

# GROWING PAINS

## 1. INTRODUCTION

This HCAG commentary is our first undertaken **and includes a brief survey which can be found on the HCAG website page “Campaigns and Actions > Surveys”** that we invite you to complete in order that we and other readers (especially planners) have a better understanding of community desires and expectations for our future urban environment and livability.

**You will need to read this article before or in-conjunction with completing the survey.**

This commentary takes a projection of what Melbourne’s population based on several scenarios could be decade by decade out to the year 2100. You may well say that by the end of this century you will not be around so why should you care. However, we put to you that whilst this is most probably the case, your children may well be and your children’s children almost certainly will be. So, they are the beneficiaries of your interest and inputs now.

For those who want to know more you can find links to related material as listed below which can be found on the **Community Conversations page on the HCAG website:**

- Plan Melbourne: Outcomes
  - Melbourne’s Strategic Planning History
  - 20 Minute Neighborhood Fact Sheet
  - Why Trackless Trams Are Ready to Replace Light Rail
  - Eastern Metropolitan Land Use Framework Plan
  - Whitehorse Council Concerns Re Suburban Rail Loop
  - Reforms to Victorian Planning Provisions
- And related;
- Response from Melbourne City Greens
  - Evaluation by Ratepayers Victoria

Other articles:

- Department of Transport Strategic Plan 2021-2025
- Suburban Rail Loop: Connecting our suburbs

- As backyards get smaller and trees are removed, urban heat islands could be making suburbs hotter (Electronic copy, ABC News 11<sup>th</sup> November 2021)

## 2. DRIVER OF POPULATION GROWTH AND PLANNING OPTIONS FOR MANAGING IT

**After reading this section 2. please complete the survey question on population growth in the related survey in the Campaigns and Actions of the HCAG website.**

### 2.1 Population growth - its primary driver:

Population growth in Australia is primarily driven by a policy of high immigration. In recent times it has been hovering around 2 percent per annum and not-with-standing Covid 19, which has curtailed it for the time being, once the pandemic has subsided this high growth rate is anticipated to resume.

The reason put for pursuing this high growth is that the Federal Government uses it as an economic driver without which the economy would grow at a much lower rate.

The cost impact of this high population growth is minimal at a Federal Government level but is high for State and Local Governments that carry the primary burden of providing more infrastructure and services to support the higher population. The planning and provision of these, especially for infrastructure, are not keeping pace with needs. Among other things this is in part due to Vertical Fiscal Imbalance which is a serious problem for Australia, which others have argued is the third worst in the world.

*“The **fiscal imbalance in Australia** is the disparity between the revenue generation ability of the three levels of governments in Australia relative to their spending obligations; but in Australia the term is commonly used to refer more specifically to the vertical fiscal imbalance, the discrepancy between the federal government's extensive capacity to raise revenue and the responsibility of the States to provide most public services, such as physical infrastructure, health care, education etc., despite having only limited capacity to raise their own revenue. In Australia, vertical fiscal imbalance is addressed by the transfer of funds as grants from the federal government to the states and territories.”*

*(Vertical fiscal imbalance is a topic that is worthy of its own section dedicated to the subject.)*

For most of the first two decades of this century Melbourne's population growth has been increasing by close to 2% per annum and is one of the highest large city growth rates in the world. This high growth rate has serious consequences in the long term.

Figure 1 shows the anticipated compounding growth rate of Melbourne at growth rates of 1.1 percent (left column) 1.5% (middle column) and 2% (right column). All show a figure for each decade.

At 2% annual compounding growth Melbourne's population is anticipated to be a staggering 22 million people by 2100. That's more than 80% of the current population of Australia. It is clearly unsustainable.

**Figure 1. Melbourne anticipated population growth (right column) between now and 2100 based on current annual compounding growth of 2% per annum.**

COMPOUNDING GROWTH			
MELBOURNE SCENARIO: 2100			
Compounding growth at a growth rate of:			
	1.1% pa	1.5% pa	2.0% pa
Year	Pop. growth	Pop. growth	Pop. growth
2000	3,450,000	3,450,000	
2010	3,844,796	3,969,876	
2020	4,272,641	4,607,203	5,100,000
2030	4,733,486	5,346,847	6,120,000
2040	5,227,331	6,205,235	7,344,000
2060	6,314,021	8,357,551	8,812,800
2080	7,532,711	11,256,410	10,575,360
2100	8,883,401	15,160,752	15,228,518
			21,929,066

## **2.2 Options for reducing the Problem**

- **Reduce the immigration rate.**
- **Planning options for addressing Melbourne's population growth.**

### **2.2.1 Reduce the immigration rate.**

One way of reducing population growth is to reduce the migration rate. However, the implication of this is also to reduce economic growth and prosperity if the advocates that link the two are correct.

It would potentially allow infrastructure and service needs to catch up **if** governments redirected their focus to doing so.

We are of the view that a Federal Government will not reduce immigration rates substantially regardless of political persuasion. Any variation between the alternative governments is likely to be minimal.

### **2.2.2 Planning options for addressing Melbourne's population growth**

**2.2.2.1 Urban consolidation – infill development. (Containment within existing boundaries.)**

**2.2.2.2 Urban expansion – moving the urban growth boundary outward (often described as urban sprawl).**

It can take different forms.

- Expansion along transport corridors
- Expansion to fill in open space out to the Urban Growth Boundary (UGB). The UGB does not get much of a mention these days. It is susceptible to being moved which defeats its very purpose.

**2.2.2.3 Decentralization – relocation and/or redirecting population growth to existing regional cities or new cities.**

The main options being used to date this century for planning in Melbourne is a combination of Urban Consolidation (Option 2.2.2.1) and Urban expansion (Option 2.2.2.2) with an increasing focus on Urban Consolidation rather than the

latter which predominated for the last 50 years of the previous century, and arguably longer.

#### **2.2.2.1 (discussion) Urban consolidation - infill development. (Containment within existing boundaries.)**

Progressively increasing, infill development has become the predominant approach to the development of Melbourne over at least the last two decades. In parallel, urban expansion has continued along transport corridors and increasingly into peri-urban townships close to the Melbourne metropolitan fringe suburbs. They will inevitably be swallowed up into the outer Melbourne sprawl as has happened along the Pakenham corridor.

With respect to urban consolidation, there are a number of assumptions that are highly questionable:

Such as the assumption that existing infrastructure has the capacity to cater for all this extra load on the various systems.

- including;
  - Electricity – Which currently is largely supplied by burning fossil fuels AND the distribution network does NOT have infinite capacity nor are there an infinite number of above ground routes. Furthermore, in many instances distribution networks for renewable energy such as wind and solar do not exist or are marginal between the generation source and Melbourne.
  - Gas – Similar problem as electricity.
  - Water supply – Up to 10% of Melbourne's water is lost due to leaking pipes. Most pipes will need progressive replacing over the next few years, (especially metal pipes) and existing pipes do not have infinite capacity.
  - Storm water drains – Have a useful life of around 70 years and most of inner Melbourne and a good part of middle Melbourne already exceeds this life. Including most of Whitehorse west of Middleborough Road and parts of Whitehorse and Maroondah to the east around district and neighborhood centers.
  - Sewerage – Much the same as storm water drains.
  - Public Transport - Public transport from the 1950's onward has been neglected by state governments of both political

persuasions in favor of “The cars that ate Melbourne.” (If you wish, Google search under this heading for several articles.)

There has in recent times been a renewed interest in public transport – but is it enough?

- Roads, especially arterials and circumferential primary roads – Most primary roads in Melbourne of all types are at or approaching their capacity and will become increasingly gridlocked during both morning and peak times. It may be possible to increase the capacity of some by using a variety of amelioration methods, but this is limited and finite.
  - Hospitals and other health facilities – Limited by land space available and/or requires substantial property acquisition and consolidation.
  - Etc.
- Similarly, do existing and future services and related infrastructure have sufficient capacity to absorb this future growth?
    - Services such as education -abbreviated title (the Education Department seems to work on different growth data to that of planning and other departments). This department is still closing and selling off school properties which they use to fund learning equipment. It does so on the argument that its research data indicates the assets are surplus to requirements. However:

State planning data out to the 2050 – 2060 timeframe is similar to HCAG’s own data.

That is a population of around 7 - 8 million. Perhaps, if no more children are born and the population growth is adult persons

only, the Education Department analysis is right – But we don’t think so.

What is most likely going to happen is that the student population is going to increase, there are not going to be enough suitable locations to build replacement facilities for the ones they have closed and sold, and they are going to eye off and compulsorily

acquire precious passive and active open space. And, for existing schools they are going to have to redevelop the sites with multilevel buildings and possibly close and build over school sporting fields.

- Related to urban consolidation is the resultant urban heat island affect, whereby more and more high-density living results in less and less greenery (especially tree canopy) and more hard surfaces such as concrete paths and walls, asphalt roads, brick dwellings, and rooves – all of which absorb heat during the day and release it back into the atmosphere during the night. The consequences of which is that cities like Melbourne are typically several degrees hotter than the surrounding countryside.
- Dwellings arising from urban consolidation tend to be smaller and more expensive. They are more suitable for retirees and empty nesters but less suitable for younger couples with young families - who often are attracted to the urban expansion option due to lower entry costs – but then suffer from the ongoing hidden costs of less services and more travel times. Etc.

It has been argued by some that what is evolving as a result of this is two distinct and increasingly disparate Melbournes.

Solutions proposed include developing Melbourne into a Polycentric city with a number of Metropolitan Activity Centres. Ringwood (within Maroondah Council) and Box Hill (within Whitehorse Council) are both designated as Metropolitan Activity Centres (MACs). In addition Box Hill is to become a Suburban Rail Loop centre, The 'Suburban Rail Loop Bill 2021' was introduced into the Victorian Parliament in September 2021. The Bill proposes powers that would enable the Suburban Rail Loop Authority (SRLA) to make planning decisions regarding land in these precinct areas when they have been declared. This will remove Whitehorse's planning authority over as much as 25% of the municipality.

Melbourne and its metropolitan suburban area has historically been a centric city with the centre being the existing CBD. Its suburbs have not grown out evenly. For several decades after the second world war it grew eastwards, then to the south east. With the intent of developing a polycentric metropolis and need for additional undeveloped space it is now developing to the west and north as well, along with the designation of a number of MACs.

(See Whitehorse Council Concerns Re Suburban Rail Loop – and the potential impact the Suburban Rail loop will have on Box Hill and withdrawal of the proposed City of Whitehorse’s planning authority for Box Hill and Burwood.)

Sydney is an example of a more Polycentric city.

Closely linked to the development of Melbourne into a polycentric city of MACs is the concept of a 20 minute metropolis.

Of concern to some is the apparent move to withdraw planning authority from Local Government and vesting it into a more central planning process removed from community input or considerations such as the individual and collective needs, wants, and expectations of the community, and potentially reduced ambience and livability.

**Figure 2. What Urban consolidation means for the local governments of Maroondah and Whitehorse, which encompass HCAG’s area of advocacy. Assuming 2% growth continues, is compounding, and retained within Melbourne through urban consolidation and assuming it is evenly distributed.**





### 2.2.2.2 (discussion) Urban expansion – moving the urban growth boundary outward. (Often described as urban sprawl). Can take different forms.

Between the end of the second world war and around the year 2000 Urban expansion was firstly along both rail and road transport corridors and then between them was the predominant development process of Melbourne. Then further expansion outward along these corridors occurred and, in spite of a greater focus on urban consolidation. (See Option 2.2.2.1 above), urban expansion has continued unabated. An Urban Growth Boundary (UGB) was devised that was aimed at addressing this outward expansion but it has failed and growth continues unabated along the transport corridors to this day. (See Figure 3).

**Figure 3. What Urban expansion means for Melbourne if it continues along the existing transport corridors.**



**Note: The growth of an outer corridor to the east has declined over several decades, but it could be argued it is an eighth corridor and is the one in which Maroondah and Whitehorse are located.**

The advantages of urban expansion are:

- Developments are usually on greenfield sites and all infrastructure provided is new and with maximum life remaining.
- Infrastructure provided generally includes;

- Made roads
- Electric power
- Drinking/washing Water
- Storm water
- Sewerage disposal or equivalent.
- Communication (usually) including telephone, internet

The disadvantages of urban expansion are:

- Other infrastructure is poor to non-existent, including;
  - Public transport
  - Health services
  - Shopping centers
  - Community services
  - Schools - which may be rudimentary and often are shown on a map as “future school.”
  - Etc.
- No or little local Jobs/employment
- Few local businesses
- Consequent long travel times to get to both of the above
- Consequent congestion along road corridors (which tend to be radial in direction) to get to jobs and employment
- To date nearly all urban expansion in recent years has been along ever longer transport corridors rather than equal expansion outward to a radius (say 30 km as shown in Figure 3). This is cheaper in the short term because it utilizes some existing infrastructure, but it has an enormous ongoing cost. It also blows away any chance of a city made up of 20 minute accessible activity centers.

### **The outcome of Urban Consolidation (2.2.2.1) and Urban Expansion (2.2.2.2)**

The combination of Urban Consolidation and Urban Expansion is slowly turning Melbourne in to an affluent inner and middle region generally populated by older age groups and younger couples without children, and a less affluent and poorly serviced outer suburban region populated by younger couples with children.

Furthermore, the planned growth in transport, both road based and public transport, has not to date kept pace and is not going to keep up with projected population growth in the future.

Similarly, other infrastructure and services are not keeping up with demand.

### **2.2.2.3 (Discussion) Decentralization – relocation and/or redirecting population growth to existing regional cities or new cities.**

#### **Forward:**

Up until this time Melbourne has benefited from its approach of Urban Expansion and more recently Urban Consolidation. It has been a cheap option that is in no small part a result of good planning practices and decisions by Local Government, resulting from delegated planning authority by the State – which, unfortunately, is increasingly under threat of being withdrawn.

Melbourne for a time was rated as the most livable big city in the world and whilst it has now been overtaken still remains a highly livable city - for now.

Regrettably this is now changing rapidly. **Melbourne is at a tipping point**, and if these past practices are continued it will become increasingly more costly to develop and provide infrastructure (especially) and services within Melbourne.

The result in a less and less livable city over time.

There is an option – decentralization. Which would benefit Melbourne AND regional Victoria.

Regional Victoria grew rapidly and accounted for a greater percentage of the state's population for the first 50 years up until about 1900 than it has today. This was helped by the gold rush and a more agricultural economy.

Between roughly 1900 and 2000 Melbourne's population grew disproportionately compared to rural and regional areas as industrialization took hold and with increasing migration from overseas and migration from rural and regional areas.

Several efforts have been undertaken in the post-world war 2 period of the last century to decentralize. These have all failed, the author suggests, because of a failure to support policy with practical incentives to entice people to make the move to regional areas.

Fundamentally these desirable incentives can be summarized into the following:

- Livability and ambience.
- Provision of jobs in regional areas.
- Services and supporting infrastructure.

All of which the governments of the day failed to provide and failed to entice the private sector to provide. The efforts seemed to be focused on growing the regional cities and townships into dormitory centres where people would live but commute to Melbourne for employment. This is not a sustainable solution. Regional cities **MUST** be independent self-contained centres.

In the last 20 years there have once again been proposals to try to decentralize into Victoria's regional areas by mandating that migrants be granted entry visas conditional on them settling in regional cities rather than settling in Melbourne and other capital cities. These remain proposals and no attempt appears to have been made to implement them.

This does not solve the problem and **ALL** of the problems identified above remain relevant.

The timing is right to **genuinely** move to a policy to decentralize Victoria's population and restrain Melbourne's population to a more livable and manageable size and population, and distribute the population and wealth more evenly and equitably across the State.

As well as a policy it will require a State Government to take measures including redirection of funding to regional centres in order to provide these fundamental incentives and turn these centres into cities more attractive to settle into than Melbourne.

Furthermore, the Federal Government, (which through its high immigration policies is a major contributor to Melbourne's growing pains), should provide tax and other incentives to moves industries and services to regional centres. As well it needs to address the crippling vertical fiscal imbalance that is largely preventing the States from addressing related infrastructure and similar issues – It is time the Federal Government became part of the solution and stepped up its responsibilities rather than being a large part of the problem.

It is noted that over the last decade or so there has been a significant uptake of people settling into peri-urban townships relatively close to Melbourne because properties are cheaper than in Melbourne. However, a large percentage of these settlers still commute to Melbourne for employment.

One frequent complaint however is the lack of supporting facilities essential for the livability of peri-urban and outer metropolitan areas. Facilities such, as but not limited to, schools and shopping centers, businesses and work opportunities.

A hundred years ago many developers provided the infrastructure to support growing suburbs and entice new residents to the developing area. For example, the developers of early Essendon built the tramway out to Essendon and operated it for a time until it was absorbed into the state-run metropolitan tram system. This is rarely the case today.

Melbourne is at a tipping point. The cost of retrofitting infrastructure in an already existing city is becoming prohibitive and its provision is set to compound in the same way its population is going to do without decisive action. Much of its existing infrastructure needs replacing - especially the below ground infrastructure the bureaucrats can't see.

What is needed to address the desirable incentives identified earlier?

(Viz: Livability and ambience, provision of jobs in regional areas, services and supporting infrastructure).

These are as follows:

- Development and provision of a diverse range of jobs and businesses in the targeted regional cities.
  - These could be attracted to regional areas by tax breaks and incentives. Provision of these is largely the remit of Federal Government.  
It is time the Federal Government play a more positive and active role given it is a significant contributor to the problem.
- Regional cities are small to medium size and are largely surrounded by greenfield sites that offer cheaper land and are less expensive to provide basic infrastructure than is the case in Melbourne.
- They offer the opportunity of forward planning of a greenfield site and city development that is no longer possible in Melbourne.
- Good roads and transport within Regional cities and further developed into adjoining areas of the existing regional cities. These must be

developed and made available at the same time as residential housing expansion takes place as was the case a hundred years ago.

(Eg: Not just locking in areas for future schools and other facilities at some future date that frequently don't materialize when they are needed.)

- Planned and equitably distributed passive and active recreational areas including the progressive provision of hard standing facilities such as toilet blocks and pavilions.
- Education facilities;
  - Kindergartens
  - Primary schools
  - Secondary colleges
  - Tertiary facilities – that can be new providers or regionally located campuses of existing universities or colleges but must have a diverse range of courses.
- Health;
  - Clinics
  - Private hospitals
  - Major hospitals with a high level of different capabilities – can be stand alone or regionally located campuses of existing hospitals.
- Shopping centers – including substantive mall shopping centers.
- Entertainment facilities;
  - Theatres
  - Restaurants
  - Live theatre
  - Cinema
  - etc.

Decentralization offers the opportunity to retain Melbourne as a highly livable city and hold its population to a more manageable size - Something less than that of a megacity. Similarly, it offers the opportunity for regional cities to grow into larger highly livable cities that provide similar infrastructure and services to those currently offered to Melburnians. It also offers surrounding townships and agricultural properties similar easily accessible convenience.

(See Figure 4 below.)

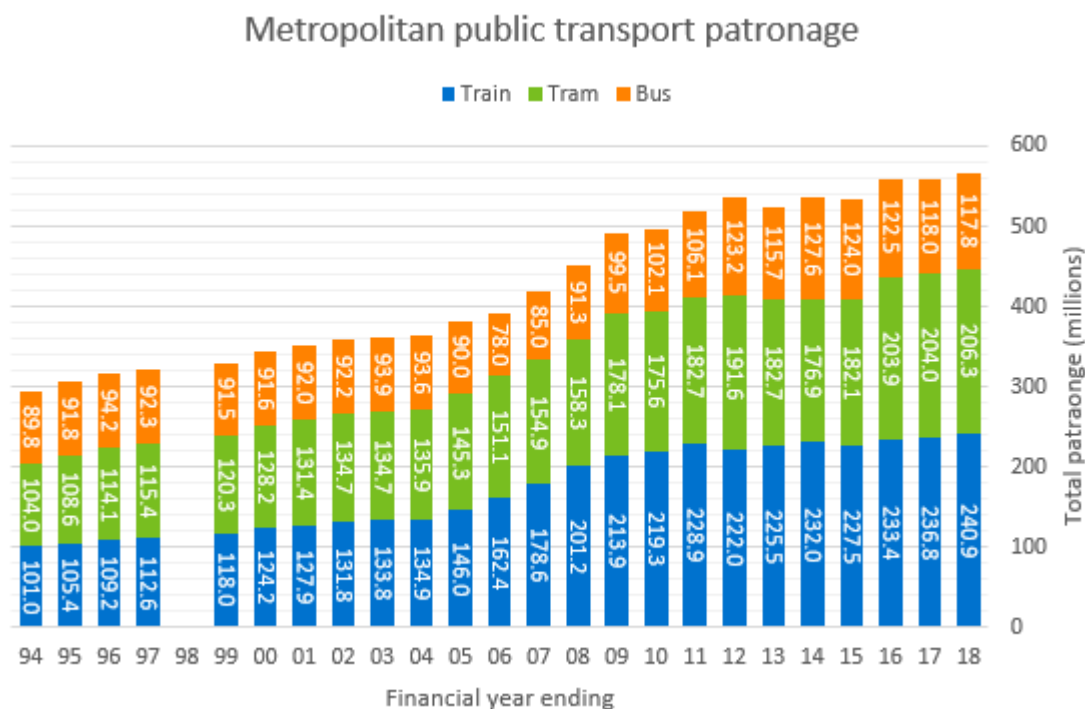
**Figure 4. What Regional expansion could mean for Melbourne and regional Victorian cities if a decentralization policy is adopted AND implemented.**



## **2.3 Transport modes**

It could be argued that traffic congestion is the most significant, challenging, and visual consequence of Melbourne's high population growth, although it is by no means the only consequence. For this reason section 2.3 has been added to this commentary.

### 2.3.1 Public Transport



Source: Transport in Melbourne Wikipedia, Date accessed 28<sup>th</sup> October 2021

This represents about 12% of trips in Melbourne and growth in patronage is flat for the last 5 years shown.

This represents 3,330 million car trips per year and 4,995 million passenger trips per year based on an average of 1.5 persons per car.

#### 2.3.1.1 From the Suburban Rail Loop website:

“The Suburban Rail Loop would change the way that people move around Melbourne. Modelling indicates it would become our busiest line by 2051 with around 400,000 passengers per day.” By 2056 it is predicted that Melbourne’s population will reach 9 million people. (Very close to the figures HCAG predicts in Figure 1 based on 2% annual compounding growth.)

The problem is; these public transport growth rates come nowhere near to matching Melbourne’s population growth rates. If Melbourne’s public transport capacity doubles over the years up to 2056 and the Suburban Rail Loop capacity is added to that it is still grossly short of what is required to move people around Melbourne. And, the Suburban Rail Loop is estimated to cost \$50 billion and we suggest it will be much, much more. Any cost-benefit analysis of the SRL just does not stack up and we are not aware that one exists. The latest (April 2022) estimate for the SRL that we are aware of is @120 billion. Whilst HCAG accepts the need for a public transport metropolitan loop (or



loops) the current SRL loop proposal is economically NOT viable and any cost/benefit analysis is also HIGHLY QUESTIONABLE based on the current estimate.

### 2.3.2 Road based private Transport

“Melbourne is one of the world's most car-dependent cities, with 74 percent of all trips to and from work or education being done by car.<sup>[47]</sup> Its freeway network is the largest in Australia,<sup>[2]</sup> with an extensive grid of arterial roads dating back to Melbourne's initial surveying. The city's total road length is 21,381 km (13,286 mi).<sup>[1]</sup>”

Source: Transport in Melbourne Wikipedia, Date accessed 28<sup>th</sup> October 2021

This represents 3,330 million car trips per year and 4,995 million passenger trips per year based on an average of 1.5 persons per car.

Notwithstanding all of this Melbourne's arterial road system is close to gridlock in some areas during peak time and will become fully gridlocked in the near future during peak times based on projected population growth. This will be a major cost component diminishing our Gross Domestic Product in the future.

There is no scope to provide enough additional freeways or remedial upgrades to the existing arterial road/freeway system to provide sufficient capacity for future population of Melbourne.