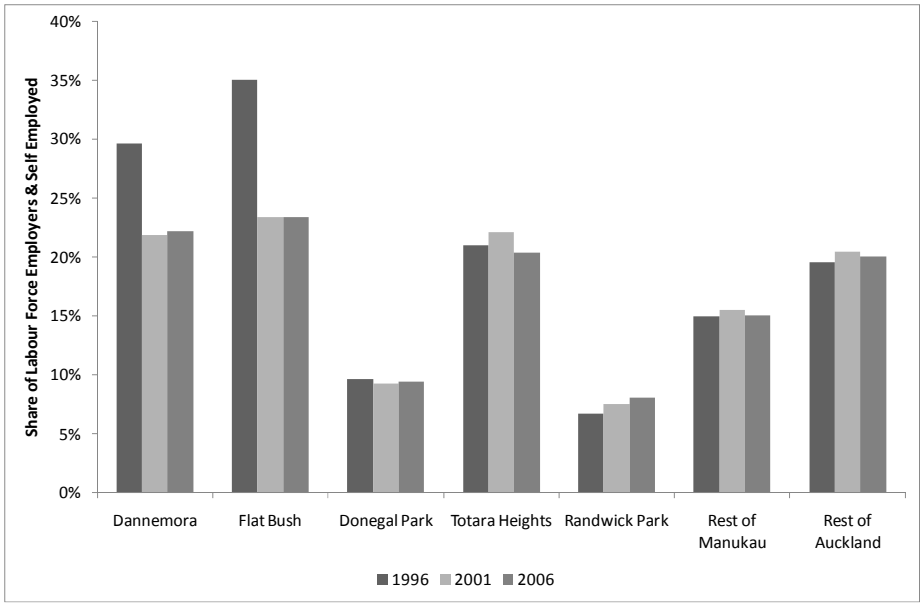
Figure 15 Unemployment rates 1996-2006



Source: Census of Population and Dwellings, Statistics New Zealand

These sorts of differential are evident in terms of labour force structure with, for example, many more employers or self employed persons (compared with waged employees) in Dannemora, Flat Bush and Totara Heights (Figure 16). The fall in shares for Flat Bush and Dannemora since 1996 may simply reflect a shift away from farming and similar activities as greenfield areas were converted to urban development. Nevertheless, the share of employers in these areas remains ahead of Auckland region and well ahead of the rest of Manukau.

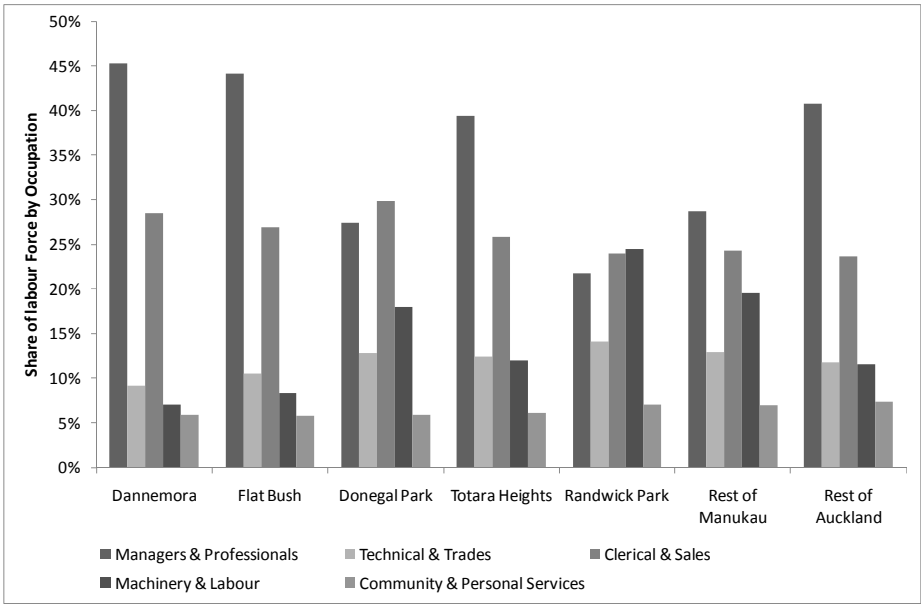
Figure 16 Share of Employers in the Labour Force



Source: Census of Population and Dwellings, Statistics New Zealand

These differences are reflected in the occupations of residents. A large number of managers and professionals live in Dannemora, Flat Bush, and Totara Heights compared with the rest of Manukau. Donegal Park and Randwick Park have more blue collar workers and a more even spread over the categories of technicians and tradespeople, clerical and sales workers (Figure 17).

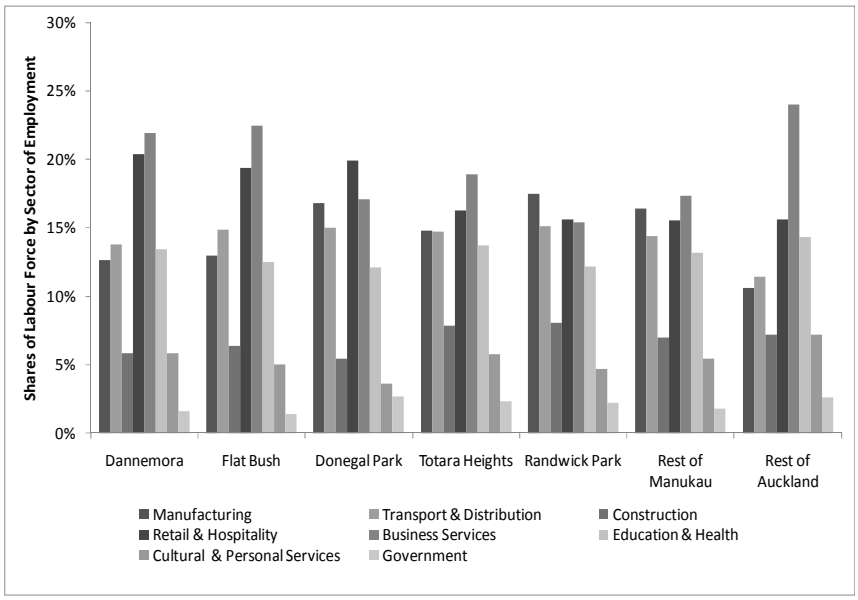
Figure 17 Principal Occupations, 2006



Source: Census of Population and Dwellings, Statistics New Zealand

Manukau City has a distinctly greater blue collar orientation than the rest of the region which is reflected in the number of people employed in manufacturing and transport and distribution relative to the rest of Auckland. This orientation is evident elative to Auckland across the precedent areas, particularly pronounced in Donegal and Randwick Parks (Figure 18).

Figure 18 Employment by Industry, 2006

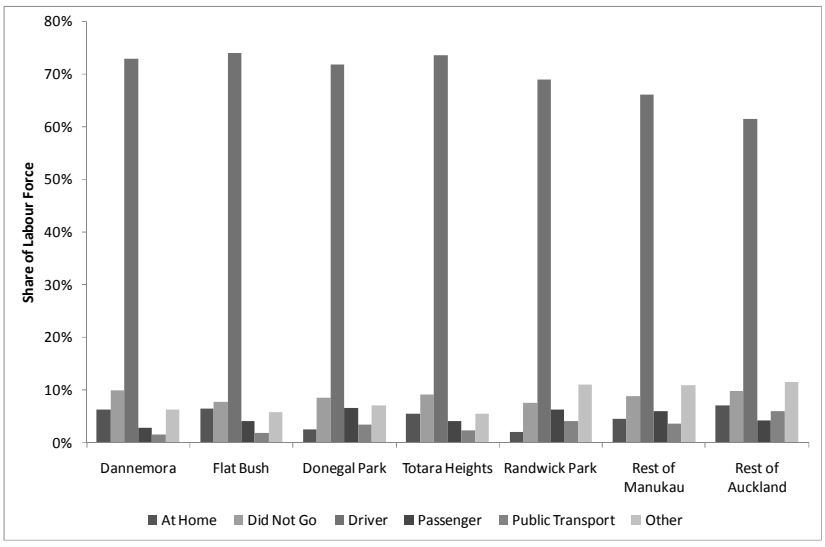


Source: Census of Population and Dwellings, Statistics New Zealand

Business service employment is important in Dannemora and Flat Bush, but less so than the rest of Auckland. Retail and hospitality employment is important in all areas, particularly Donegal Park.

The labour force in the selected areas is distinctively dependent on private vehicles for commuting with a large share being drivers. Public transport usage is limited – a characteristic of Manukau relative to the rest of Auckland (Figure 19). This pattern in part reflects the absence of accessible public transport in the areas involved. It may also reflect a diversity of employment destinations, covering a range of industrial areas in Manukau and Papakura, commercial, retail and service employment in Manukau Central, and diverse work opportunities in the southern Auckland isthmus.

Figure 19 Mode of Journey to Work, 2006



Source: Census of Population and Dwellings, Statistics New Zealand

5 Population Growth Prospects

There are a number of population projections which can provide insights into the nature of the market which Flat Bush will be serving. In 2007 Statistics New Zealand produced cohort projections based on the 2006 Census. It updated these in March 2010. The ARC produced a different set in 2009. In both instances the difference from the 2007 baseline projection was minor – a reduction of 1% in the 2031 total population projection, well within the realms of forecasting uncertainty.

Only the 2007 base projections provided a broad age distribution that can be used to examine labour force and housing demand prospects, and so form the basis of this discussion.

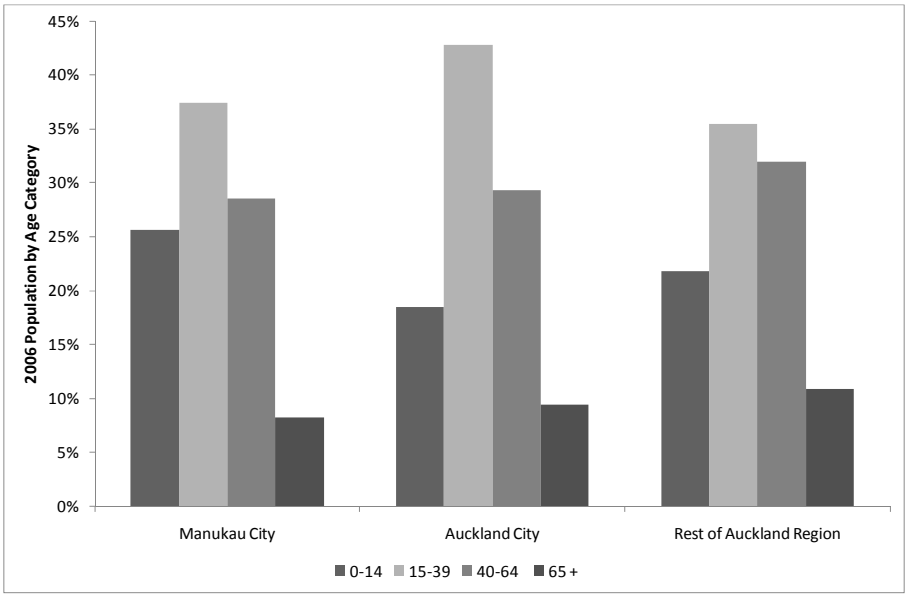
Because the focus is on likely structural changes in age-related characteristics of the population and not on forecasting precise numbers, only the medium projections are used. Statistics New Zealand suggests this series is "*the most suitable for assessing future population change*". The emphasis is initially on the characteristics projected for Manukau City as a whole.

5.1 Age Projections

Manukau's population is substantially younger than that of Auckland City (as a benchmark) and the rest of the Region (Figure 20). Over 26% of Manukau residents in 2006 were aged less than 15. This compares with just 18% in Auckland City and 22% in the rest of the region. On the other hand, Auckland City has a significantly larger group in the young adult cohort – 35 to 40 years – 43% compared with Manukau's 37% (and 35% across the rest of the region). Auckland and Manukau have similar shares in the two older cohorts.

The balance of the region has greater shares in these categories and so can be considered "more aged" than either Auckland or Manukau.

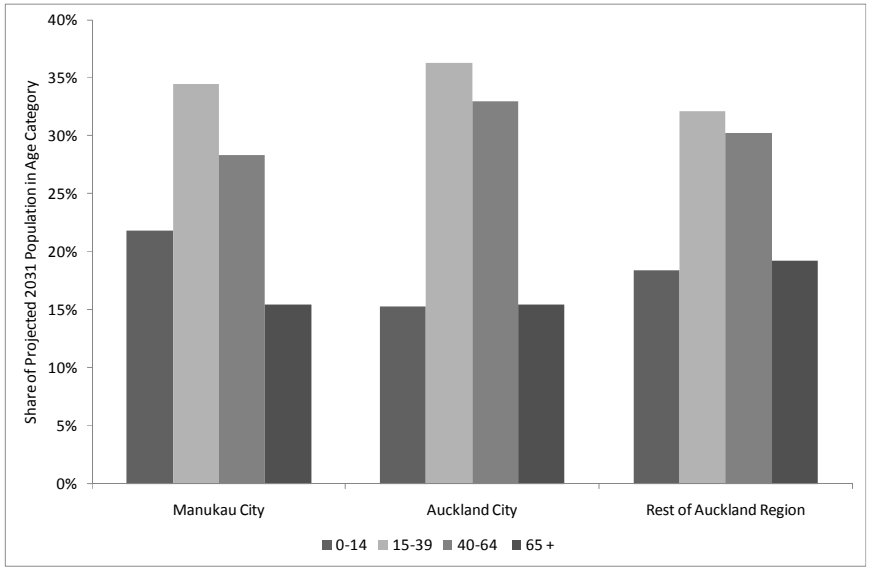
Figure 20 Age Distribution, Manukau and Auckland 2006



Source: Census of Population and Dwellings, Statistics New Zealand

The Statistics NZ medium projections (based on applying "medium" birth, death and migration assumptions) will see only a modest contraction in the relative shares of the youth and young adult age groups and minimal change in the share of middle aged adults. The 65 plus age group, though, is expected to increase by 7 percentage points (Figure 21). The implication is that the maturing family cohort will become more significant within Manukau, although the retirement cohort will increase the most spectacularly (by over 180% according to these projections).

Figure 21 Projected Age Distribution 2031, Manukau and Auckland



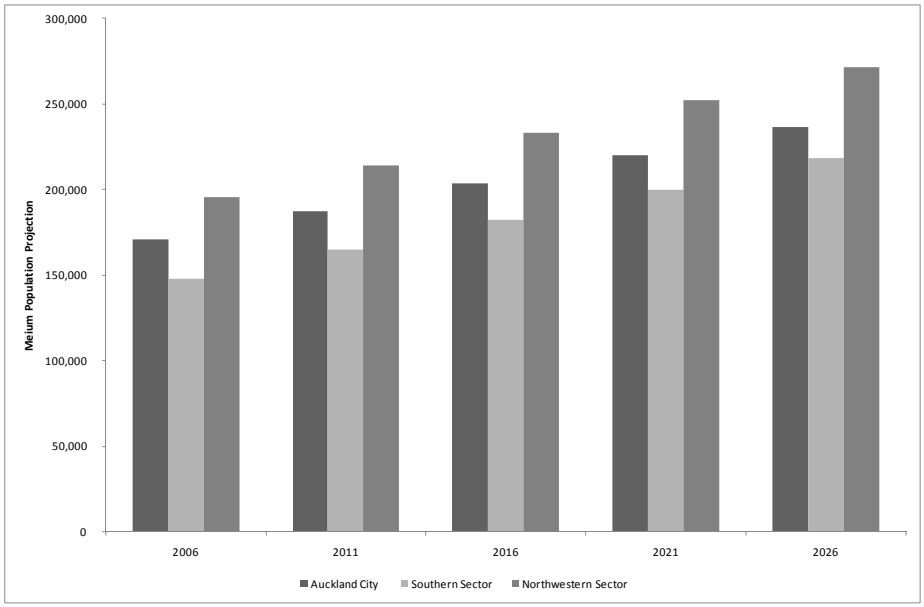
Source: Statistics New Zealand, Subnational Population Projections, 2006 base (2007)

5.2 Projecting Household Age Structure

This information can be used to provide indicative estimates of growth in housing demand – and the age distribution of future households – and the labour force. Again, these are only indicative. They demonstrate the broad consequences of the projected rate of ageing (including the impact of the underlying assumptions about migration) for household formation and labour force growth.

The Statistics NZ medium projection suggests that there will be an additional 260,000 households in Auckland Region between 2006 and 2031, with 70,000 of these in Manukau City and 81,000 in Auckland City (Figure 22).

Figure 22 Projected Additional Households, Auckland Region 2006-2031

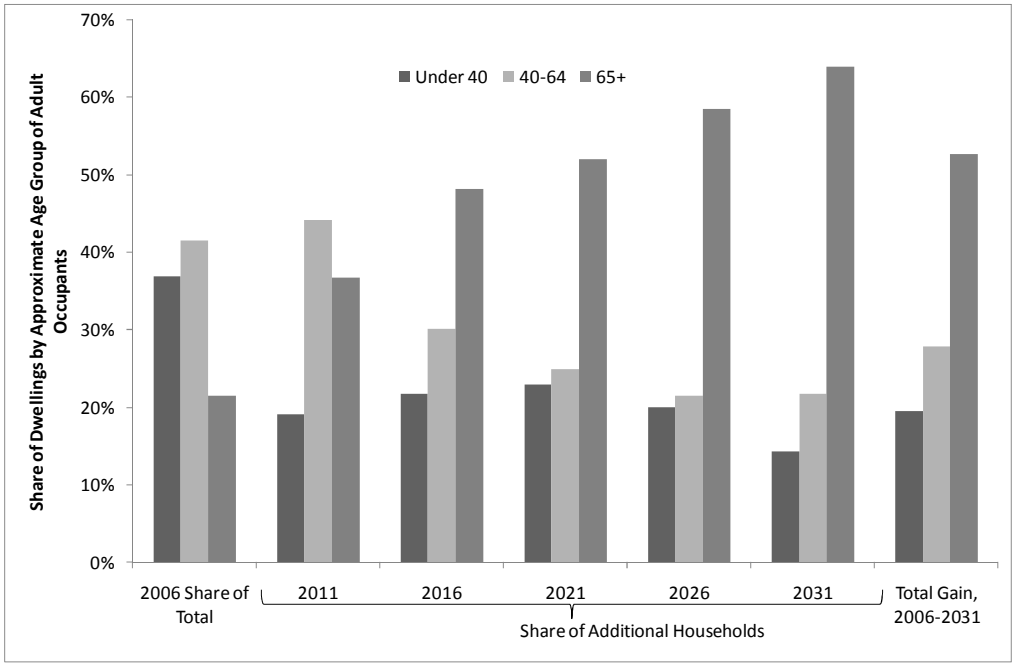


Source: Statistics New Zealand, Subnational Population Projections, 2006 base (2007)

Projected growth in Manukau is 2,800 new households a year for 25 years. This compares with 2,000 a year from 1996 to 2006 (census-based). Some 41% of new households in Manukau were in the precedent areas, which accounted for 10% of all new households in the region.

The age structure of households has been projected by applying occupancy assumptions which when applied to the three adult age groups in an iterative manner reproduce 2006 household numbers. [7] The resulting projections have been converted to percentages of each five year increment to demonstrate the changing mix of households according to the age of adult occupants (Figure 23).

Figure 23 Projected Age Structure of Manukau Households, 2006-2031



Source: Derived from Census 20006 and Statistics New Zealand, Subnational Population Projections, 2006 base (2007)

Based on the medium age-specific population projections, the results demonstrate the contrast between household age structure in 2006, when then 40-64 age group dominated household numbers (accounting for 42% of the total), and the projected increment which will be dominated by the over 65 age group (accounting for 53% of the gain). The young household and household formation group (15 to 39 years) accounted for 37% of households in 2006 but is expected to account for only 20% of growth through to 2031, and just 17% over the ten years to 2031.

The precise balance among age groups (and the total number of households) will be strongly influenced by what happens with respect to migration. The medium projection includes net annual migration gains of 2,200 in Manukau City through the 25 years. This compares with a reconciliation of Census data which suggests that migration gains in Manukau City exceeded 5,000 per year from 2001 to 2006, entirely attributable to gains from overseas.

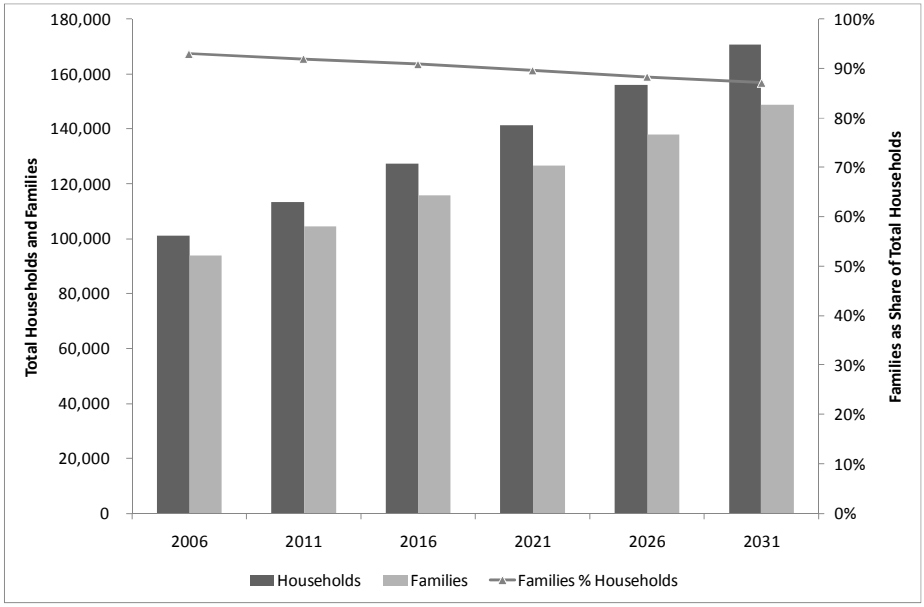
Migration to New Zealand hit a high during that period and has since contracted sharply, so that these figures may be abnormally high. A recent rebound (late 2009 and early 2010) is a sign of a depressed labour market that has constrained mobility and outward migration rather than a turning point. Nevertheless, the record suggests that the medium projection is likely to prove low. Population growth could be stronger than projected, building on net international migration gains. The result of higher than projected migration gains might be to increase the relative share of younger households (adult occupants under 40 years).

[7] This was 6% lower in Manukau than Statistics New Zealand's June 2006 estimates of total households, which correct for Census under-enumeration, used as the basis for the projections of household and household characteristics by Statistics NZ for the 2007 demographic projections.

5.3 Projected Household and family Numbers

Statistics New Zealand projects household and family numbers off its medium population projections. It anticipates a 69% increase in households but only 58% in family numbers in Manukau by 2031. As a result, family-based households would fall from around 93% to 87% of the total (Figure 24). Consequently, average household size would decline from 3.4 to 3.0 people.

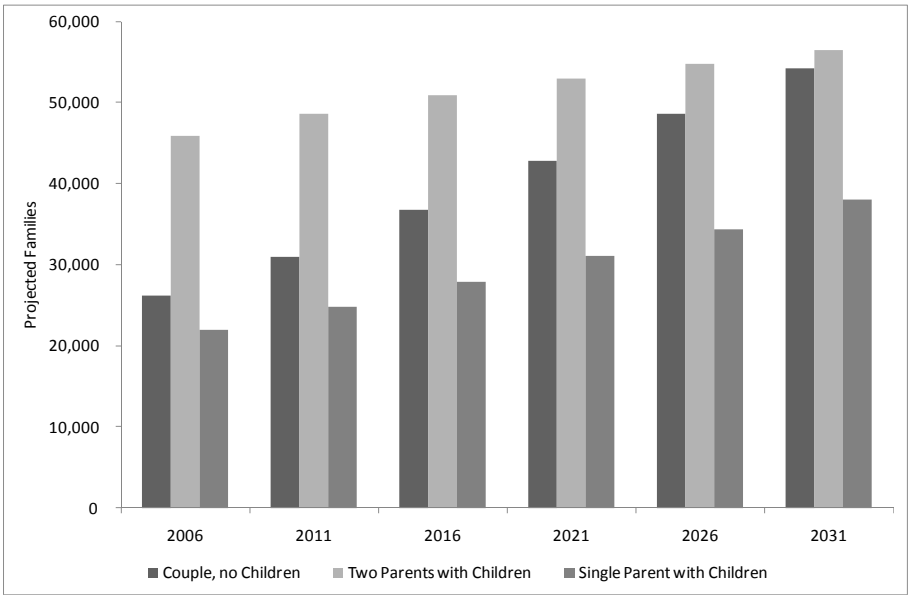
Figure 24 Projected Household and Family Numbers, Manukau 2006-2031



Source: Statistics New Zealand, Subnational Population Projections, 2006 base (2007)

The projection of family types suggests that the most rapid growth will be in couples without children, projected to double and account for over 51% of additional families over the period, and 36% of the total by 2031 (Figure 25). Single parent families are also projected to grow strongly (by 74%) to account for 28% of families in 2031. In contrast, two parent families are expected to grow by just 19%, falling from 49% of all families in 2006 to 38% in 2031.

Figure 25 Projected Family Types, Manukau City 2006-2031

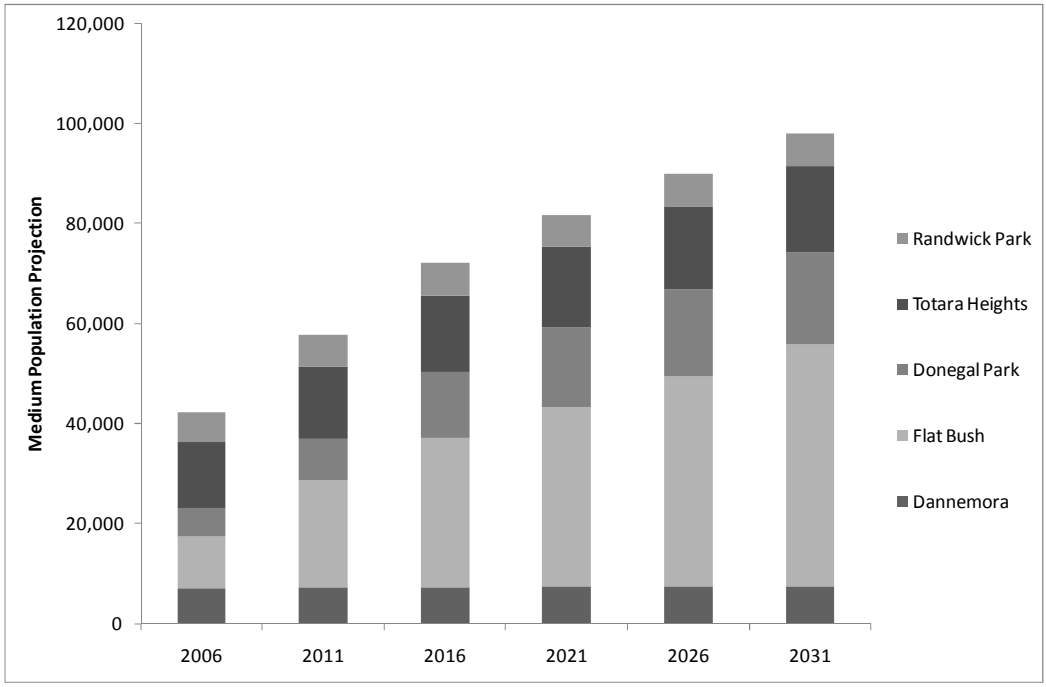


Source: Statistics New Zealand, Subnational Population Projections, 2006 base (2007)

5.4 Local Area Population Projections

Statistics New Zealand prepares population projections for individual Census Area Units. These are subject to even greater uncertainty than council level projections because of the smaller numbers involved and because migration and housing supply assumptions are more susceptible to unforeseen local developments or events. However, the projections are at least informed by past population dynamics and by capacity estimates (usually supplied by councils) relevant to the small areas provided. For present purposes, the medium projections for the precedent areas have been cumulated to indicate local growth prospects most relevant to Flat Bush 2 (Figure 26).

Figure 26 Population Projection, Flat Bush and Surrounds2006-2031.



Source: Statistics New Zealand, Subnational Population Projections, 2006 base (2007)

An increase of around 56,000 people is projected between 2006 and 2031 across the precedent areas, concentrated not surprisingly on the Flat Bush area (Ormiston and Point View CAUs). Here the projected gain is 38,000. The growth projected across the precedent areas is equivalent to around 30% of the growth projected for Manukau City as a whole. The Statistics New Zealand high projection would see the areas increase by 55,000, with Flat Bush up by 47,000. The low projection for Flat Bush is 29,000 more people between 2006 and 2031.

The population capacity for the balance of Stage 1 (7,300), the town centre (2,900), and Stage 2 of Flat Bush (16,100, Table 1 page 4 above) amounts to 26,300. Assuming (conservatively) that just 80% of the projected medium population gain actually moves into the Flat Bush development, the Stages 1 and 2 and town centre capacity would be absorbed by around 2031. Under the high growth projections this would occur between 2026 and 2031; and under the low projection it would not occur until after 2031. A higher share of growth going into Flat Bush on the basis of the ready availability of housing early in the period (i.e., more than the assumed 80%of local growth going to Flat Bush) would accelerate development.

5.5 Discussion

Flat Bush is likely to meet only a modest share of the substantial growth projected for Manukau, perhaps around one third. Demographic analysis indicates that there will be considerable diversity

of demand, so that the mix of housing and amenities provided at Flat Bush may have a significant impact on the precise nature of households that do there, and will influence the rate of uptake.

For example, there will clearly be a large number of growing family households early in the development cycle seeking amenities associated with larger, detached houses who could readily occupy much if not all of the capacity. On the other hand, there will also be more smaller households than has been the case in the past, with more of them amenable to higher density housing, a large share of which could be provided in Flat Bush if a policy commitment to well designed and located medium density housing prevails.

The provision of a variety of cultural amenities in and around Flat Bush, including places of worship or assembly for different cultures, and the early emergence of distinctive ethnic groupings will also help shape the character of the "community of communities" that will develop there.

A commitment to "design for diversity" relates to urban design in terms of the arrangement of land uses, precincts and areas within the wider development, the nature of streetscapes and how key corridors and linkages are created, the mix and location of public amenities and space provided, and the treatment of residential areas and design. One challenge to achieve the capacity target will be to ensure the appeal of higher housing densities without undermining the economics of multiunit dwellings.

In essence, while the projections demonstrate the likelihood of strong housing demand in the area; the population mix and community development may well be influenced by the approach taken in the master plan and the quality and character of individual developments within it.

Given the potential to develop Flat Bush 2 early in the projection period, the early commitment (through to, say, 2020) may best be made to low- to medium-density housing, with an emphasis on detached and semi-detached or terrace housing suited to young and maturing family. This is likely to be the case for the first ten years of development.

Densities may increase as a share of new dwellings over time, with a greater share of terraces and apartment living after, say, 2020. This sequence is used for the demographic profile developed in the next section. While dates are not put on the two development phases (the first ten years and then development through to capacity), given the population projections in this section a start in the next two years – or earlier – could see Flat Bush 2 could be more or less at capacity by 2031.

6 Profiling Flat Bush 2

6.1 Approach

The preceding discussion suggests that the character of the Flat Bush 2 community will be influenced by the style and quality of dwellings offered. A significant increase in multi-unit dwellings will be most effective if attention is paid to the quality of amenity in the Flat Bush urban environment and the quality of the dwellings themselves. The challenge is to provide multi-unit dwellings that are competitive with detached houses, in terms of cost effectiveness and affording some of the qualities that underlie the current preference for the latter over the former. Nevertheless, it is important to recognise that demographics are likely to continue to favour detached housing for much of the development period

Reflecting the experience of Flat Bush Stage 1 and surrounding suburbs over the period from 1996, Flat Bush 2 is likely to be characterised by:

(9) A large share of immigrants and quite possible a majority of non-European residents;

(10) A tendency early on to cater for larger, younger families and perhaps multi-generational families with demand for at least three and often four or more bedrooms;

(11) The share of older families, couples without children, and single person households increasing later in the development cycle, the last two increasing potential demand for multi-unit development by way of terrace housing, apartments, retirement villages, and the like.

(12) A majority of dwellings owner occupied, but an increasing share of rentals reflecting a diverse community;

(13) A high labour force participation rate relative to the rest of Manukau and generally higher household incomes than in other parts of the City.

Estimating the size of the population and its various segments and quantifying the likely composition of the Flat Bush 2 community relies on making a series of assumptions informed by the preceding analyses. Likely or possible demographic characteristics are applied to the population estimated broadly on the basis of expected household occupancy levels, distinguishing between detached and multi-unit dwellings. Prospects for partial ("after ten years") and full development ("at capacity") are also distinguished.

The characteristics of the resident households and population can be illustrated by applying coefficients derived from the analyses of parallel developments. The choice of coefficients has been influenced somewhat by the values expressed in the Community Plan (Section 1.2, p1 above) and the expectation that "buying a house in Flat Bush will require an above-average household income" (*Flat Bush Community Plan*, p9). These suggest that the profile of Flat Bush 2 will be closer to that of Flat Bush Stage 1, as described in Sections 3 and 4, and perhaps moving towards the Dannemora profile as it matures, than to that of, say, Donegal CAU.

The uncertainty surrounding future population composition, preferences, and behaviours, though, means that the resulting numbers can only illustrate broad tendencies rather than represent actual outcomes. Totals have therefore been rounded to the nearest ten (or, in some instances, 100) to is to avoid any impression of precision (which means that rounded totals are not always consistent one with another). The underlying assumptions, however, should be plausible. They are reasonably founded and internally consistent so that the general trends indicated can inform long-term planning with some authority.

6.2 Timing

The characteristics of households and population from among the precedent centres considered the most relevant have been applied to the population estimate made for Flat Bush 2 (Table 1, p4). While the focus is on total population potential, consideration is also given to timing by applying assumptions regarding the rate of uptake of different dwelling types. Based on the projected rate of growth for Flat Bush underlying Figure 26, above, it is assumed that 69% of the capacity is taken up in the first ten years (2021) or thereabouts, comprising 75% of detached houses, 55% of terrace dwellings, and 50% of apartment dwellings. The balance in each case is assumed to be absorbed within five to ten years thereafter (Table 8).

The aim of this division is not to generate a precise timeline but to demonstrate how population ageing might be manifest in changing demand for different dwelling types and in different population characteristics over the development cycle.

6.3 Population

Indicative population figures have been estimated by applying different household occupancies to the main dwelling types, but with the overall occupancy achieved on completion approximating that projected for Manukau City in 2031 (3.0). A slightly higher occupancy level is consistent with the tendency for the precedent areas to have larger households than elsewhere in Manukau. The result is a total population of close to 17,000 residents (compared with the land use based estimate of 16,200 in Table 1), with 23% (3,850 persons) potentially living in multi-unit housing by the time the development is completed.

Table 8 Estimated Population and Households, Flat Bush 2

Capacity	Detached	Terraces	Apartments	TOTAL
% First Ten Years	75%	55%	50%	69%
Households				
After ten years	3,030	500	310	3,840
At capacity	**4,040**	**900**	**610**	5,550
Persons/Household				
After ten years	3.3	3.0	2.5	3.2
At capacity	3.3	2.8	2.3	3.1
Population				
After ten years	10,000	1,500	780	12,280
At capacity	13,130	2,480	1,370	16,980

At capacity there could be 27 out of every 100 households in multi-unit dwellings. This compares with eight across the selected areas in 2006, but as high as fourteen in Dannemora and twenty in Donegal Park. For Flat Bush the equivalent figure was just four. In the rest of Manukau 18% of households were in multi-unit dwellings, and 24% in the rest of Auckland. The implication, nevertheless, is that there will be – or needs to be -- a significant shift in preferences compared with Flat Bush Stage 1 to increase the incidence of multi-unit housing, which is most likely to occur later in the development cycle as the share of smaller households increases.

6.4 Households and Families

While the future household and population figures are indicative only, they provide a basis for simulating a community profile based on possible household and demographic characteristics. This profile can be used to determine requirements for amenities to cater for the people and families who will live in Flat Bush 2. Such a profile will ideally be subject to regular review to fine tune the timing and scope of amenities as the development proceeds and community character unfolds.

The percentages of household and family types applied reflects the profile for Flat Bush Stage 1 in 2006 (First Ten Years) and Dannemora (At Capacity), the latter being the longer-established of the

two communities. The suggestion is that there will be around 4,900 family households in Flat Bush 2 at capacity, compared with 500 single person households (Table 9).

Table 9 Indicative Household Profile, Flat Bush 2

Households	Families	Single Person	Other	Total
After ten years	91%	6%	4%	100%
At capacity	88%	9%	3%	100%
After ten years	3,480	210	140	3,830
At capacity	4,900	500	150	5,550
Families	**Couple**	**Family**	**Single Parent Family**	**Total**
After ten years	28%	60%	12%	100%
At capacity	31%	57%	12%	100%
After ten years	970	2,100	410	3,480
At capacity	1,500	2,800	610	4,910

Families with children will dominate, accounting for 69% of all family households at capacity. This compares with 71% across all selected centres in 2006, 73% in the rest of Manukau City and 63% across the rest of Auckland. It is above expectations for Manukau City contained in the Statistics New Zealand medium population projections, with 66% of families projected to have children in 2021 and 64% in 2031, but consistent with the expectation of a tendency towards larger families settling in Flat Bush 2.

Based on the figures for Flat Bush and Dannemora, around 74% of households (approximately 4,100) might be projected to own or partially own their homes (including through family trusts). This is relatively high. It contrasts strongly with Donegal and Randwick Parks (48% and 45% respectively); is above the 2006 figure for all selected centres (69%) and contrasts strongly with the balance of Manukau (56%) and, to a lesser extent, the rest of the region (at 60%).

A lower share – or a higher level of renting – is associated with a more diverse community. It is also a function of declining housing affordability through which investors have come to play a more important role in housing provision over the past two decades. The role of investors and low income housing is an outstanding question for Flat Bush. However, the history of Dannemora and Flat Bush Stage 1 suggest it will be above average on income and ownership parameters.

On these grounds, household incomes are also assumed to approximate those of Dannemora in 2006 (median income, $82,300). This was selected because it is significantly above the income profile for Manukau City ($62,300) and Donegal Park ($68,400), but below Flat Bush ($92,700) and Totara Heights ($86,300).

Table 10 Household Income Distribution, Flat Bush 2

Household Income	$20,000 or Less	$20,001 - $30,000	$30,001 - $50,000	$50,001 - $70,000	$70,001 - $100,000	$100,001 or More	Not Stated	Total
After ten years	9%	6%	11%	11%	15%	33%	16%	100%
At capacity	9%	6%	11%	11%	15%	33%	16%	100%
After ten years	10%	7%	14%	13%	17%	39%	NA	100%
At capacity	10%	7%	14%	13%	17%	39%	NA	100%
After ten years	390	250	520	510	670	1,500	NA	3,840
At capacity	560	370	750	730	960	2,170	NA	5,540

Two estimates have been made of potential gross household income using this data. The first is simply based on multiplying through the median income by the number of households. The second involves taking each of the income categories and multiplying the number of households by the mid-point for the relevant income band. In the under $20,000 category it was assumed that all

households received $20,000. Under the over $100,000 category, it was assumed that the average was $150,000. It was also assumed that the "not stated" category had the same income profile as all households that gave a figure, and was multiplied through by the median.

The total income estimate based on simply multiplying the median by total households led to a projection of $316m gross income in Flat Bush 2 after ten years and the latter to $311m. The equivalent figures at capacity were $457m and $448m. The lower estimate is used for the analysis of retail demand in Part 2 of the study because it enables spending profiles to be developed that are sensitive to the income distribution across households.

6.5 Population Profile

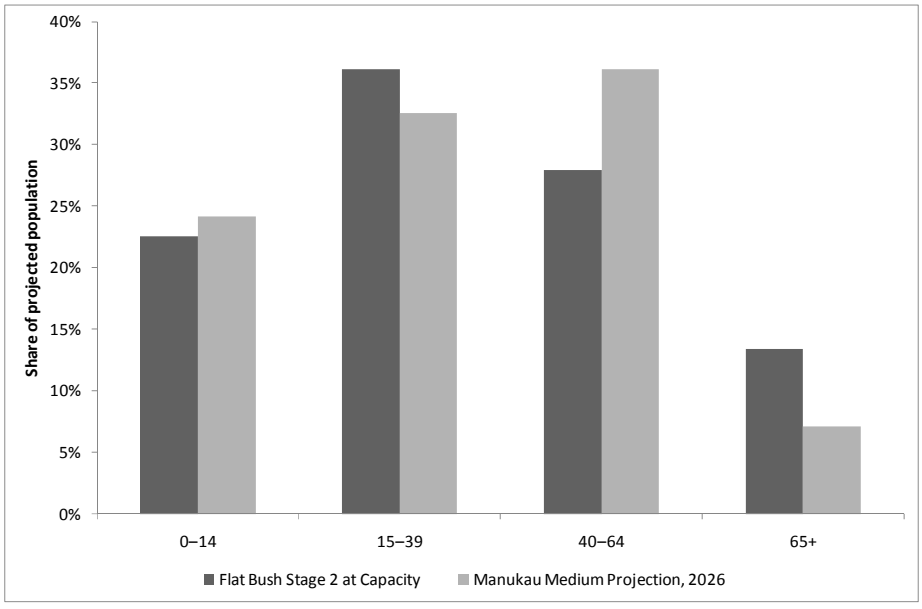
The projected age profile is based on the 2006 age distributions at Flat Bush (First Ten Years) and Dannemora (At Capacity). Under these assumptions the number of children falls back to 24% of the total population (Table 11) and there is a shift in the majority from the under 40 groups (15-39 year olds ease back from towards the over 40s (from 37% to 43% at capacity).

Table 11 Projected Age Distribution, Flat Bush 2

Age profile	0–14	15–39	40–64	65+	Total
After ten years	26%	37%	32%	5%	100%
At capacity	24%	33%	36%	7%	100%
After ten years	3,190	4,570	3,930	590	12,280
At capacity	4,100	5,540	6,140	1,210	16,990

The age profile reflects the expectation of relatively rapid growth based primarily on family groups, many of whom may be recent migrants. It suggests a younger population than might be expected elsewhere. This can be illustrated by a comparison of the age distribution at capacity and the medium Statistics New Zealand projection by age group at Manukau City Council level in 2026 (Figure 27). The inference is that young adults and young families will be more important to Flat Bush development than with respect to Manukau's growth generally. This remains a key assumption which will require close monitoring to understand the employment, amenity, education and recreational needs of the emerging community.

Figure 27 Comparing Age Distribution Projections



A key groups for planning social and community amenities, including pre-school, school, and training facilities, is the under 20 cohort. This group, projected as described above, has been divided into five year cohorts, once more based on Flat Bush (at Ten Years) and Dannemora (At Capacity) in 2006 (Table 12). It indicates substantial growth in primary and secondary age children and young adults either in senior college or entering tertiary education, with potentially the greatest demands by the time of full development in the area of junior high schools (years 7 to 10).

Table 12 Projected Distribution of School Age Children, Flat Bush 2

School Age	0-4	5-9	10-14	15-19*	
After ten years	**23%**	**25%**	**31%**	**19%**	
At capacity	**19%**	**25%**	**33%**	**23%**	
After ten years	730	790	980	880	3,380
At capacity	770	1,020	1,330	1,290	4,410

6.6 Ethnic Mix

Projecting the possible ethnic mix of the population is even more fraught than projecting household, family, and age characteristics. It will be influenced by international macro-economic conditions, the performance of the national and regional economy, and the attractiveness of alternative residential options to different cultural groups, as well as by the relative fertility and mortality of different ethnic groups, their family and household structures and income earning capacity.

For present purposes, Flat Bush Stage 1, as the area most recently developed, is used as the basis for assumptions about the composition of the Flat Bush 2 community (Table 13). This reinforces the potential significance of Asian migrants (potentially and predominantly from North and Southern Asia) which would reinforce the prospect for relatively large, family-oriented households.

Table 13 Projected Ethnic Distribution, Flat Bush 2

Ethnic Profile	European	Maori	Pacific	Asian	Other	Total
After ten years	40%	4%	3%	49%	3%	100%
At capacity	40%	4%	3%	49%	3%	100%
After ten years	4,960	530	380	6,070	340	12,280
At capacity	6,860	730	530	8,390	470	16,980

6.7 The labour Force

Projecting the labour force at capacity is complicated by the expectation that participation will decline in response to population ageing, particularly towards the end of the Flat Bush 2 development cycle. There could be a significant impact on labour force size if an older population is associated with the uptake of multi-unit dwellings. However, downward pressure on participation may be offset by a greater tendency by people to work after the traditional retirement age of 65.

The existing Flat Bush has been chosen as the basis for labour force assumptions because it had the lowest participation rate of the selected areas in 2006. However, the figure has been further lowered to the 2006 level for Manukau (68%) for the development is at capacity (Table 14).

Table 14 The Labour Force, Flat Bush 2

	Participation Rate	Unemployed	Pat-Time	Employer
After ten years	73%	5%	17%	23%
At capacity	68%	5%	19%	23%
After ten years	6,600	300	1,110	1,540
At capacity	8,770	400	1,650	2,050

The result is a labour supply of around 8,800 persons. Based on Flat Bush characteristics in 2006, around 23% might be working part-time only. However, this belies the fluid nature of employment, with the figure bound to fluctuate and possibly increase as greater flexibility is pursued in the work force. Similarly, the unemployment rate will fluctuate and is almost impossible to project. The 5% adopted here is probably a little higher than the frictional rate of unemployment (the rate associated with people moving between jobs).

There will be a significant share of the workforce self employed and employing others. Based on Flat Bush and Dannemora in 2006, this could be as high as 23%, a figure that suggests a strong entrepreneurial and managerial component to the existing labour force in these areas.

One of the key issues associated with planning for the labour force apart from the availability of employment is its distribution, and how commuters will access jobs. Applying journey to work figures for Dannemora to the first ten years reflects the current dependence on driving and limited access to public transport (0).

However, in expectation of an increase in working at home and casual work, more use of public transport, and a reduction in dependence on private vehicles the full capacity projection draws on the rest of Auckland 2006 profile. Under this assumption public transport would remain marginal, with working at home more significant. The growth in other modes suggests an increased capacity to work locally, commuting by foot or bicycle, for example.

Table 15 Journey to Work Projections, Flat Bush 2

Journey to Work	At Home	Did Not Go	Driver	Passenger	Public Transport	Other	Total
After ten years	6%	10%	73%	3%	2%	6%	100%
At capacity	7%	10%	61%	4%	6%	12%	100%
After ten years	470	640	4,060	280	400	760	6,610
At capacity	620	850	5,390	370	530	1,010	8,770

The journey to work figures will be driven heavily by the location of work opportunities. Greater employment self-sufficiency in the southern sector, for example, could reduce travel distances although it may not support significant growth in public transport usage if the system remains oriented towards line haul services to the CBD.

6.8 Conclusion

Section 6 has provided a profile of the potential Flat Bush community over the next ten years or so, and how it might look when fully developed. The trends on which it is based reflect the immediate setting and are informed by what has happened in Flat Bush Stage 1 and nearby developments.

While largely descriptive and subject to qualification, the profile provides several insights:

- It confirms that the scale and scope of Flat Bush as outlined in the Master Plan is likely to be highly appropriate for the market, with the development potentially completed – at capacity – fifteen to twenty years after commencement;
- A changing profile will support significant multi-unit dwellings – provided the design and quality specifications are appropriate – but early development is most likely to focus on families in detached or perhaps semi-detached dwellings with three and often four or more bedrooms;
- This age structure will be reflected in the demand for local educational, recreational and community facilities;

At the same time, the population is likely to be diverse – in terms of ethnicity, age distribution, household, and family structures.