# DECENTRALISATION - HOW WILL IT WORK?



# INTRODUCTION

Decentralisation is at the core of a number of key discussions around Australia at the moment.

For example:

- The Federal Government has proposed policies to settle migrants in regional areas, which they say will address congestion growth in Sydney and Melbourne;
- The 'Balance Victoria' initiative seeks to shift as much as half the population growth slated for Melbourne into regional Victoria, supported by new rural land releases at sites to be linked to Melbourne by high speed rail; and
- The State Government is promising improved regional rail services and facilities, in part to encourage more regional growth.

The questions in my mind about decentralisation are:

- Will it reduce congestion in Melbourne and Sydney?
- Will it produce more efficient land and transport use?
- Will it be better than focusing growth and investment in the cities?
- And if so, what is needed to make it work?



### SOME BACKGROUND FIGURES

#### NATIONAL POPULATION GROWTH

Every year, Australia's population grows.

More people are born than die (natural increase, Figure 1), and more people immigrate than emigrate (net overseas migration, Figure 2).

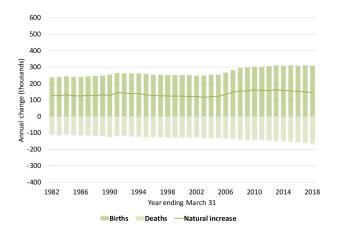
Combining the two, Figure 3 shows how natural increase and net overseas migration have varied since 1982.

Natural increase has steadily and slowly increased (more or less in line with population growth itself), while net overseas migration has been up and down in response to economic conditions and Government policy settings.

It was lower than the natural increase through much of the 1990s, but has grown to outpace it since then, albeit with large year-on-year variations

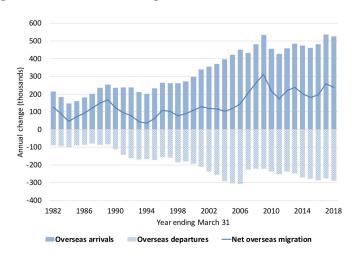


Figure 1: Natural population increase 1982-2018



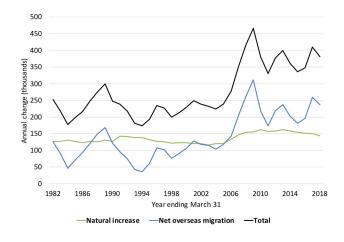
Source: ABS 3101.

Figure 2: Net overseas migration, 1982-2018



Source: ABS 3101.

Figure 3: Natural population increase 1982-2018



Source: ABS 3101.



# Almost 20,000 people left Sydney for elsewhere in Australia

When looking at what's driving capital city growth, a third influence - net internal migration - must be added to natural increase and net overseas migration.

The number of people moving in and out of each city is quite large, but they also tend to cancel each other out. The net influence of internal relocation is much smaller than natural increase and net overseas migration.

Unfortunately, this data is not available over a long period; ABS has recently published details of the three components for small areas around Australia, but only for one year of growth (2016-2017). I have summarised this for the capital cities in Figure 4.

The greatest growth is in Sydney and Melbourne, and the reason for Melbourne growing significantly more than Sydney is internal migration.

Almost 20,000 people left Sydney for elsewhere in Australia, whereas over 10.000 moved into Melbourne. Perth. Adelaide and Darwin also 'lost' people to internal migration.

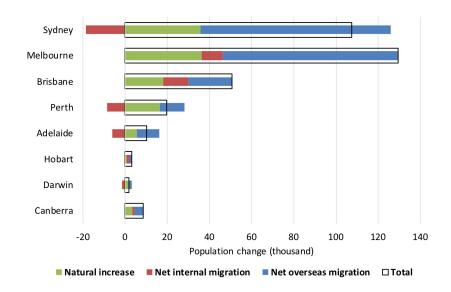
To explore this further, each of the three net components of population change have two elements, making six movements in the data (Figure 5):

- Natural increase = births deaths
- Net internal migration = internal arrivals - internal departures
- Net overseas migration = overseas arrivals - overseas departures

Clearly, the net changes mask much larger movements in and out. The largest movements by far are internal arrivals and departures. In any given year (assuming 2016-17 is typical in this respect), many more residents are moving in and out of the cities than births, deaths, overseas arrivals and departures combined

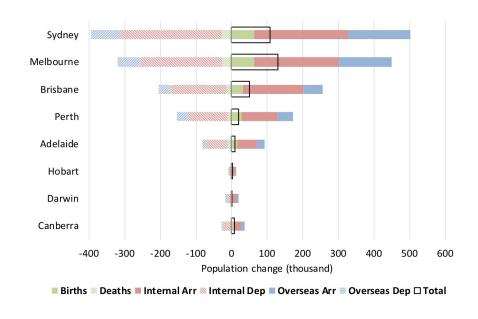
#### CAPITAL CITY POPULATION GROWTH

Figure 4: Net growth components in capital cities, 2016-2017



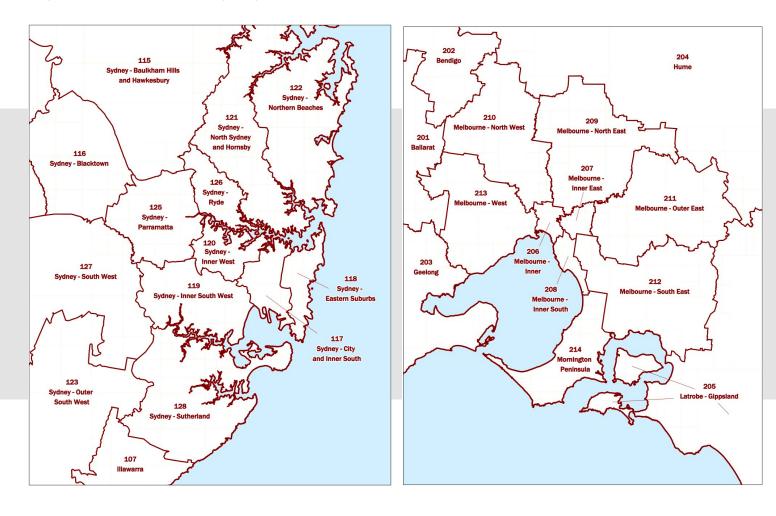
Source: ABS.Stat

Figure 5: All growth components in capital cities,



Source: ABS.Stat

Figure 6: ABS SA4 areas for Sydney and Melbourne



It is also possible to look at the movements within each city. I have chosen SA4 areas for this (see Figure 6), but the information is available down to SA2 areas, which is quite detailed.

Net changes are shown in Figure 7 for Sydney and Figure 8 for Melbourne.

In Sydney, the greatest growth is in Parramatta, City and Inner South, South West and Inner South West areas. All of these have large growth in overseas migration, supplemented by significant natural increases.

Parramatta and the Inner South West also have sizeable reductions due to internal migration.

In Melbourne, growth is strongest in the West, South East and Inner areas, strongly driven by overseas migration. All components are growing everywhere except in the Inner East, Outer East and Inner South, where net internal migration is negative.

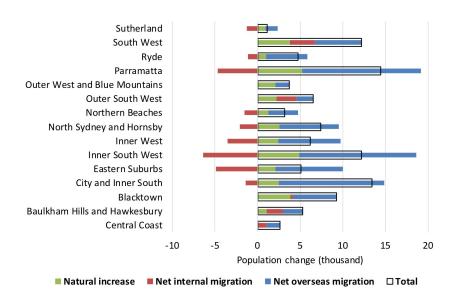
I have also looked at the in and out movements behind these net figures. Sydney is summarised in Figure 9, and Melbourne in Figure 10.

Clearly, there are substantial movements in and out of all SA4s in Sydney and Melbourne, especially internal migration. The highest rates of movement in and out coincide with the areas of greatest overall growth. In the inner-city areas of Sydney and Melbourne, population turnover is well over 10%, suggesting that the entire population would be refreshed in less than ten years.

These high rates of population turnover prompt many other thoughts, not least about the need for continuous education about local transport choices

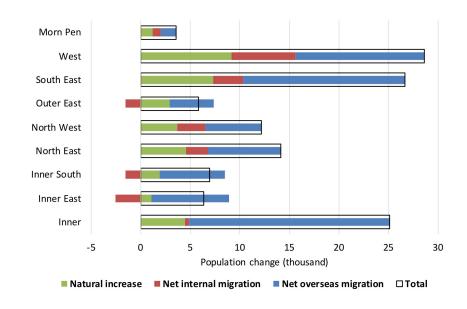


Figure 7: Net growth components in Sydney SA4s 2016-17



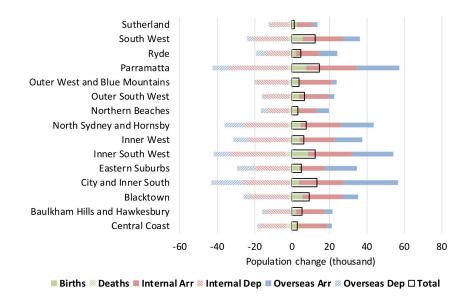
Source: ABS.Stat

Figure 8: Net growth components in Melbourne SA4s 2016-17



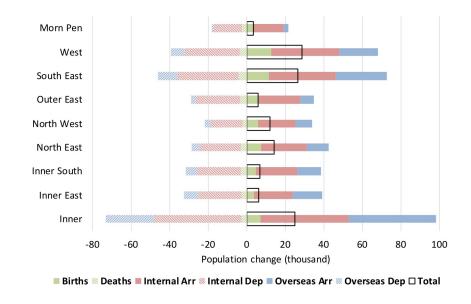
Source: ABS.Stat

Figure 9: All growth components in Sydney SA4s.



Source: ABS.Stat

Figure 10: All growth components in Melbourne SA4s, 2016-17



Source: ABS.Stat

#### CONGESTION



# The highest congestion growth per capita is in Brisbane and Sydney

In a recent speech promoting settlement of migrants in regional areas, Population Minister Alan Tudge said that the main contributor to congestion growth in Melbourne and Sydney is net overseas migration, with 87% of skilled migrants settling there.

However, he has not presented any information to support a causal link between the two. BITRE data suggests that the 'avoidable cost of congestion' (excess time, vehicle operating and noxious emissions cost) expressed in \$billions per year, has been trending as shown in Figure 2 since 1990.

Is congestion increasing in line with population? Figure 12 shows the avoidable cost of congestion per capita in the capital cities, indexed at 100 in 1990 for easier comparison. Interestingly, the highest congestion growth per capita is in Brisbane and Canberra. Sydney is close to the average for all cities, and Melbourne, Hobart and Adelaide have lower-thanaverage growth.

Population growth is obviously an important factor, but it's not the only one. Why was Melbourne (seemingly) doing better than Sydney, at least until about 2020?

A recent report commissioned by the Australian Automobile Association[1] examines trends in road use and performance over the last 5 years, using data collected by HERE Technologies from GPS probes of various types (vehicle sensors, smartphones, portable navigation devices, roads sensors and connected cars).

The report looks at city-wide travel speeds but doesn't break them down by area. It also assesses trends on a number of key routes in each city (routes between the CBD and airports, as well as between certain key suburbs and the CBD). Each route is summarised over its entire length, without showing whereabouts the biggest changes are happening. The chosen routes are not very representative of travel in each city; many journeys do not use these routes in their entirety every day.

#### CONGESTION

I would be particularly interested to know how congestion is worsening around each city. We know that traffic volumes on inner city roads change very little over time (partly because they are already full).

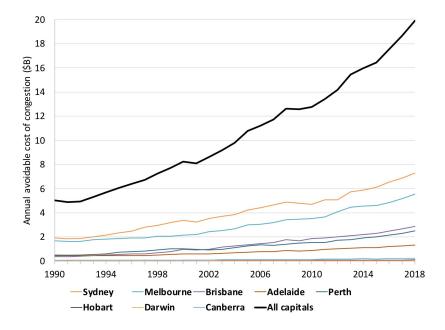
Further out in the suburbs, traffic increases more rapidly. Do congestion trends reflect this? Is there any relationship between these changes and the patterns of population growth and change? To answer these questions, analysis is required of changes in travel time at finer levels of detail. Data is available for this (from HERE Technologies, amongst others).

A good approach would be to look at the data by local government area (LGA) or another small-to-medium area basis, to examine where the travel times are changing most and see if this corresponds to where traffic growth is greatest.



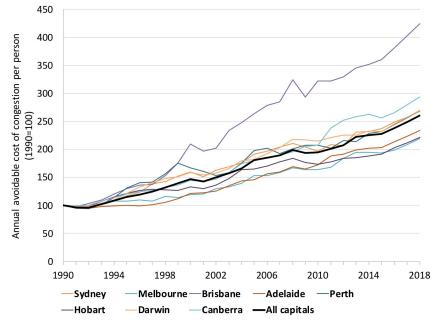
# **CONGESTION**

Figure 11: Avoidable cost of congestion in capital cities



Source: BITRE (figures beyond 2015 are projections

Figure 12: Avoidable cost of congestion per head of population in capital cities (1990=100)



Source: Analysis of BITRE data

### IS DECENTRALISATION CONGESTION-BUSTING?



# The best solution is to develop regional areas consciously

Clearly, shifting growth to places away from Sydney and Melbourne will reduce (in any given year) the amount of travel demand taking place there.

The key question is whether congestion growth will be reduced in a lasting way. In Australia, regional centres are much smaller than the capital cities. Shifting substantial growth into regional areas (sufficient to make a lasting difference to growth in capital cities) will have very large impacts in those areas.

Further research is needed to understand how congestion growth is distributed around cities before this question can be answered. The large cities are not homogenous.

A key issue is to predict where in each city the shift to regional growth will relieve the pressure. The very large influence of internal migration is probably a key here. Will regional growth primarily come from internal migration? If migrants are encouraged - or required - to settle in regional areas, how many years will they stay there?

I believe that the best solution is to develop regional areas consciously. The Balance Victoria concept is to link new regional towns to capital cities via high speed rail links, thus providing the new regional residents with capital city work, commerce and cultural opportunities. At the same time the new regional development areas must have their own identities and reasons for existing.

A key overseas example might be London's Green Belt. This was proposed in the early 20th century, but not taken up fully until the 1950s when growth in private motor transport created unprecedented congestion.

Essentially the concept was to limit London's suburban spread by designating a green area around the city. Pre-existing and new towns outside the Green Belt with fast rail links to London thrived as places for London workers to live (the so-called Stockbroker Belt), although many also became dormitory towns during the week and local jobs suffered.

#### IS DECENTRALISATION CONGESTION-BUSTING?

Interestingly the Green Belt implementation was also more or less coincident with the motorway development programme, which brought Britain's towns and cities much closer together. Similar policies were implemented around Paris, and there are other examples too.

In conclusion, I think that regional satellite growth around Australia's capital cities holds great potential, provided they are linked to the capitals with high quality transport.

However, the current lack of critical mass in many places around the cities is a problem (although Victoria probably has an advantage over the other states in this regards, with several significant places at convenient distances from Melbourne). I also suspect that decentralisation policies will only work where there are also policies limiting growth in the capital cities, similar to London's Green Belt policies mentioned above.

The effects of regional growth on future growth within the capitals needs to be thoroughly researched and understood. The simplistic solution recently put forward by the Federal Government - to settle migrants in regional areas - is emphatically not the only answer.



# **ABOUT THE AUTHOR**



William McDougall is a Melbourne based independent transport planner with considerable experience in strategic transport studies, demand forecasting and multicriteria appraisal.

He has undertaken many planning and feasibility studies for major transport projects, including High Speed Rail in Australia, Melbourne Metro Tunnel, Melbourne Airport, Rowville and Doncaster rail lines.

William is particularly interested in developing strategic transport plans and policies for more sustainable outcomes.