11 - 13 April 2019, The Devon Hotel, New Plymouth www.nzcbc2019.co.nz

## The implications of our ageing population

Natalie Jackson





New Zealand Community Boards Conference 2019 Community Boards in a Time of Change



#### The implications of our ageing population

Dr Natalie Jackson\*

Invited Address to the New Zealand Community Boards Conference 2019: *Community Boards in a Time* of Change

New Plymouth – April 13<sup>th</sup>, 2019

\*Director, Natalie Jackson Demographics Ltd;

ex Professor of Demography and Director of NIDEA, University of Waikato; Professor of Demography, Massey University

# $\bigoplus$

# Outline

**1**.Population ageing and its finer points

- Having confidence in projections in the absence of census update
- 2.Can migration 'solve' population ageing?

3.Ageing, housing, inequality and need









© NATALIE JACKSON DEMOGRAPHICS LTD.

## New Zealand's population ageing looks like this:





# Population ageing in a nutshell

#### 1. Numerical ageing

• Absolute increase in the number of older people, primarily due to increasing longevity.

#### 2. Structural ageing

• Increased number at older ages becomes an increased proportion, primarily due to falling birth rates.

#### 3. Natural decrease

Once a population has more older people than children it is a short step – around one decade - to more deaths than births and the end of natural increase.

#### 4. Depopulation/Shrinkage

• Once areas enter natural decrease, they can only grow via migration – but often it is migration that is driving natural decrease..



Population ageing - view II

Total NZ 2038 (1966 Unshaded)

NATALIE JACKSON DEMOGRAPHICS LTD



### Using the past to anticipate the future





# Huge subnational diversity in rates and extent of ageing

© NATALIE JACKSON DEMOGRAPHICS LTD.

### Age structures and rates of ageing are highly diverse across the country:



<sup>65+</sup> years: 11.9% (1996 = 9.7%)

# Hyper-ageing

We already have 'hyperageing' populations. What does this mean for current models of rate revenue gathering? **Resource and service** provision? Housing demand and supply?

Thames-Coromandel projected 2038 (2018 Unshaded)



NZ: 2038: 65+ yrs = 22.6%; 25-49yrs = 32.5%

NATALIE JACKSON DEMOGRAPHICS LTD

# What about 'standard' structural ageing?

How will **sub-national** *differences* in the rate and extent of population ageing affect our typical onesize-fits-all policy development?





NZ: 2038: 65+ yrs = 22.6%; 25-49yrs = 32.5%

NATALIE JACKSON DEMOGRAPHICS LTD

# What do Community Boards need to be aware of (demographically)?

- Almost all towns/centres will have more older people than children within 10 years (total NZ within 8 years, already the case in 1/3 TAs)
- Most towns/centres will have declining proportions at **key parental ages**
- Many schools will see **unsustainable student numbers**

1.

- Many towns will see **fewer young/middle-aged people available for service groups** this is not disinterest, it is demographic
- 2. Many populations will shrink in size (or remain static)
  - Under current funding arrangements, growth is rewarded. **Declining areas will struggle** to get sufficient resources and services.
- 3. Labour forces will be much older > *and also* shrink in size
  - Outside of the cities it will become ever harder to get sufficient local services
- 4. Many local ethnic compositions will change quite rapidly
  - •Not simply a migration effect. The structurally older European population will shrink from natural decrease, while younger populations will 'replace' them.
- 5. Average household size will fall but demand will increase
  - however there is also a **'tenure revolution'** to take account of



#### More older than younger people

© NATALIE JACKSON DEMOGRAPHICS LTD.

NZ: one of the highest birthrates in the developed world, but **more older people than children** in 8 years (even with 15,000 net migrants every year)



Numbers aged 0-14 and 65+ years

Source: Author/Statistics NZ Estimated Resident Population (1996-2013); Projections 2013(base)-2043 Update

# Most TAs and the towns in them will soon have more older people (65+ years) than children (0-14 years) – even with 15,000 net migrants every year.



Source: Author/Statistics NZ Estimated Resident Population (1996-2013); Projections 2013(base)-2043 Update



#### Many townships will shrink in size

[due to ageing]

© NATALIE JACKSON DEMOGRAPHICS LTD.

#### Migration makes most subnational areas older rather than younger





Source: (Jackson and Brabyn 2017) Tai Timu Tangata: Taihoa e?

NATALIE JACKSON DEMOGRAPHICS LTD

#### NZ Towns are now more likely than rural centres to have >20% aged 65+



Percentage of TAs with greater than 20% aged 65+ Years

| Projected onset of subnet of depopulation |              |           |           |  |
|---|--------------|-----------|-----------|--|
| Medium<br>Variant                         | 2012 not the | 2013-2033 | 2013-2043 |  |
| Number el de                              | 7            | 9         | 17        |  |
| %   | 10.4         | 13.4      | 25.4      |  |

Medium assumption = 15,000 net migrants every year

Source: Author/Statistics NZ (2017) Projections 2013(base)-2043 Update



# Labour forces will be much older and in many towns will be smaller

© NATALIE JACKSON DEMOGRAPHICS LTD.

2/3 TAs already have fewer people at labour market 'entry' than 'exit' age (20-29 years : 60-69 years), and this will increase (even with 15,000 net migrants per year)



Source: Author/Statistics NZ Estimated Resident Population (1996-2013); Projections 2013(base)-2043 Update





Source: Author/Statistics New Zealand (2017) 2013(base)-2043 Update (medium assumption = 15,000 net migrants per year; high = c.55,000 per year







NATALIE JACKSON DEMOGRAPHICS LTD

 $\bigoplus$ 

## Community Care Services 1996-2013 (+101%)



Source: Jackson/Statistics New Zealand Customised Occupation Database

National ratio 15-29:55+ years from 27:10 in 1996 to 9:10 in 2013



### Primary School Teachers1996-2013 (+25%)



Source: Jackson/Statistics New Zealand Customised Occupation Database

National ratio 15-29:55+ years from 27:10 in 1996 to 9:10 in 2013

# Special Interest Organisation Administrators 1996-2013 (+72%)



National ratio 15-29:55+ years from 27:10 in 1996 to 9:10 in 2013

Source: Jackson/Statistics New Zealand Customised Occupation Database

## Local Government Legislators1996-2013 (+48%)



Source: Jackson/Statistics New Zealand Customised Occupation Database



## CEO - Local Government 1996-2013 (+114%)



Source: Jackson/Statistics New Zealand Customised Occupation Database

National ratio 15-29:55+ years from 27:10 in 1996 to 9:10 in 2013



#### Ethnic compositions will change rapidly

© NATALIE JACKSON DEMOGRAPHICS LTD.

#### Maori (and Pacific Peoples) have very youthful structures cf. European (and Asian) >> different demand/resource needs



# $\bigoplus$

#### It's important to know the ethnic composition of your constituency



# Overseas Born proportion is changing more rapidly in the South Island

#### Percentage Change in % Overseas Born, TAs of North and South Islands, 2006 and 2013 70 North Island South Island 58.5 60 50 Percentage change 32.0 40 30 4.9 5.3 20 10 0 Southland Ashburton Central Otago Invercargill Hastings Waipa Far North Waimate Upper Hutt Whangarei Manawatu Wanganui Clutha Westland Timaru Rangitikei Opotiki AUCKLAND Gore Waitaki Kaikoura Hurunui Selwyn Tasman Chatham Islands Territory Waitomo Tauranga Kaipara Taupo Ruapehu Wairoa Gisborne Rotorua Porirua Tararua Hauraki South Waikato Kawerau Queenstown-Lakes Buller Marlborough Waimakariri Mackenzie Nelson Dunedin Christchurch (2) Otorohanga Carterton Western Bay of Plenty Central Hawke's Bay Waikato New Plymouth South Taranaki Matamata-Piako Napier Grey South Wairarapa Palmerston North Wellingtor Horowhenua Thames-Coromande Lower Hutt Kapiti Coas Stratford Whakatane Hamilto Masterto -10

# Composition of Overseas Born population is very different by age (and region)



Source: Jackson/Statistics New Zealand 2013 Census QuickStats about national highlights, Table 5

© NATALIE JACKSON DEMOGRAPHICS LTD.



#### Maybe its time to re-think what is meant by population 'growth' – and what should/can be resourced..



#### Ageing-driven growth is not the same as youth-driven growth



Statistics New Zealand, Projected population by age and sex, 2013 (base)-2043 Update



#### The effects of ageing are more pronounced outside of the cities



Statistics New Zealand, Projected population by age and sex, 2013 (base)-2043 Update



#### Can migration solve 'the problem'?

© NATALIE JACKSON DEMOGRAPHICS LTD.

### Auckland is one city where migration (mainly international) is [typically] high. It slows, but does not prevent, ageing



Source: Stats NZ Births, Deaths, ERP (Note change of timing and method of enumeration between 1995 and 1996 means that only natural increase can be shown for that year)

# Despite increased migration, Auckland's natural increase has recently reduced (as most elsewhere)



© NATALIE JACKSON DEMOGRAPHICS LTD.

### With one exception, natural increase has been the major driver of New Zealand's population growth since 1880



Source: Author/Te Ara/Stats NZ (<u>https://teara.govt.nz/en/graph/28726/migration-natural-increase-and-population-change-1865-2015</u>)

NATALIE JACKSON DEMOGRAPHICS LTD



Source: Statistics New Zealand (2017) Subnational population projections, characteristics, 2013(base)-2043 update

#### Projected Structural Ageing under different conditions





*Source: Stats NZ 2016-base – 2068)* 

# Percentage aged 15-39 years projected to decline under ALL migration scenarios





Source: Stats NZ 2016-base – 2068)



So.. Accept population ageing.

## Now - thinking about ageing and housing — and inequality and need in your communities



## Ageing and housing >> anticipating need

- 1. As structural ageing progresses, average household size falls
  - More older people are widowed, live alone
  - Later family formation/fewer children means fewer people per HH
  - Fewer children means empty nest stage is reached earlier
- 2. NZ's current average 2.6 persons per HH will fall to around 2.5 around 2022, but ranges from 2.1 for Thames-Coromandel to 2.9 for Selwyn
  - Ageing/Family and HH type differ by Area Unit. Household projections by Councils must take these differences into account.
- 3. There is currently a **tenure revolution** in progress. More people are and will be renting at all ages
  - The biggest change will be at [future] older ages, where ownership was previously almost a given.



### The descent of home ownership, 1986-2013



SOURCE: AUTHOR/STATISTICS NEW ZEALAND, CUSTOMISED CENSUS DATABASE, HOUSING TENURE 1986-2013

# Home Ownership (%) has declined in every TA. Ownership is generally lower/decline has been greater in North than South Island TAs





## Renting has increased in all but six\* TAs



#### FAMILY TRUSTS\* have increased in all but one TA. %'s generally lower and have increased by a smaller margin in North Island TAs



SOURCE: AUTHOR/STATISTICS NEW ZEALAND, CUSTOMISED CENSUS DATABASE, HOUSING TENURE 1986-2013



### European aged 40-54 years, 1986-2013





### Asian aged 40-54 years, 1986-2013

Asian 40-54 years 1986-2013





### Maori aged 40-54 years, 1986-2013

Maori 40-54 years 1986-2013 100% 90% 35.9 35.3 80% 44.5 48.2 70% 60% 67.5 64.1 7.2 64.7 50% 8.8 59.1 48.3 40% 51.8% 30% 43.0 20% 10% 0% 2001 1986 1991 1996 2006 2013 Owned Family Trust Rented



### Pacific People aged 40-54 years, 1986-201

100% 90% 38.6 80% 44.8 56.9 70% 61.8 60% 61.3 61.4 50% 55.2 47.2 40% 6.9 6.1 38.2% 30% 20% 36.2 32.0 10% 0% 1986 1991 1996 2001 2006 2013 Owned Family Trust Rented

Pacific People 40-54 years 1986-2013



# Times of change - Joining the dots

- Population ageing must be built into your work, planning, thinking
- Most of your constituencies will/have more older people than children, fewer labour force entrants than 'exits'; many towns and labour forces will shrink in size.
  - There will be increasing competition for resources betweek growing and declining areas - many current funding models are inappropriate.
- Our communities are changing in ethnic composition not only because of migration - older European populations are reaching natural decrease faster
- The trends will generate many challenges, but also many opportunities for those who work with their demography.



# Planning for a changing world

#### Thank you - enquiries welcome

Email: <u>demographics@nataliejackson.net</u>

Website: www.nataliejackson.net



© NATALIE JACKSON DEMOGRAPHICS LTD.